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# การผสมผสานวัฒนธรรมงิ้วปักกิ่งกับเศษขยะเหลือใช้ : การสร้างความตระหนักรู้ด้านการอนุรักษ์สิ่งแวดล้อม

# Peking Opera Culture Fused with Scrap Art: Raising Public Awareness of Environmental Protection

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## บทคัดย่อ

การศึกษาครั้งนี้มีจุดมุ่งหมายเพื่อสำรวจการผสมผสานระหว่างองค์ประกอบทางวัฒนธรรมของงิ้วปักกิ่งผ่านของเหลือใช้เพื่อจัดการทัศนยภาพให้เกิดการผสมผสานมรดกทางวัฒนธรรมแบบดั้งเดิมให้เข้ากับสภาพแวดล้อมที่มีความร่วมสมัยเป้าหมายคือเพื่อให้แน่ใจว่าการผสมผสานกันดังกล่าวอาจสร้างความตระหนักรู้ด้านสิ่งแวดล้อมในหมู่ประชาชนทั่วไปได้อย่างไร โดยการนำผลการทดสอบสมมติฐานเชิงปริมาณและการตีความการออกแบบเชิงคุณภาพมาแปลความร่วมกันในการศึกษานี้มีการสร้างงานศิลปะขยะที่สร้างขึ้นในรูปแบบของงิ้วปักกิ่งและประเมินผลกระทบต่อความคิดเห็นของสาธารณชนงานศิลปะถูกจัดแสดงในนิทรรศการและระบบการตอบกลับถูกนำมาใช้เพื่อยืนยันความถูกต้องของเทคนิคที่เลือกวิจัย ผู้วิจัยได้ทำการวิเคราะห์ข้อมูลที่ได้รับอย่างละเอียดรวมถึงการทดสอบสมมติฐานโดยใช้เครื่องมือทางสถิติ การศึกษาครั้งนี้แสดงให้เห็นว่าการผสมผสานความสร้างสรรค์ของศิลปะขยะและธีมงิ้วปักกิ่งมีพลังในการรักษามรดกทางวัฒนธรรมและปลุกจิตสำนึกด้านสิ่งแวดล้อมได้อย่างไร การผสมผสานนี้สะท้อนให้เห็นในเชิงศิลปะและกลายเป็นเครื่องมืออันทรงพลังในการสนับสนุนด้านสิ่งแวดล้อมในทางทฤษฎีการศึกษานี้เชื่อมช่องว่างระหว่างทฤษฎีวัฒนธรรมดั้งเดิมกับกระบวนทัศน์การสนับสนุนสิ่งแวดล้อมร่วมสมัยโดยนำเสนอมุมมองใหม่ๆในทั้งสองสาขาโดยทำหน้าที่เป็นแบบอย่างสำหรับศิลปินและนักอนุรักษ์สิ่งแวดล้อมซึ่งแสดงให้เห็นว่าวัฒนธรรมแบบดั้งเดิมสามารถผสมผสานเข้ากับความทันสมัยได้อย่างกลมกลืนเพื่อบรรลุเป้าหมายทางสังคมในวงกว้างได้



**คำสำคัญ** : วัฒนธรรมปักกิ่งโอเปร่า, ศิลปะเศษขยะ, การรับรู้สิ่งแวดล้อมของสาธารณะ

## Abstract

The study was conducted to investigate the impacts of merging Peking Opera culture with scrap art on enhancing public environmental awareness. In light of rising global environmental challenges, a multi-disciplinary methodology was employed. This approach combined quantitative and qualitative research techniques to highlight the collaborative potential between traditional and modern elements in championing environmental conservation. A sample of 550 individuals, aged between 18-40, was chosen. Questionnaires were distributed and subsequently analyzed using the SPSS and AMOS platforms. The findings suggested that the integration of Peking Opera and scrap art led to notable advancements in artistic expression, community engagement, environmental cognizance, and the preservation of cultural heritage. Interestingly, specific characters from Peking Opera were found to resonate more profoundly with specific audience segments. This research provided fresh perspectives on the interplay between culture and environmental protection and offered valuable guidance for artists and environmental advocates. The study emphasized the synergistic potential of melding tradition with modernity to meet societal goals cohesively and harmoniously. In conclusion, the research showcased a distinctive perspective on the symbiotic relationship between cultural practices and environmental conservation efforts.



**Keywords :** Peking Opera Culture; Scrap art; Public Environmental Awareness

# 1. Introduction

## 1.1 Background of the Study

Global dialogues highlighted the efficacy of innovative media in augmenting environmental consciousness. The research integrated Peking Opera's historical nuances with scrap art's contemporary relevance. The theoretical framework highlighted innovative strategies for environmental awareness through art. Challenges were faced in merging cultural elements with environmental values. This study was recognized as pioneering, offering insights for scholars and policymakers, and accentuating art's role in environmental discourse.

## 1.2 Research Question

RQ1:How does integrating Peking Opera culture and scrap art influence and reshape public perceptions of environmental protection?

RQ2:What are the inherent challenges and complexities involved in integrating elements of Peking Opera cultural characters with the needs of contemporary scrap art?

RQ3:How can Peking Opera culture and scrap art be combined to build a more effective environmental awareness campaign?

## 1.3 Research Objectives

RO1: To analyze the combined impact of Peking Opera cultural character elements and environmental narratives of scrap art on public environmental awareness.

RO2: To evaluate the effectiveness of the combination of Peking Opera culture and scrap art.

RO3: To develop a creative direction for scrap art practice that integrates Peking Opera culture and scrap art to increase the effectiveness of environmental awareness and related activities.

## 1.4 Original Value and Significance

### 1.4.1 Original Value

This research uniquely linked traditional culture and contemporary art to enhance environmental awareness. Unlike prior studies that treated art forms separately, this work bridged them, emphasizing practical applications. It proposed a creative direction, integrating Peking Opera culture with scrap art,

diverging from studies fixated on a singular art form's social impact.

### 1.4.2 Significance

The fusion of scrap art with Peking Opera was analyzed, revealing its potential for impactful environmental advocacy. Guidance was provided by the research, suggesting how conservationists and artists might be influenced by this combined artistic approach for enhanced environmental campaigns.

## 2. Literature Review

### 2.1 A Synopsis of Recent Research in the Field

Academic debate was shifting toward the interdisciplinary convergence of ancient cultural forms, such as Peking Opera culture, and modern means of expression, including trash art. Even through these creative forms' separate contributions to environmental campaigning had been well studied. More untapped potential in their combined capabilities was still believed to be present.

### 2.2 Past Researches on Art and Environmental Consciousness

Art, whose roots were firmly planted in cultural and historical contexts, had become a powerful medium for addressing most current serious societal challenges, especially environmental consciousness. As environmental issues, worldwide had become more pressing, artists had adapted various forms to address them,the limitless potential of installation art in the visual arts is emphasized (Negi & Singh 2023). By offering immersive experiences, Abstract environmental concepts like biodiversity loss and climate change were transformed into real-world issues that a wider audience could understand. Andrzejewski & Maliszewska (2022) discussed its dynamic nature and highlighted its capacity to sway public opinion. Through exhibitions, the public was engaged as participants who were contributed to local conversations on environmental issues and strong emotional reactions were elicited. Thus, art was reflected and actively shaped social attitudes and was played a vital role in raising environmental awareness.

### 2.3 Intersection of Traditional Art Forms and Contemporary Environmental Issues

The interplay between traditional art and contemporary social dilemmas, particularly environmental issues, was become a focus of academic discussion (Grebosz-

Haring & Weichbold, 2020). With their rich cultural narratives, traditional art forms were offered unique perspectives and approaches to addressing today's pressing issues. Recognizing this, research was delved into by researchers on how these traditional expressions could be repurposed for modern advocacy. Stories of dwindling forests, polluted rivers, and the theme of natural vulnerability were woven by artists. This transformative approach to traditional art forms was emphasized their adaptability and relevance in today's world (Blagoeva, 2018). By interweaving tradition with contemporary challenges, the essence of these forms was retained by artists and their impact in contemporary discourse was expanded (Ametova, 2021). The strength of the above research was the versatility and adaptability of traditional art forms to resonate with contemporary audiences were illuminated. However, little was needed to be more to analyze the impact of these revised art forms on tangible environmental outcomes.

### 2.4 Research Gaps

Historically, studies were explored art forms like Peking Opera and scrap art individually for environmental advocacy.Sharma (2020)studied analyzed Peking Opera's cultural depth and the interplay between traditional and contemporary art, a gap remains in combining these forms to influence public perceptions. Most researches was treated them as separate entities, lacking a holistic exploration. This fragmented approach was limited the understanding of their combined potential for environmental advocacy. This gap was bridged by this study, examining the combined impact of Peking Opera culture and scrap art on environmental awareness. Unlike previous works, an interdisciplinary approach that united Peking Opera's cultural richness with scrap art's environmental urgency was unveiled by it. This approach was offered insights for impactful environmental advocacy, potentially revolutionizing culture–environment interactions.

## 3. Conceptual Framework

### 3.1 Establishment the theoretical background

Cultural Heritage Preservation:The importance of cultural heritage preservation and the need to revitalize traditional culture were recognized by this study. The researcher observed the challenges facing the dissemination of Peking Opera culture in

contemporary society and the importance of preserving and promoting cultural heritage for future generations.

Scrap Art and Upcycling: Integrating scrap art in revitalizing Peking Opera culture was offered a creative and innovative approach. The concept of up-cycling, which transforms discarded materials into artistic creations, highlights the potential of utilizing discarded materials to create multiple forms of artistic expression.

Public Awareness and Environmental Protection: The role of art and display in raising public awareness of environmental protection was emphasized by the study. The potential of scrap art to engage the public, evoke emotion, and promote sustainable practices was recognized by it.

By combining these theoretical background, This study was aimed to comprehensively understand the intervention of Peking Opera culture in scrap art. The importance of cultural heritage preservation, the transformative potential of waste material art, and the importance of public awareness for environmental protection and cultural heritage were recognized by it. The theoretical was provided a framework for data collection, analysis, and interpretation, guided the research process, and contributed to a broader discussion of cultural revitalization and sustainability.

### 3.3 Establishment of Theoretical Model

Based on the establishment of the theoretical above and the research literature, the theoretical framework model between the independent variables; " ("Peking Opera Culture and Scrap Art (IPOSA), and Public Participation (PP), dependent variables; (Public Awareness of Environmental Conservation (PAEF)")", and Cultural Inheritance (CI)")", and mediator variables; " ("Artistic et al. (AET), and Community Participation (CPP)")". The relevance of all variables were determined as shown in Figure 1.

H1:There is a significant relationship between Peking Opera culture and scrap art and artistic expression and transformation.

H2:There is a significant relationship between Peking Opera culture and scrap art and public environmental awareness.

H3: There is a significant relationship between Peking Opera culture and scrap art and cultural inheritance.

H4:There is a significant relationship between Peking Opera culture, scrap art,

and community participation.

H5:There is a significant relationship between public participation and public environmental awareness.

H6:There is a significant relationship between public participation and cultural heritage.

H7: There is a significant relationship between artistic expression, transformation, and public environmental awareness.

H8: There is a significant relationship between artistic expression, transformation, and cultural heritage.

H9: There is a significant relationship between community involvement and public awareness of environmental protection.

H10: There is a significant relationship between community participation and cultural heritage.

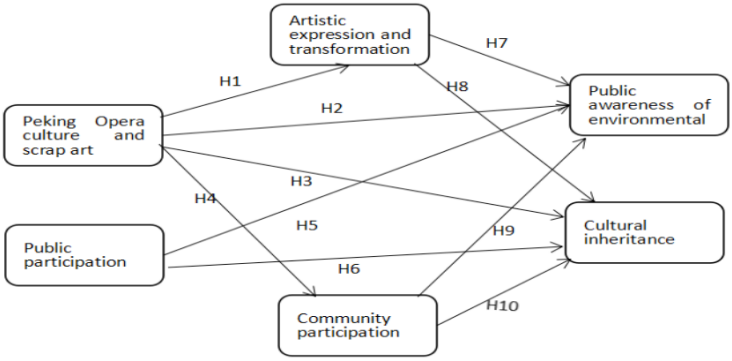



Fig. 1 Theoretical model

## 4. Research Methodology

### 4.1 Creative Method of Peking Opera Culture Intervening in the Art of Used Materials

#### 4.1.1 Criteria for Selecting Used Materials

First, suitable materials to represent Peking Opera characters needed to be found by researchers. The materials that were selected by the researchers should have been as close as possible to the character and gender of the Peking Opera

characters that were to be created. Used materials could be found everywhere, and the Used materials that were chosen should have been more accessible to the general public. Used materials from our lives were collected and organized by the researcher to prepare for the next step of production.

### 4.1.2 Character selection

Determine the roles:In this project, the researchers chose the four traditional roles of Sheng, Dan, Jing, and Chou in Peking Opera and chose the leading representative roles of Peking Opera. "Sheng" refers to decent men, "Dan" refers to female roles, "Jing" refers to people with outstanding character, and "Chou" refers to people with outstanding character. The "clowns" are the comical theater characters. These four roles represent the broadest range of Peking Opera culture.

Thus, the character selection process carefully orchestrated public interest with the intrinsic attributes of these traditional characters and our program's mission. The traditional roles of "Sheng," "Dan," "Jing," and "Chou" are a testament to the enduring appeal and adaptability of Peking Opera. Its appeal was sought to be revitalized by researcher through a novel and environmentally friendly approach.

### 4.1.3 Creative Steps of Peking Opera Cultural Intervention in Old Object Art

In the project research, used material art was combined with Peking Opera characters to create a meaningful fusion effect that was enhanced to convey the message of representation and resource reuse. The research results were presented in this section. These data were analyzed and summarized to form validation information for various prototype models. Three parts were included in total.

Part I: Preliminary small drafts were drawn according to the cultural content and design of Peking Opera, and repeated adjustments were made to determine the characterization of the work.

Part 2: Skeletonize individual character roles to form a prototype character model.

Combination of both above parts: Combining the work of the first two parts, searching for suitable waste materials, combining and applying the character model with the art of waste materials, controlling the combination process in terms of form and artistry, and finally carrying out an innovative design.

## 4.2 Data collection

### 4.2.1 Questionnaire design

The final questionnaire survey was conducted through community participation, and the researcher explored the Peking Opera culture intervening in the art of old things: stimulating the public's awareness of environmental protection and cultural inheritance. This study took 18-60-year-olds as the target audience, and two experts (experts in culture and art creation) were consulted to evaluate the questionnaire. The survey used a Likert 5-point scale to evaluate independent and dependent variables in the model, and a structured questionnaire was refer to a representative sample of the target population, which was purposive randomized sampling through an online questionnaire platform. Respondents were to complete the questionnaire which was designed based on the identified influencing factors The researcher analyzed the collected data with correlation and regression analysis on SPSS software and validated factorial data analysis with Structural Equation Modeling (Amos) .

### 4.2.2 Sample Characterization

The researcher used a sampling method to select three communities to participate in this survey. For data sampling validity, informants sampling was based on residential neighborhoods in Nanchang High-Tech Zone. The survey subjects is residents aged 18-40 in Nanchang High-tech Zone. The questionnaire consisted of 18 questions, which were recognized as valid by experts evaluation. 550 questionnaires were distributed, and 506 were recovered, with a recovery rate of 92%. 274 of the 506 questionnaires were female, accounting for 54.15%. In addition, the male sample was 232 points, accounting for 24.85%. Regarding age distribution, the most significant samples were from 18 to 25 years old, with 295 samples accounting for 58.3%.Those aged between 20 and 40 accounted for

30.84%. From the education perspective, more than 40% of the samples were "undergraduate."40.33% chose "office worker." Students accounted for 35.95%. Finally, the results of 506 returned questionnaires were entered into SPSS.

### 4.3 Data Collection and Measurement

A Likert scale was to be used by the researcher as the primary data collection technique to examine the factors influencing public environmental awareness of waste material art interventions in public exhibitions. This method was systematically used to assess participants' attitudes and opinions toward the study's variables.

As mentioned earlier, in June 2023, 550 questionnaires were distributed to the public, of which 506 were returned. A correlation study was conducted using independent, dependent, and mediating variables. Participants would be asked to rate their agreement or disagreement with each statement using a number ranking from 1 (Strongly Disagree) to 5 (Strongly Agree). This approach was offered as a methodical and measurable manner to evaluate participants' attitudes and opinions regarding the study's design. Utilizing data from a Likert scale, the researcher conducted a three-stage study. Mean, median, standard deviation and frequency distribution measurements were included in the first stage's descriptive statistics, which provided a data summary.

In addition, analysis of variance (AMOS), correlation, regression, and hypothesis testing were applied. These statistical techniques were assisted in testing research hypotheses, examining the relationship between variables, and evaluating the importance of the study's findings. The data analysis outcomes were interpreted and discussed in the second stage within the context of the theoretical underpinnings and research goals. The study's limitations, such as sample size, data collection methods, or potential biases, were considered essential to be discussed. In the third stage, the conclusion was summarized the main findings of the data analysis and answered the research questions or hypotheses. Implications of the findings, including theoretical, practical, and policy implications, were discussed.

## 5. Research Findings

### 5.1 The creative process of Peking Opera culture intervening in the art of old things

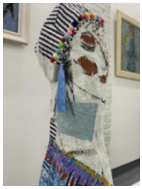
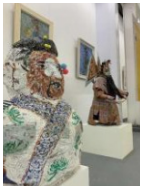
Through the constituent elements of Peking Opera characters' decoration and character, the researcher made the main innovative design according to the appearance of “Sheng”、“Dan”、“Jing”、“Chou” and the character features and characterization, combined with some modern elements.

“Sheng”(Decent Men): The use of old metal for decent male characters was in line with the typical character and fighting role of these characters. Art using scrap materials symbolizing strength, resilience, and traditional values were incorporated into the character's design to express these qualities.

"Dan" (female characters): “Dan” characters were suited for using soft materials such as cloth, paper, and plush materials. It resonated with traditional images of these characters to emphasize their femininity and create visually compelling elements.

"Jing" (people with outstanding personalities):“Jing”characters were primarily male characters with outstanding characteristics that were different from the norm in terms of personality, qualities, or appearance. For example, a vibrant figure might have been associated with bright colors or conspicuous materials. In contrast, a stately, wise name or character might have been associated with more subdued, understated materials. The styling was also dominated by dignified, austere, and realistic characterization, which was more likely to emphasize the character's personality and emotion he represented.

"Chou" (Comical figure): Known for their humor and silliness, 'Chou' characters were filled with plastic foam and scrap tape. The plastic sheets were provided structure and stability, while the duct tape was considered flexible and easy to mold. Using these materials made it possible to give the character an exaggerated form. The integration of characters and scrap materials was shown in table 1.

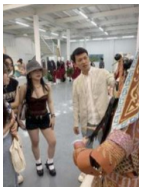
| Character | Rough sketch | Prepare scrap materials | Creative process | Creation result |
|---|---|---|---|---|
| Sheng |  |  |  |  |
| Dan |  |  |  |  |
| Jing |  |  |  |  |
| Chou |  |  |  |  |

## 5.2 Final Results Presentation and Feedback

A total of two presentations of the results were held, the Academic Exchange Exhibition and the Community Engagement Exhibition, which aimed to demonstrate the concept of effective utilization of waste materials and to promote environmental protection. The displays were intended to draw attention to the intangible cultural heritage of Peking Opera and the importance of environmental protection and the promotion of sustainable practices. Researchers conducted questionnaires in academic exchanges and community exhibitions to collect views and insights from audiences of different identities on the works. In addition, the questionnaires collected feedback from visitors on their impressions, participation level, and the display's effectiveness

in promoting public awareness of environmental protection and attention to Peking Opera's cultural heritage.

Table 2. Academic Exchange Exhibition and Community Participation Exhibition

| Academic exchange | Community participation |
| --- | --- |
|  |  |
|  |  |
|  |  |

## 5.3 Testing Hypothesized Results through Theoretical Framework Modeling

### 5.3.1 Measurement model analysis

In this study, the Peking Opera culture was involved in a series of garbage artworks, and according to the principles of public participation and social participation, the data for the research theoretical model were analyzed using SPSS and AMOS. The fitting of the model was evaluated by econometric model analysis. Test Comparative fit index (CFI), typical fit Index (NFI), Tuck-Lewis Index (TLI), adjusted goodness of Fit Index (AGFI), Incremental fit Index (IFI), reduced goodness of Fit Index (PGFI),

Reduced typical Fit Index (PNFI), Among them, GFI, CFI, NFI, TLI, IFI, and AGFI are all greater than 0.9. Although PGFI and PNFI did not meet the standard, they had been reached the acceptable range, which was considered acceptable compared with the overall model, so the overall model fitting index was deemed relatively good. The data were shown in Table 3.

Table 3 Model fitting indicators

| Common index | χ2 | df | p | Chi-square freedom ratioχ2/df | GFI | RMSEA | RMR | CFI | NFI |
|---|---|---|---|---|---|---|---|---|---|
| Judging standard | - | - | >0.05 | <3 | >0.9 | <0.10 | <0.05 | >0.9 | >0.9 |
| value | 131.347 | 120 | 0.226 | 1.095 | 0.972 | 0.014 | 0.031 | 0.997 | 0.968 |
| Other indicators | TLI | AGFI | IFI | PGFI | PNFI | | | | |
| Judging standard | >0.9 | >0.9 | >0.9 | >0.9 | >0.9 | | | | |
| value | 0.996 | 0.961 | 0.997 | 0.682 | 0.759 | | | | |

A standardized evaluation measurement model was used in this study, and the data are shown in Table (4) and Table (5).

The reliability analysis expressed as Cronbach's alpha coefficient (0.690 ~ 0.801) exceeded the recommended threshold of 0.7, confirming the reliability of the measurement items .

Regarding validity : the AVE values (0.561 ~ 0.601) exceeded the commonly recommended threshold of 0.5, indicating good convergent validity .

Validation Factor Analysis: From the above Table 4, it can be seen that a total of six factors were corresponded to an AVEAVE value of 0.599, an AVEAVE > 0.5, a CR value of 0.817, and all of the CR values were higher than 0.7, implying that the data of the present analysis had good convergent (convergent) validity.

Table 4 KiMo and Bartlett test [Source: Author,2023]

| | | |
|---|---|---|
| KiMo value | | 0.915 |
| Bartlett spherical test | Approximation | 4090.587 |
| | df | 153 |
| | P value | 0 |

Table 5 Analysis of the reliability, validity, distinction, and verification factor analysis

| | Fusion | public participation | Public environmental awareness | Cultural heritage | Artistic expression and transformation | Community Involvement | AVE | CR | CR Cronbach α |
|---|---|---|---|---|---|---|---|---|---|
| Fusion | 0.758 | | | | | 0.574 | 0.801 | | 0.800 |
| public participation | 0.424 | 0.775 | | | | 0.601 | 0.819 | | 0.819 |
| Public environmental awareness | 0.516 | 0.459 | 0.765 | | | 0.586 | 0.809 | | 0.809 |
| Cultural heritage | 0.485 | 0.504 | 0.543 | 0.765 | | 0.585 | 0.809 | | 0.808 |
| Artistic expression and transformation | 0.469 | 0.493 | 0.543 | 0.546 | 0.749 | 0.561 | 0.793 | | 0.793 |
| Community Involvement | 0.377 | 0.35 | 0.458 | 0.417 | 0.413 | 0.599 | 0.817 | | 0.817 |

### 5.3.2 Results of Hypothesis Testing

The researcher tested the hypothesis using the data provided to see if the path coefficients were significant. The results showed that the path coefficients were significant at 0.05. Therefore, conclusions could be drawn and evidence could be provided for the following conclusions based on the results of the thorough path analysis in Table (6) and Figure (2).

The standardized path coefficients of Peking Opera culture fusion of scrap art and artistic expression and transformation, community participation, public environmental awareness, and cultural heritage were 0.67 (P<0.000), 0.53 (P<0.000), 0.28 (P<0.002) and 0.19 (P<0.032), respectively, which indicate that the hypotheses (H1, H2, H4, and H10) were satisfied. The study found that Peking Opera culture combined with scrap art had a significant positive impact on artistic expression and transformation, community participation, public environmental awareness, and cultural heritage, with artistic expression and transformation showing the most significant impact, followed by community participation as the most significant impact. Indicating that hypotheses (H5 and H6) were supported, the standardized path coefficients of public engagement with public environmental awareness and cultural inheritance were 0.15 (P=0.011) and 0.27 (P=0.000), respectively. According to the study, public participation was found to increase people's understanding of the environment and cultural heritage considerably. Community involvement with cultural heritage and public environmental awareness were shown to have standardized path coefficients of 0.15 (P<0.005) and 0.21 (P<0.000), respectively, indicating that hypotheses (H7 and H8) were satisfied. The study confirmed that community participation was significantly positively affected by cultural heritage and public environmental awareness. The standardized path coefficients of artistic expression and transformation with public environmental awareness and cultural heritage were shown to be 0.33 (P<0.000) and 0.35 (P<0.000), respectively, indicating that hypotheses (H3 and H9) were satisfied. The study confirmed that artistic expression and transformation were found to significantly positively affect public environmental awareness and cultural heritage.

Table 6 Assuming the test results [Source: Author,2023]

| H | Independent | Relationship | Dependent | Std. estimate | Unstd. estimate | S.E. | C.R. | P | Result |
|---|---|---|---|---|---|---|---|---|---|
| H1 | IPOSA | ---> | AET | 0.671 | 0.660 | 0.060 | 10.919 | *** | Supported |
| H2 | IPOSA | ---> | CPP | 0.533 | 0.585 | 0.063 | 9.321 | *** | Supported |
| H3 | AET | ---> | PAEF | 0.327 | 0.338 | 0.071 | 4.776 | *** | Supported |
| H4 | IPOSA | ---> | PAEF | 0.282 | 0.287 | 0.092 | 3.110 | 0.002 | Supported |
| H5 | P.P. | ---> | PAEF | 0.147 | 0.138 | 0.054 | 2.548 | 0.011 | Supported |
| H6 | PP | ---> | CI | 0.266 | 0.252 | 0.056 | 4.460 | *** | Supported |
| H7 | CPP | ---> | CI | 0.151 | 0.141 | 0.050 | 2.802 | 0.005 | Supported |
| H8 | CPP | ---> | PAEF | 0.213 | 0.197 | 0.050 | 3.950 | *** | Supported |
| H9 | AET | ---> | CI | 0.355 | 0.369 | 0.073 | 5.081 | *** | Supported |
| H10 | IPOSA | ---> | CI | 0.671 | 0.200 | 0.093 | 2.147 | 0.032 | Supported |

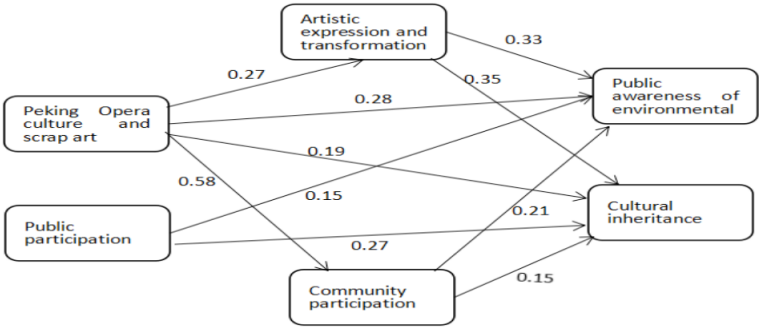



Figure 2 Theoretical framework model

### 5.4 Consistency of research results with objectives

RO1: Analyzing the combined impact on public environmental awareness

The results of the study showed that the cultural character elements of Peking Opera were intertwined with the environmental narratives inherent in scrap art to produce a clear and significant impact. Specific designs based on Peking Opera characters, such as Sheng, Dan, Jing, and Chou, were effectively translated to contemporary audiences to convey traditional cultural nuances. These academic and community-

centered exhibitions served as platforms to demonstrate the potential of this integration, capturing audience attention and promoting a deeper understanding of environmental conservation and the cultural richness of Peking Opera. The positive coefficients of the hypothesis tests further validate the increased public environmental awareness brought about by this fusion.

### RO2: Evaluating the effectiveness of the integration

The audience's comments made during the show and the statistical significance of the findings of the hypothesis test could be used to determine how well Peking Opera culture and junk art were incorporated. The meticulous and successful integration of the two fields was highlighted by carefully selecting materials that matched the specific traits of the Peking Opera characters, such as the metal materials of "Wusheng"and the soft materials of"Dan". The show received substantial audience engagement and favorable reviews, highlighting the successful fusion of tradition and innovation.

### RO3: Advancing the creative direction of scrap art practice

Helpful guidelines for upcoming scrap art projects were offered by this study. A model for how traditional cultural elements might be revived and re-envisioned in the realm of scrap art was created by this study, by fusing the culture of Peking Opera with scrap art. The potential of this ground-breaking fusion as a formidable instrument for environmental advocacy was exemplified by the final artwork, as was shown by the character-to-material design and presentation. The facts on artistic performance, community involvement, and significant impacts on public environmental awareness were demonstrated, showing that the effectiveness of environmental campaigning was boosted by the fusion of garbage art and Peking Opera culture.

The objectives stated at the start of the investigation were addressed and met by the findings. Insightful information was offered by this study by closely examining the combination of Peking Opera culture and scrap art. The door was opened for more research, while it was highlighted how integration might increase cultural sensitivity.

# 6. Discussion and Conclusion

## 6.1 Discussion

### 6.1.1 Overview of the Discussion

The research was initiated to delve into the implications of merging Peking Opera culture with scrap art on environmental awareness. A mixed-methods approach was employed, and data were meticulously analyzed using SPSS and AMOS. This section commences by revisiting the research's objectives, briefly outlining the methods and findings, and setting the stage for the subsequent detailed discussion.

### 6.1.2 Elaboration on Findings

#### (1) Principal Discoveries

To understand the complex effects of the fusion of Peking Opera culture and junk art, a thorough investigation was conducted. Data analysis revealed a number of important conclusions.

First off, a standardized path coefficient of 0.67 (P0.000) revealed that the fusion significantly improved artistic expression and transformation. The revolutionary potential of such an integration in the field of artistic creation is highlighted by this dominating impact.

Secondly, Another significant improvement was seen in community involvement, with a value of 0.53 (P 0.000). This outcome demonstrates the fusion's potency as a tool for community participation.

With values of 0.28 (P 0.002) and 0.19 (P 0.032), respectively, public environmental awareness and cultural heritage were also positively influenced, but to a lower level.

Further investigation found a favorable correlation between increased appreciation of environmental and cultural aspects and active public engagement. Coefficients of 0.15 (P=0.011) for environmental awareness and 0.27 (P=0.000) for cultural inheritance provided support of this.

Increased cultural heritage (0.15, P 0.005) and environmental awareness (0.21, P 0.000) were also positively correlated with community involvement. This highlights how important community involvement is for raising cultural

and environmental awareness.

Lastly, innovative artistic approaches, particularly in expression and transformation, were shown to have significant positive effects on both public environmental awareness (0.33, P<0.000) and cultural heritage (0.35, P<0.000), further underscoring the fusion's potential in promoting holistic awareness.

### (2) Unanticipated Outcomes

While most hypotheses were corroborated, certain nuances emerged unexpectedly. Specific Peking Opera characters, for instance, were found to resonate more profoundly with particular audience segments.

### (3) Extended Insights: Audience Engagement

In this study, audience engagement was not merely confined to passive observation. It was revealed that a deeper, more interactive bond between the observer and the artwork was fostered, encompassing tactile and dialogic interactions. This enriched engagement not only augmented the artistic experience but also facilitated a profound comprehension of Peking Opera's cultural significance and the imperative of waste reduction.

### 6.1.3 Concluding Remarks

In essence, this research illuminated the multifarious ramifications of intertwining Peking Opera culture with scrap art. The primary discoveries validated the study's propositions, underscoring the fusion's potential in amplifying artistic creativity, galvanizing community involvement, and heightening environmental cognizance. The unexpected outcomes proffer intriguing avenues for future exploration. The extended insights, pivoting around audience engagement, accentuate the pivotal role of interactive participation in deepening cultural and environmental appreciation. Collectively, these revelations offer a holistic response to the research queries posited initially, emphasizing the intricate interplay between culture, art, and environmental cognizance.

## 6.2 Conclusion

This research was undertaken to explore the amalgamation of Peking Opera cultural elements with scrap art and its subsequent influence on environmental

awareness. A combination of qualitative and quantitative methodologies was employed, revealing the transformative potential of this fusion in both cultural preservation and environmental advocacy. Through meticulous data analysis, existing paradigms of public awareness, environmental art, and cultural preservation were enriched. The integration of Peking Opera with scrap art was identified as a conduit between traditional cultural theories and contemporary environmental activism. Valuable insights were provided for policymakers, environmentalists, and artists, suggesting innovative avenues for deeper public engagement. However, limitations were recognized, as the study was confined to a sample of 550 individuals aged 18–40. The emphasis on Peking Opera might have overshadowed other traditional art forms. It was recommended that future research should diversify its sample, incorporate other art forms, and utilize varied methodologies for a more comprehensive understanding.

# Reference


Ametova, L. (2021). Peculiarities of the Artistic Language of the Ukrainian Artist Yevhenia Gapchynska. *Innovative Solution in Modern Science, 6*(42), 230. https://doi.org/10.26886/2414-634X.6(42)2020,14

Andrzejewski, A., & Maliszewska, M. (2022). Public Art in (Local) Communities: Multiple Publics and the Dynamic Between Them. *Aisthesis. Pratiche, Linguaggi e Saperi Dell'estetico, 15*(1), 5—14. https://doi.org/10.36253/Aisthesis-13456

Blagoeva, N. (2018). Promoting integrative teaching through interdisciplinary arts and crafts collaboration between after-school clubs. *Nordic Journal of Art and Research, 7*(1). https://doi.org/10.7577/information.v7i1.2709

Grebosz-Haring, K., & Weichbold, M. (2020). Contemporary art music and its audiences: Age, gender, and social class profile. *Musicae Scientiae, 24*(1), 60—77. https://doi.org/10.1177/1029864918774082

John Ph.D, I. A., Ekwere Ph.D, S. E., & Edem Etim Peters, P. (2022). Visual Art Exhibition : A Catalyst for Social Unification in Nigeria. *International Journal of Applied Science and Research, 05*(04), 01—04. https://doi.org/10.56293/IJASR.2022.5401

Negi, N., & Singh, G. (2023). Social Metaphors in the Installation Art of Contemporary India Woman Artists: -. *ShodhKosh: Journal of Visual and Performing Arts, 4*(1). https://doi.org/10.29121/shodhkosh.v4.i1.2023.373

Sharma, Y. P. (2020). Tracing the Traditional Contents and Forms in Contemporary Nepali Paintings. *Molung Educational Frontier*, 169—180. https://doi.org/10.3126/mef.v10i1.34040