

Article

Analysis of Taiwan Calligraphy Design and Experience by the Delphi Method

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Abstract: The handwriting on the street is Taiwanese folk art and represents the life of Taiwanese people. As the actual needs of people, it is also derived from the practical functions of people's daily life. The materials, processing techniques, and styles in the artworks describe the lifestyle and culture, and even the life attitude and life needs metaphorically. In this research, an open website platform, "Taiwan Calligraphy and Painting", was built and used for more than one year. This platform allowed users to upload handwritten characters or hand-painted murals from alleys and streets to it, and all these artworks were commented on and annotated. The location from Google Maps was integrated into this platform, so the users understood where the artworks were found. Nearly 1,000 pieces of artwork were categorized for 6 different features "food, clothing, housing, transportation, education, and others". We used Delphi Method to explore the media and carriers of the handwriting from the streets. 64 scholars and experts participated in the questionnaire survey. The reliability of the first-round survey was evaluated to be high. The second round survey was organized based on the first round one with a Likert five-point scale. These questions of the questionnaire were modified by the values of the InterQuartile Range. The handwriting culture represents the common people in Taiwan as cultural and creative products. The result of this research and the platform provided the foundation for further study to understand the Taiwan handwriting from people's point of view more in detail.

Keywords: Handwriting, Folk art, Delphi Method, Restricted code, Locality

1. Introduction

We saw an old lady in her seventies called Jin-Feng Qiu in Daquan Community which is located in Hualien, Taiwan in 2018. She used multiple colors to paint walls of private houses to record her rural memories and handwriting from her childhood. She also painted the picture of someone's daughter's marriage, hairdressing customers, and the countryside lifestyle in the early period in Taiwan (Fig. 1). People in her community found that Qiu's paintings and handwriting had a sense of Taiwanese common people's culture which united local people. As a result, the community let her freely write and paint on every wall in the community, making the community a new model of "regional revitalization". Such ordinary people's activities show that handwritings in alleys and on the doors reflect people's needs for living in Taiwan. Taiwanese people have used common materials to create a "Taiwanese commoners" style which not only represented the way they have lived and their unique culture but implied their mentality such as attitude and needs for life. These elements can be transformed and recorded into Taiwanese people's interesting cultural creativity.



Fig. 1. Handwritings and paintings from Jin-Feng Qiu in the Daquan community. (taken in Hualien).

The disappearance of multiculturalism and local identity is attributable to the prevalence of cultural globalization with occidentalism or imperialism which make different cultures around the world become averaged or homogenized and hinder cultural diversity and variability, letting local cultures dissipate (Wu, 2003). The rapid decrease of distance and geospatial influence due to globalization and the influence of transnational commercial symbolic images and invaded spatial contexts bring the crisis such as the disappearance of cultural identity. It causes people's perception of the spatial domain and physical environment gradually to disappear and lose their sense of belonging and identity to the place (Wu, 2005). Liu (2004) also pointed out that the tide of globalization was overwhelming, and since knowledge of English has been an indispensable element for Taiwan to master the medium of global communication and enter into the globalization system, the hegemony of English has emerged. However, overemphasizing the importance of learning English made the cultural subjectivity of Chinese be overlooked and caused a lack of reflection and integration of local culture in English learning, which leads to a crisis of cultural identity as well as the neglect and depreciation of the local language. Therefore, in the era of globalization, humanities, and social sciences have their localization needs, and these disciplines have the mission to localize global culture and to transmit and cultivate local culture.

For an administrative area within a village, there are two main formal promoters of public affairs: the village mayor and the president of the community development association. The funding source for the village is mainly the government's budget, so it is relatively fixed. The community funding can be used for various programs which are announced by the Ministry of the Interior, county and city governments, the Environmental Protection Agency of the Executive Yuan, the Cultural Affairs Commission, the Agricultural Development Committee, the Environmental Protection Bureau, or the Cultural Affairs Bureau. However, these programs are not always available upon application. The community also has to have "personal connections" to communicate with various departments in the government to use the funding. In summary, in terms of local funding, whether it is the village mayor or the president of the community development association, they strive to obtain funds from various government departments or public representatives. Chen (2006) thought that the funding for community construction to carry out various activities usually relied on project applications which was a great burden for many communities. Accessing funds requires many people to do different works such as planning, implementing, and doing verification, otherwise, it is difficult to obtain government resources. This is the biggest dilemma for community construction in Taiwan. Government resources are so limited that the government cannot offer sustainable resources for further development to communities. Moreover, the government has various restrictions and programs on timing and the ways for funding so it is difficult for local people to rely on government resources alone for sustainable development. However, the construction of the culture or the establishment of a new culture needs to be accumulated over a long period. Thus, frequent staff changes or the existing system or resource changes hinder community construction from remaining as a government policy and achieving the goal of the community (Chen, 2014)

2. Purpose of Study

The purpose of this study is to define and identify the Taiwanese commoner's culture and unique possibilities to develop it while avoiding the dilemma of "collaged landmarks" and the lack of confidence. Lin and Wang (2008) pointed out that enterprises have faced the impact of "economic globalization" nowadays. The answer to how to combine cultures to exert design creativity is important to enterprises. Therefore, creating product characteristics with "localization design", the uniqueness of regional culture, and the construction of creative knowledge have become the core elements of national competitiveness (Hsu and Lin, 2011). Furthermore, each country's traditional culture and lifestyle have a unique identity. In global competition, the application of design with cultural characteristics can enhance product uniqueness and increase consumer experience (Handa, 1999; Yair, Tomes, and Press, 1999; Yair, Press, and Tomes, 2001). Taiwanese people have no confidence in their cultures so they only dare to recommend big attractions (e.g., the 101 Building, Jiufen, and the Forbidden City) to foreigners. According to the deputy director general of the Business Model Innovation Research Division in Commerce Development Research Institute, Li, Shyh-Jane, there are 12 "collaged landmarks" around Taiwan such as "Crystal Churches" and "Skywalks". The reason why the director of National Chiao Tung University's Graduate Institute of Architecture, Kung, Shu-Chang, calls them "collaged landmarks" is that they are not integrated with the local people's cultural and historical features, which are just similar to castles in the air and unable to provide a "unique and sustainable" experience. If we can find local handwriting elements and Chinese characters which are approved by experts, it will be a significant opportunity to demonstrate the vitality of the plebeian culture in Taiwan.

3. Literature Review

From related references to this research, we conducted a literature review to find the basis of questions and dimensions of the questionnaire. In contrast to mainstream culture, subculture is relatively isolated, and a new domain of social culture exists within the wider society (Jordaan and Jordaan, 1984). Brake (1985) thought that subculture was a meaning system, a form of expression, and a lifestyle. Murdock (1974) pointed out that subcultures provided symbolic resources which allowed individuals and groups to

apply various symbols to understand their situation and establish a visible identity. Hence, subculture can be a manifestation of self-expression, individual autonomy, and cultural diversity. It constitutes a unique social style closely related to an individual's freedom from the influence of secular values (Muggleton, 2000). The music album design by Taiwanese designer, Godkidlla shows the street spray-painted characters who were looking for jobs as inspiration for the design of Jolin Tsai's music album in 2016 and Lee Ying Hong's music albums in 2016. The visual inspiration for the covers is taken from the common sentence "Do you need a worker?" on the iron sheet beside the road (Fig. 2).



Fig. 2. Godkidlla's music album design.

The golden cross of the historical painting and the genre painting appeared in the late 18th century when the influence of commoner's art crafts overturned the orthodox status. In the 19th century, the dominance of the genre painting took over the authoritarian historical painting, which echoed the political change: power was no longer in the hands of the elite and the plebeian's arts was on the rise (Fig. 3).



Fig. 3. Genre paintings.

4. Research Design and Methods

We constructed an open platform website and collected handwriting in alleys over nearly two years to conduct the modified Delphi Method as the research method.

4.1. Website to Collect Handwriting

In 2018, we designed an open platform website (Fig. 4) "Taiwan Street Word" (<https://www.streetword.com.tw/streetword/#/>) for people to take pictures of their findings in alleyways and upload them. It also combined the function of Google Maps to register addresses. The sample size was nearly 800, categorized to "food, clothing, housing, transportation, education, business, and others".



Fig. 4. Self-designed and established open-platform website.

4.2. Modified Delphi Method (MDM)

The Delphi Method was developed by the U.S. military as a sponsored product to solve complex military problems and was gradually applied to other research areas since the 1960s (Dunn, 1988). MDM was developed because the return rate of the questionnaires was low due to the multiple-round surveys and the time and effort required to conduct the Delphi Method (Song, 2001). MDM simplifies the complicated questionnaire process but still retains the spirit and the advantages of the Delphi Method. The usual way of simplification is to use a “literature review” or “in-depth expert interview” instead of open-ended questionnaires to gather experts’ opinions in the first round of the survey. We used MDM with “in-depth interviews” as the Delphi method (Chiu, 2001). The first round of the open-ended questionnaire was conducted as in-depth interviews instead of collecting experts’ opinions to explore how the handwriting of the common people can become a usable design element and represents the culture of commoners in Taiwan and the rationality of developing it into commodities. Since there were not enough case studies on the use and recordings of handwritten elements, we invited experts and scholars with more than 20 years of experience as creative directors and international advertising and design awards, directors of marketing media companies, and academic experts in the key positions of the public sector. The Delphi multi-round questionnaire survey reduced the burden on the participants and increased their participation rate, and made it easier to manage survey time. The parameters imply a consistent opinion on the indicators (Table 1). In the Delphi questionnaire, open-ended questions were added to provide an in-depth understanding of the representativeness of the alleyway’s plebeian handwriting creations. The questionnaire also contained orientation and scale questions on the credibility of the handwriting of commoners to become the reference for subsequent researchers.

Table 1. Parameters and indicators derived from the Delphi method questionnaire survey.

Degree of Consistency	Quartile Deviation (Q)
High level of consensus	$Q \leq 0.6$
Moderate level of consensus	$0.6 \leq Q \leq 1$
Low level of consensus	$Q \geq 1$

4.3. Data Testing

The Durfee method is based on statistical presentation of experts’ opinions and achieving consensus (Green et al., 1999). The second-round questionnaire survey of this study was based on the result of the first-round survey result and the Likert Scale was used to let interviewee express their opinions on each question. The five-point scales were “strongly agree”, “agree”, “no opinion”, “disagree”, and “strongly disagree”. This scale was used to show the experts’ opinions in the plurals and the degree of variation of the opinions by using the quartiles. In this study, the quartiles and the plural were the criteria for testing whether a consensus was

reached. If the interquartile variance reached a high or moderate level of consistency, the question was considered to have a consensus among experts and scholars. If the mean was less than 4 (significant), the question was removed. Questions with a high level of consistency (plural) were used to see the trend of consistency among scholars and experts. In this study, the opinion of Holden and Wedman (1993) was adopted as the standard for consistency with the interquartile range in the Durfee method (Young, 1999). The opinion was considered to have a high level of consensus when its value of the interquartile range was less than 0.6. If the interquartile range was between 0.6 and 1, the question was considered to have a moderate level of consensus. If the interquartile range was greater than 1, the question was considered to have no consensus. If more than 85% of the questions reached a moderate level of consensus, the survey was completed.

4.4. Question Design in Second-Round Survey

The handwriting design as the style of culturally creative products was tested in the second round of the questionnaire survey and expert opinion was sought as shown in Fig. 5. The questionnaire was presented in Table 2.



Fig. 5. Self-designed culturally creative goods for experts and scholars to test their preferences and feasibility.

Table 2. Questionnaire structure and questions by the Delphi method.

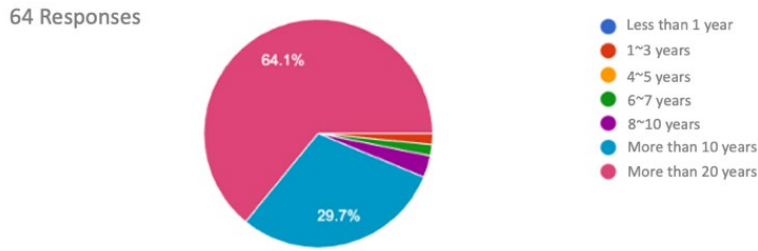
Structure	Literature
1. Handwritten sense of life and cultural representation	1. The humorous effect of language 2. The influence of artistic creations of the plebeians reversed the orthodox status
2. Applicability to culturally creative products	Taiwan’s designer, Godkidlla’s music album design: he used the street spray paint font that workers used for looking for works as an inspiration for his design
3. Exploring the characteristics of handwriting	Grassroots globalization, and collective imagination has the functions of consensus gathering and community creation
4. Value-added design of the plebeian handwriting culture	Language is a collective custom
5. Usability and meaning of website	Feedbacks on the website’s user interface
6. Open question: Do you think there are other suggestions or opinions on this plebeian handwriting element?	Handwritten Chinese characters will be an important material for Taiwan’s plebeian culture

5. Research Results and Discussion

5.1. Subjects

There were 64 respondents, and 64.1% of them have been working in advertising marketing or design professionals for more than 20 years (Fig. 6). Their positions included general managers, directors of advertising agencies or design firms, executive creative directors, and senior experts with world-class awards of advertising design.

The personal information of the experts: What is your relevant working experience?



The personal information of the experts: What is your current occupation?

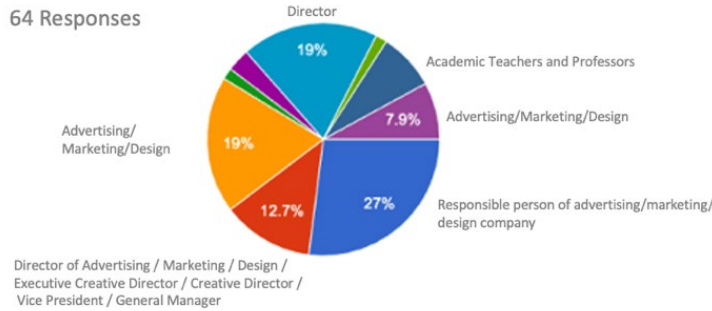


Fig. 6. Professional experience and professional fields of correspondents.

5.2. Results

Tables 3 and 4 show the reliability test result of MDM using Cronbach’s alpha analysis with IBM SPSS. When the value was higher than 0.7, the questionnaire was considered to have high reliability.

Table 3. Questionnaire structure and questions design from the Delphi method.

Cronbach’s Alpha	Cronbach’s Alpha Based on Standardized Items	Number of Items
0.935	0.937	20

Table 4. Second reliability analysis result of MDM.

Cronbach’s Alpha	Number of Items
0.897	27

In the first questionnaire survey, four questions had quartiles lower than 1, so they were deleted. Three questions with plurals lower than 4 were also deleted. In the second questionnaire survey, only one question’s response did not meet the standard and was deleted.

The first quartile (Q1), also known as the smaller quartile, is equal to the 25th percentile of all values in the sample after the replacement from the smallest to the largest. The second quartile (Q2), also known as the median, is equal to the 50th percentile of all values in the sample after the replacement from the smallest to the largest. The third quartile (Q3), also known as the greater quartile, is equal to the 75th percentile of all values in the sample after the replacement from the smallest to the largest replacement. The difference between the third quartile and the first quartile is also called the InterQuartile Range (IQR). In Eq. (1), if L was an integer, then the average of the Lth and L+1st was taken. If L was not an integer, then the next nearest integer was taken. (For example, if $L = 1.2$, then 2 was chosen.) Equation (2) was examined by the second round survey of experts, and the consensus was used as the basis for future research.

$$L_p = n \cdot \frac{p}{100} \tag{1}$$

6. Conclusions

Experts agreed with the commoner's handwriting culture and its cultural elements could not be defined as the "only" cultural representative. The experts thought that the elements of the handwriting in alleys became interesting design elements. Designed goods representing Taiwanese culture need to be culturally creative. The experts recommended designing goods such as umbrellas, notebooks, LINE emoji stickers, hats, key rings, mouse pads, seals, movable character stamps, packaging, paper towels, and so on. The website showing handwriting became a digital platform to record the culture of commoners and the history of handwriting. When the website becomes more popular, there will be more possibilities to use and study handwriting. The experts believed that unembellished and unpackaged characters could be associated with the environment. Handwritten characters lacked aesthetics and sometimes presented helplessness or sadness. Handwriting is common in folk lives and is found all over the world. Can it fully represent Taiwanese culture? In addition to writing, many other symbols represent Taiwan's commoner culture. Taiwan's alley handwriting represents Taiwan's local lifestyle. However, because each person has a different aesthetic sense, it cannot be a representative element of Taiwan's design. The handwriting was created with limited tools and materials in earlier times, and the Taiwanese imitated others' aesthetics as long as it had the same elements. This led to the creation of similar patterns. Future research is necessary to analyze the different handwriting and textual contents of urban and rural villagers on the open platform website.

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