Research Article

Study on the Application of Chinese Traditional Visual Elements in Visual Communication Design

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This study analyzed the data collected from field research and SD questionnaires on the application of traditional elements in Aba Prefecture. This study adopted the multidisciplinary research method integrating linguistics, architecture, art, and statistics of science and technology to discuss the related issues of the cultural industry park, and analyze the expression of traditional art elements in the visual communication of the cultural industry park. First, based on the photographs taken, we analyzed the layout of typical scenes of traditional element applications on the plane, including the analysis of traditional element types, colors, and materials. Second, the SD questionnaire results are displayed and analyzed. From the comprehensive scores of the respondents, we learned that the application of traditional elements has different effects on the architectural landscape. The main results show that (1) the public has a positive attitude toward the expression of traditional culture in the planning and construction of the park. Scenes rich in traditional elements play a positive role in the transmission of traditional culture and the creation of a traditional atmosphere; (2) showing traditional architectural styles and landscape layouts in a reproducible way can more intuitively set off the traditional cultural atmosphere; (3) the texture of the stone wall has certain rules and principles. The arrangement and combination of stones are a plane composition, and the visual characteristics brought by the wall can be specifically analyzed according to the elements of the plane composition. The stone masonry wall is analyzed according to the elements of plane composition, which can be divided into visual elements and relational elements. The visual elements are divided into the size, shape, color, and texture of the image, and the relational elements refer to the relationship between position and arrangement, including orientation, location, and center of gravity.

1. Introduction

The protection and utilization of traditional culture have far-reaching significance for the development of Chinese cultural industry and society [1]. The cultural industry park not only undertakes the economic function of industrial agglomeration and development but also serves as a display window for urban regional culture. It is of great significance to carry out cultural activities, attract consumer groups, and create a cultural atmosphere. In the construction of cultural industry parks, how to apply traditional art elements reasonably and skillfully to the park design, and how to fully display traditional material and nonmaterial cultures have gradually become the focus of researchers [2]. Therefore, in order to better protect and rationally utilize traditional culture, it is very

necessary to study the application effect of traditional art elements in the planning of cultural industry parks [3]. The role of visual communication design in the design of cultural industrial parks is becoming more and more obvious [4]. Studying the visual effects of traditional art elements can grasp the development trend and focus of traditional art elements in the planning of cultural industrial parks, and then can provide a basis for formulating reasonable planning and management guidance schemes for cultural industrial parks. Traditional visual elements were applied in visual communication design mainly through analyzing the color, composition, type, location, and spatial relationship of visual communication elements in the park, and then discussing the necessity of using visual communication elements in the design of cultural industrial parks, providing references for the park to deeply

explore cultural connotations, and filling in traditional elements and modern design.

Traditional art elements are the unique precious wealth and cultural heritage of Chinese traditional culture, which cannot be replaced by other art forms [5]. Traditional art elements come from traditional culture and can directly reflect traditional culture. Therefore, how to apply traditional art elements to contemporary design and create a diversified design trend has become a new topic for designers. In this study, traditional art elements mainly refer to the relevant content that can be applied to the visual communication design of cultural industrial parks [6]. A cultural industry park is a specific carrier of cultural industry, which usually carries out the development of cultural industry in the form of parks or blocks. China's cultural industry parks have a tendency to form cultural industry clusters to enhance their competitiveness. At present, there are three main types of cultural industrial parks in China: cultural theme parks, cultural and creative blocks, and cultural heritage gathering areas [7].

Visual communication is considered to be the most natural way for people to communicate various information to each other [8]. In Heller and Philip, from the perspective of the development process of visual communication design, to a large extent, it is a printing art design (graphic design) that emerged in Europe and the United States in the mid–19th century, also translated as graphic design or graphic design [9]. Visual perception is a subjective way of expressing and interpreting thinking, which can interpret information obtained from the human eye. As far as the purpose of visual communication design is concerned, it takes into account the acceptance of the target object, and combines words, symbols, colors, images, etc. to transmit information to the target object through appropriate visual media [10]. There are 4 main factors and basic principles of visual communication design: (1) text and its design principles. Writing is a system of symbols that humans use to communicate, and it is the form of writing that records thoughts and events. (2) Color and its design principles. Colors can often be used to symbolize specific emotions and connotations, and at the same time, the meaning of colors also changes with different cultures. (3) Logo and design principles. Logo design is an important part of visual communication design. (4) Placements and their design principles. The placement of visual communication media (e.g., signage and billboards) plays an important role in attracting attention.

The expression forms of traditional art elements in architectural practice are divided into three types, namely, the expression of traditional elements' "shape," the expression of traditional elements' "environment," and the expression of traditional elements' "meaning" [11]. In contemporary architectural design, "shape" refers to obtaining a visual experience similar or similar to traditional buildings in appearance and form by drawing on traditional architectural shapes and compositions, building materials, and architectural colors [12]. "Environment" refers to the construction of modern architectural space and streamlines by drawing on the traditional architectural space combination

and streamline organization to create a traditional spatial atmosphere and situation. "Meaning" means that it does not pursue the similarity of the external form of traditional architecture, but focuses on the expression of the creative concept and artistic conception of traditional architecture [13].

In landscape design, Chinese classical gardens simultaneously show the essence of traditional philosophy and traditional Chinese culture. The long-term development of Chinese culture is accompanied by its inevitable ideological foundation, which is the ideological spirit of Chinese culture—implicit, introverted, broad, and profound. At the same time, traditional cultural elements are the carriers of humanistic thoughts, and people's pursuit of harmony, moderation, and simplicity is consistent with their understanding of culture, nature, and philosophy [14].

Japanese architect Kisho Kurokawa believes that each country's culture has its own uniqueness and vitality, and he applies this philosophy to urban planning and design [15]. According to Indian architect Kriya, third-world countries have a good environment, which includes a balanced ecology, recycling of used products, a proper way of life, and indigenous construction techniques. As far as landscape design is concerned, the design is to help the area form a specific urban connotation, and the religious belief formed by the unique local culture of India and the understanding of time and space is a unique feature in the architectural design of Koriya [16]. Weeks and Grimmer describe the U.S. Department of the Interior's basic conservation strategy for historic relics. There are many types of historical relics, for example, historical buildings (residential houses, courts, town halls, commercial buildings, etc.), and landscape design and natural scenery [17]. English Heritage is the body that manages most of England's ancient and modern famous cultural buildings. It can provide advice and opinions on the protection of historical buildings and historical landscapes for local planning management departments and governments. They advocate that any restoration and protection of historical buildings should reduce the damage to the historical context and texture of the city [18].

Chinese traditional culture can be intuitively expressed through the application of traditional art elements. In contemporary China, cultural economy has the potential to promote urban development. As a specific medium to undertake cultural industries, cultural industry parks can play an important role in conveying traditional culture and urban connotation. Visual communication design is a combination of ideas and media [19]. It continues to evolve with the development of society. Visual communication design itself contains social significance, economic benefits, and cultural connotations. Its humanistic value is manifested in the satisfaction of people's living needs. National cultural symbols are the crystallization of human consciousness and traditional cultural spirit [20]. The reinnovation and reuse of national symbols can better reflect and convey Chinese folk culture. For example, the abstraction and redesign of traditional elements such as New Year pictures, paper-cuts, wood carvings, and shadow puppets can be better combined with modern design [21].

Graphics are one of the elements of visual communication design, and researchers can study visual communication design through perceptible conceptual elements in graphics. The most basic elements of the form of graphic language are points, lines, and planes [22]. A point, from a geometrical point of view, has only a position. But in the concept of graphic language, a point not only has position, but also size and shape. The smaller the point, the stronger the feeling of the point; on the contrary, the larger the point, the more the face [23]. The content of the points covers the elements with location, such as pavilions, sculptures, trees and stones, benches, and steps, and has two functions: functional and decorative. According to the focal characteristics of the point, the point scene can be placed in the middle of the intersection, the corner of the green space, the end of the road axis, or the center of the square, and the characteristics of the point can be highlighted through symmetry, contrast, repetition, etc [24]. Curves are often used in entertainment and leisure landscape design because of their free and smooth form to create an elegant and romantic atmosphere. The surface usually includes buildings, squares, lakes, trees, lawns, etc. The geometrical plane has a strong order and is generally used in monumental landscapes, such as Tiananmen Square, to create a solemn and solemn atmosphere. Irregular planes are easy to coordinate with buildings and roads, and can bring a feeling of liveliness and freedom [25].

The Tibetan blockhouses in Aba Prefecture have strong regional characteristics, and the core part of the blockhouses is their stone-making skills. Therefore, the stone-making skills of Tibetan blockhouses are unique among traditional Chinese construction techniques. The uses of stone crafting materials, tools, and construction techniques in the Tibetan watchtowers in Aba Prefecture all reflect the construction wisdom of the Tibetan people. The use of stone in the house is more in line with the material construction logic. The architectural cultural landscape is the carrier of various regional cultures, such as the natural fusion of environment, humanities, and historical and cultural elements. On the contrary, local culture is the gene of architectural cultural landscape. The Tibetan watchtower in Aba Prefecture is a beautiful cultural landscape. Under the impact of modern craftsmanship, materials, and lifestyles, the cultural landscape of the Kangzang area in Aba Prefecture is gradually disappearing. Traditional buildings are gradually being demolished and remodeled. Modern materials are integrated with traditional buildings and even replace the materials used in traditional buildings. For the inheritance part, the inheritance of stone craftsmanship basically relies on words and deeds, but such inheritance methods are disappearing, and many excellent stone craftsmen are also facing various difficulties.

In this study, taking the case of Aba Prefecture showing regional cultural characteristics as the research object, the layout of traditional elements in the plane is analyzed by means of graphical methods, and the public's satisfaction with the application of traditional elements in the study area is analyzed through SD questionnaires, and traditional art is summarized. In the second section, we introduced the main approaches we have used; in the third section, graphical expression and SD method questionnaire analysis of the case of Aba Prefecture were carried out to evaluate the public's satisfaction with the application of traditional art elements to the cultural industry park. First, according to the plane composition theory, the distribution of the plane layout of traditional elements in the area is analyzed by points, lines, and planes. Second, 8 scenes were selected to take photographs in the case, the evaluation factors and evaluation scales were established, and the SD questionnaire was conducted. A total of 81 valid questionnaires were collected. Through data entry analysis and graphic display, the author learned that the public has different evaluations on the application scenarios of different traditional elements. Generally speaking, the public tends to affirm the scenarios of traditional architectural styles and classical garden landscape layouts; finally, we summarized the main conclusions.

2. Study Area and Methods

Aba Prefecture is located in the northwest of Sichuan Province (Figure 1). The latitude and longitude range is as follows: 30°35′–34°19′ N and 100°31′–104°27′ E, with a total area of about 84,200 square kilometers, accounting for about 17% of the total area of Sichuan Province. The site is located on the southeastern edge of the Qinghai-Tibet Plateau and is part of the Hengduan Mountains [26]. It is located between the Qinghai-Tibet Plateau and the Chengdu Plain as a whole. Aba Prefecture is one of the most important water sources in the upper reaches of the Yangtze River and the Yellow River. It is also the only place where the Yellow River flows in Sichuan Province. At the same time, the Minjiang River, one of the most important tributaries of the upper reaches of the Yangtze River, also originates here. It borders Qinghai and Gansu in the north, Mianyang, Deyang, and Chengdu in the east, Ya'an in the south, and Ganzi in the west, as shown in Figure 1.

According to the traditional Tibetan division, the stone-built watchtowers in Aba Prefecture are located in Amdo and Khamba in the three major Tibetan areas (Amdo, Kham, and Uizang), among which Tibetan dwellings are the majority, and some Qiang dwellings are distributed in Li County, Mao County, and Wenchuan County. There are also branches of Tibetans in this area. The Amdo Tibetan area is mostly the Baima Tibetan area, while the Kangba Tibetan area is mostly populated by the Jiarong Tibetans. At the same time, some areas of Rangtang County belong to the Jiarong Tibetan area, and other areas belong to the Amdo Tibetan area; except for the areas distributed in the Kangba Tibetan area, some areas of Li County belong to the Qiang area [27].

The district has 1 city and 12 counties, namely, Malkang City, Jiuzhaigou County, Xiaojin County, Aba County, Ruoergai County, Hongyuan County, Rangtang County, Wenchuan County, Li County, Mao County, Songpan County, Jinchuan County, and Heishui County, a total of 223 towns, and 1354 administrative villages, and the administrative center is located in Malkang City [28].
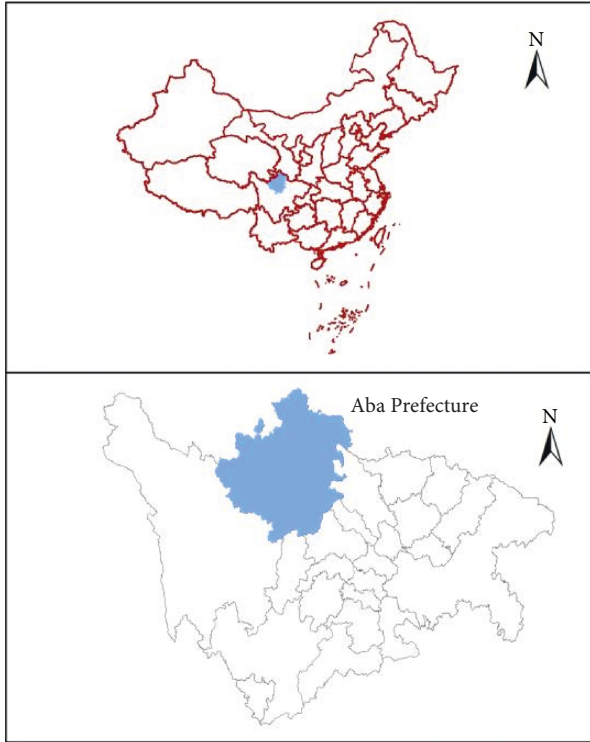
FIGURE 1: Location of Aba Prefecture.

Aba Prefecture has a vast land area and a total population of only 919,500 people. The density is small, and the distribution is extremely uneven. Among them, the agricultural population is 710,000, the nonagricultural population is 209,500, and the urbanization rate is 37.86%. Among the total population, Tibetans account for as high as 58.36%, followed by Han and Qiang, accounting for 19.69% and 18.55% of the total population, respectively; other ethnic minorities account for about 3.4%. The continuous optimization of the industrial structure promotes the sound development of the regional economy [29]. The per capita income of residents in Aba continues to increase, and the government finances are further moving toward a virtuous circle. The regional economic development situation is good, and the comprehensive economic strength continues to rise. According to the 2017 Aba Government's National Economic and Social Development Statistical Bulletin, the state's GDP has reached 29.516 billion yuan, of which the primary industry's total output value is 7.248 billion yuan, contributing 12.0% to economic growth; the industrial output value was 114.34 years, contributing 80.8% to economic growth; the output value of the tertiary industry was 10.738 billion yuan, contributing 7.2% to economic growth. The per capita GDP is 31,487 yuan, accounting for 70% of Sichuan's per capita. In terms of transportation construction, by the end of 2017, the total mileage of highways in Aba Prefecture reached 13,454 kilometers, and the total government investment in transportation during the "13th Five-Year Plan" period was as high as 10.1 billion [30]. At present, there are 2357.313 kilometers of trunk highways in the whole state, including 11 national highways and 2 provincial

highways. As far as the overall traffic construction is concerned, there are still shortcomings such as a small number of high-grade highways and poor traffic conditions. In 2017, in addition to the increase in road freight traffic in Aba Prefecture, passenger turnover and cargo turnover decreased by 22.9% and 5.8%, respectively, compared with the previous year [31].

The SD questionnaire method was used to study the public's views and satisfaction with the application of traditional art elements in the cultural industry park. The SD method (semantic differential) is a method for evaluating the connotation and meaning of research objects, which can be used to evaluate the views, attitudes, and thoughts of the respondents [32].

Referring to the adjective pairs (such as "open-closed") that are often used in the field of architecture in the previous literature, 19 pairs of adjectives were selected for the investigation of Aba Prefecture, and the 19 pairs of adjectives were divided into five aspects: spatial layout characteristics (4), architectural style (4), landscape design (2), psychological experience (7), and visual experience (2) (the frequency of adjective pairs in parentheses). In the questionnaire design, the researchers randomly arranged and combined adjective pairs to obtain the respondents' subjective evaluation of the research content. The adjective pairs and corresponding evaluation factors are shown in Table 1. Regarding the selection of the evaluation scale, generally speaking, when the evaluation scale is lower than level 5, the evaluation scale will be too general, which will easily lead to the deviation of the evaluation results. In order to facilitate the respondents to understand and identify the evaluation grades, and at the same time to ensure the evaluation accuracy, the SD method questionnaire in this study selected a 5-level evaluation scale, that is, the scores are −2, −1, 0, 1, 2, and 0 is the center. Symmetrical setup (Table 2): the collected questionnaire data were entered into Microsoft Excel for calculation. According to the scores of the respondents, the average score of each evaluation factor can be calculated. Among them, the total number of respondents is R, each respondent is $r_1, r_2, r_3, \ldots, r_R$, and the scores of each respondent for different questions are as follows:

$$\begin{cases} Q_1 r_1, Q_2 r_1, Q_3 r_1, \ldots, Q_{19} r_1, \\ Q_1 r_2, Q_2 r_2, Q_3 r_2, \ldots, Q_{19} r_2, \\ Q_1 r_3, Q_2 r_3, Q_3 r_3, \ldots, Q_{19} r_3. \end{cases} \quad (1)$$

Average scores for each question are as follows:

$$\begin{cases} Q_1 = \dfrac{(Q_1 r_1 + Q_1 r_2 + Q_1 r_3 + \cdots + Q_1 r_R)}{R}, \\ Q_2 = \dfrac{Q_2 r_1 + Q_2 r_2 + Q_2 r_3 + \cdots + Q_2 r_R}{R}, \\ \cdots \\ Q_{19} = \dfrac{(Q_{19} r_1 + Q_{19} r_2 + Q_{19} r_3 + \cdots + Q_{19} r_R)}{R}. \end{cases} \quad (2)$$

TABLE 1: Adjective pairs and evaluation factors of SD analysis.

Adjective pair	Evaluation indices	Evaluation object
Open-closed	Sense of space	Spatial layout features
Orderly-messy	Sense of order	Spatial layout features
Attractive-resistant	Attractiveness	Psychological feeling
Vivid-rigid	Vitality	Psychological feeling
Staggered-flush	Staggered degree	Architectural style
Vegetation rich-vegetation monotonous	Vegetation richness	Landscape design
Quiet-noisy	Quietness	Psychological feeling
Novelty-ordinary	Novelty	Architectural style
Architectural style	Traditional	Architectural style
Public-secret	Publicity	Psychological feeling
Relaxed-tense	Relaxation	Psychological feeling
Safe-dangerous	Security	Psychological feeling
Pleasant-unpleasant	Pleasure	Psychological feeling
Bright-dim	Brightness	Visual feeling
Diverse-singular	Diversity	Architectural style
Colorful-monotonous	Color richness	Visual feeling
Coordinated-unbalanced	Coordination	Spatial layout features
Clean-dirty	Cleanliness	Landscape design
Easily identifiable-not easily identifiable	Recognizable	Spatial layout features

TABLE 2: Rating scale.

Adjective (positive)	Very much 2	Well 1	Moderate 0	Well −1	Very much −2	Adjective (negative)

By comparing the average scores of the evaluation factors, the public's views and opinions on the evaluation objects can be reflected.

This study adopts the multidisciplinary research method integrating linguistics, architecture, art, and statistics of science and technology to discuss the related issues of the cultural industry park, and analyze the expression of traditional art elements in the visual communication of the cultural industry park. In this study, in order to explore the relationship between the application of traditional art elements and the design level of cultural industrial parks, both qualitative and quantitative research methods are used to analyze the research objects. Among them, qualitative research methods are mainly used to obtain, analyze, and interpret data through observational methods. Quantitative research methods are used to analyze quantitative relationships between attributes and phenomena of research objects, often involving a large number of respondents. The research object of this paper covers online literature and actual case studies. The application of qualitative and quantitative research methods can comprehensively reflect the relationship between traditional elements and cultural industrial parks.

3. Results and Discussion

3.1. The Expression of the Art of Building Stone Works.
According to China's current administrative divisions, Tibetans are mainly distributed in parts of Tibet Autonomous Prefecture, Sichuan Province, Qinghai Province, Gansu Province, and Yunnan Province. As an area covered by Tibetan architectural culture, the Tibetan area in Sichuan must have been influenced by Tibetan culture. However, before the introduction of Tibetan culture, the area also had its own cultural accumulation. It is integrated with Tibetan culture to form a unique and diverse Sichuan Tibetan architecture. The Tibetan watchtowers in Aba Prefecture have a long history and have experienced thousands of years of wind and rain. Its development can be summarized as the initial germination period, the embryonic period, and the mature period.

Stone walls give people a special feeling. This special texture has certain rules and principles. The arrangement and combination of stones are a plane composition, so it follows the visual elements of plane composition, so the visual effect brought by the wall can be specifically analyzed according to the elements of plane composition and features. The stone masonry wall is analyzed according to the elements of plane composition, which can be divided into visual elements and relational elements. The visual elements are divided into the size, shape, color, and texture of the image, and the relational elements refer to the relationship between position and arrangement, including orientation, location, and center of gravity.

3.1.1. Shape. Any visible object has a shape, and the wall made of stone craftsmanship also has its own unique shape. The shape of the wall is a rectangular plane or a curved surface. Different shapes of walls will bring different visual experience to people. Rectangular and neat walls give people a sense of stability, while curved walls give people a line of sight and have a certain "extensibility" (Figure 2).

Figure 2: Different shapes of walls of Aba Prefecture.

3.1.2. Size. The size relative to the volume of the building will give people an intuitive feeling. The size here includes the ratio of the length, width, and height of the building, and the influence of the size of the stone on the visual characteristics of people. Due to the different building volumes and the choice of stone sizes, the walls give people different feelings (Figure 3).

3.1.3. Color. The wall composed of natural stone colors will form a unique color matching, and the visual image of the wall is perceived by people through the color and brightness of the combination of stones. There is a certain relationship between the color of the stone and the soil. The main colors of the stone in Aba are red, gray, cyan, brown, etc., a wide variety of colors. The combination of different colors brings different visual feelings to people. The complex color splicing of natural stone will give people a grand feeling and a strong visual impact (Figure 4).

3.1.4. Texture. Stone, as the most traditional texture material, forms a flat and even, rough, and rough visual experience. As a natural product of nature, stone has its own unique texture and beauty. Therefore, due to the different units of the stone masonry wall, the unevenness of the wall is formed, which enriches the texture of the wall, and forms a unique and regular geometric texture and strong texture. At the same time, the stone walls in Aba Prefecture are more inclined to a kind of "weaving," and it is this weaving texture that gives people a very strong visual impact.

In the relationship elements of wall art, there is no special feature in direction and position, but the center of gravity gives people a strong feeling. Due to the application of the wall and prestressing technology, such a wall gives people a sense of stability. It can psychologically give people a sense of balance and heaviness (Figure 5).

3.2. Aba Prefecture SD Law Evaluation Survey. We select 8 representative scenes (entrances, squares, buildings, etc., as shown in Figure 6) in each park for shooting, make photographs of the same size as the samples of the SD method

evaluation research, and then conduct the SD method questionnaire survey. The questionnaire was distributed to the public in different regions of our country by e-mail. Considering the feasibility of the study, the respondents were mainly concentrated in the regional center where the case was located. All respondents were over the age of 16 years, were able to express their views independently and clearly, and were allowed to withdraw from the survey at any time according to their wishes. In this SD method evaluation study, the author distributed 110 questionnaires and recovered 81 valid questionnaires. The information of the respondents is shown in Table 3, and the ratio of men to women is nearly 1 : 1. In terms of occupation, the number of respondents related to architectural planning accounted for 44.0% of the total number of respondents, and the test sample has a certain objectivity and reference.

We completed the selection of adjective pairs and evaluation scales, and finally completed the design and production of the SD method questionnaire (Table 3).

After collecting all 81 questionnaires, we first entered the scores of the case samples into Microsoft Excel software and then calculated the average score of each evaluation factor of each sample. Then, the comprehensive average value of 8 sample pictures is obtained, that is, the comprehensive average value is the average value of each factor of $\Sigma/8$ (number of samples), and the comprehensive evaluation score of the SD method is drawn according to the comprehensive average value obtained (Table 4).

Then, with the adjective pair as the abscissa and the comprehensive average of the samples as the ordinate, the average change curve of the sample evaluation can be drawn (for example, Figure 6). For the average change curve of the sample evaluation, the points on the curve represent the average score of each adjective pair, and which side of the score is biased to indicate that the evaluation is biased toward the adjective on this side, that is, the public's evaluation of the scene.

It can be seen from Table 5 that different scenes can bring different visual feelings to the respondents and then obtain corresponding scores. Sample 7 is the scene with the best overall evaluation among the 8 samples in Aba Prefecture, with 11 evaluation factors getting the highest score. In

Figure 3: Combinations between different sizes of stones.

Figure 4: Different colors of stone bring different visual experience.

Figure 5: The arc formed by the retraction of the wall and the improvement of the corner brings a sense of stability.

contrast, sample 8 did not receive the highest score for either evaluation factor. In the comprehensive evaluation of Aba Prefecture, the scores of all 19 evaluation factors are between 0 and 1; that is, the subjective evaluation obtained by Aba Prefecture is between average status and slight status. Ten of these evaluation factors scored higher than 0.50: sense of space, sense of order, attractiveness, publicity, relaxation, safety, pleasure, brightness, cleanliness, and recognizability. The sense of space received a high score of 0.96, indicating that the respondents believed that the space type of the park was mainly open space. The combined average scores for traditionality and color richness were 0.19 and 0.30, respectively. It can be seen from this that the public's comprehensive evaluation of Aba Prefecture can be summarized as a public open space with a strong sense of space and order. In terms of visual perception, its traditional degree and color richness have been affirmed to a certain extent.
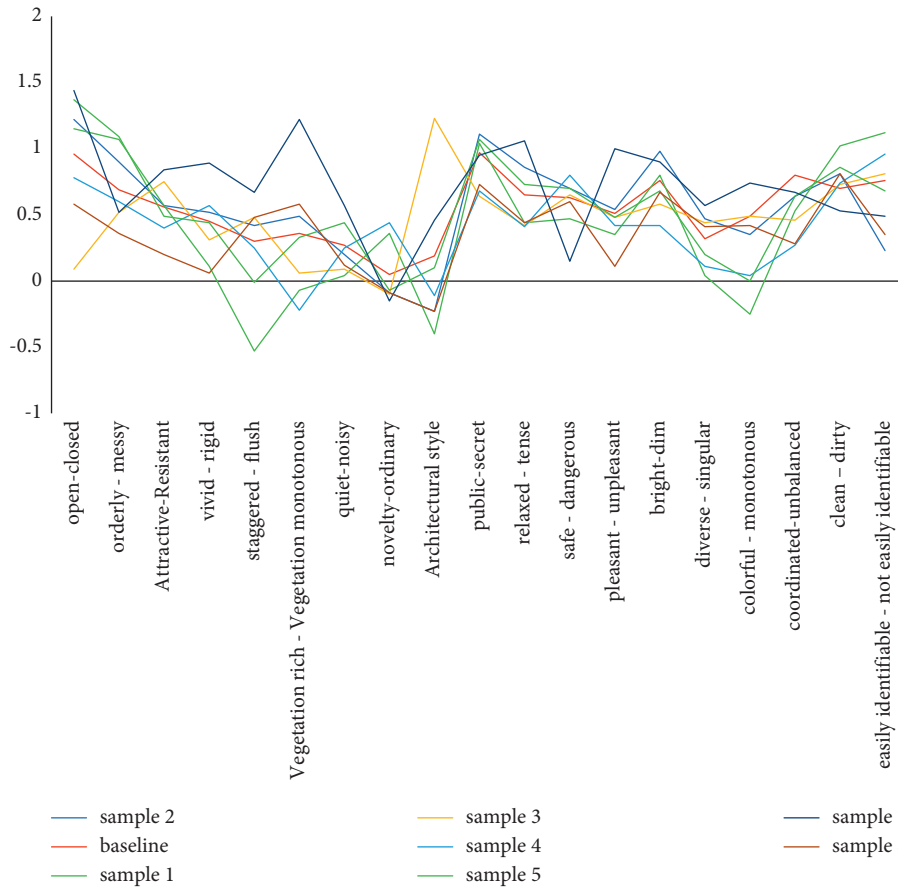
FIGURE 6: Samples' evaluation curve. Red line is the comprehensive evaluation curve (baseline).

TABLE 3: Statistics of the interviewees.

	Type	Proportion (%)		Type	Proportion (%)
Gender	0-Woman	46			44
	1-Man	54			
Age	18–28		Job occupation	0-Architectural planning related	
	29–40			1-architectural planning unrelated	
	41–65				56
	Above 65				

3.3. SD Questionnaire Sample Curve Analysis.

We draw the evaluation change curve for the selected samples in Aba Prefecture one by one and superimpose the comprehensive evaluation curve of each sample with the comprehensive evaluation curve (baseline curve) of Aba Prefecture (red line in Figure 6), so as to compare and analyze the differences in the psychological evaluation scores of these 8 samples (Figures 7(a)–7(h)).

Green line in Figure 6 shows that the sense of space, order, novelty, publicity, cleanliness, and recognizability of sample 1 is all higher than the comprehensive average score. However, the scores for staggeredness, quietness, tradition, and richness of color were lower than the overall evaluation score. In particular, sample 1 in Aba Prefecture has an open space and is easily recognizable because of its novel and unique pillars. However, its colors and vegetation types are relatively simple.

Most of the interviewees thought that the pillars could identify the entrance characteristics of the scene, but as a park entrance with the theme of traditional culture, it seems too modern and the classical atmosphere is not very strong.

The trend of the evaluation curve of sample 2 is almost the same as that of the benchmark curve (blue line in Figure 6). The scores of evaluation factors such as sense of space, sense of order, vegetation richness, publicity, relaxation, brightness, and color richness are slightly higher than the comprehensive evaluation scores. Conversely, scenario 2 received lower scores for traditionalness and recognizability. The public sees the scene as a spacious space for public events, with diverse vegetation and landscape pieces. Although sample 2 has high vegetation and color richness, most respondents believe that the scene lacks its own characteristics and is, therefore, difficult to identify.

TABLE 4: SD method questionnaire sample.

Adjective	Very much	Well	Moderate	Well	Very much	Adjective
Open	2	1	0	−1	−2	Close
Ordered	2	1	0	−1	−2	Messy
Abstractive	2	1	0	−1	−2	Resisting
Vivid	2	1	0	−1	−2	Boring
Scattered	2	1	0	−1	−2	Flush
Rich in vegetation	2	1	0	−1	−2	Monotonous in vegetation
Quiet	2	1	0	−1	−2	Noisy
Novel	2	1	0	−1	−2	Ordinary
Traditional	2	1	0	−1	−2	Modern
Public	2	1	0	−1	−2	Hidden
Relax	2	1	0	−1	−2	Nervous
Safe	2	1	0	−1	−2	Dangerous
Happy	2	1	0	−1	−2	Sad
Bright	2	1	0	−1	−2	Dim
Diverse	2	1	0	−1	−2	Monotonous
Colorful	2	1	0	−1	−2	Colorful
Coordinated	2	1	0	−1	−2	Imbalance
Clean	2	1	0	−1	−2	Dirty
Identified	2	1	0	−1	−2	Unidentified

TABLE 5: Comprehensive average scores of Aba State.

Adjective pair	Evaluation indices	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8
Open-closed	Sense of space	1.15	1.22	0.09	1.07	0.78	1.37	1.44	0.58
Orderly-messy	Sense of order	1.07	0.9	0.52	0.49	0.6	1.09	0.52	0.36
Attractive-resistant	Attractiveness	0.57	0.57	0.75	0.68	0.4	0.49	0.84	0.2
Vivid-rigid	Vitality	0.11	0.52	0.31	0.67	0.57	0.44	0.89	0.06
Staggered-flush	Staggered degree	−0.53	0.42	0.48	0.67	0.25	−0.01	0.67	0.48
Vegetation rich-vegetation monotonous	Vegetation richness	−0.07	0.49	0.06	0.52	−0.22	0.33	1.22	0.58
Quiet-noisy	Quietness	0.04	0.2	0.09	0.42	0.25	0.44	0.57	0.12
Novelty-ordinary	Novelty	0.36	−0.09	−0.1	0.07	0.44	−0.07	−0.15	−0.09
Architectural style	Traditional	−0.40	−0.23	1.23	0.72	−0.11	0.1	0.46	−0.23
Public-secret	Publicity	1.04	1.11	0.64	0.75	0.68	1.07	0.95	0.73
Relaxed-tense	Relaxation	0.44	0.86	0.42	0.83	0.41	0.73	1.06	0.44
Safe-dangerous	Security	0.47	0.7	0.65	0.98	0.8	0.7	0.15	0.6
Pleasant-unpleasant	Pleasure	0.35	0.54	0.48	0.72	0.42	0.48	1.00	0.11
Bright-dim	Brightness	0.8	0.98	0.58	1.02	0.42	0.68	0.9	0.67
Diverse-singular	Diversity	0.04	0.47	0.44	0.33	0.11	0.2	0.57	0.41
Colorful-monotonous	Color richness	−0.25	0.35	0.49	0.64	0.04	0.00	0.74	0.42
Coordinated-unbalanced	Coordination	0.53	0.64	0.46	0.43	0.27	0.64	0.67	0.28
Clean-dirty	Cleanliness	1.02	0.81	0.73	0.9	0.74	0.86	0.53	0.81
Easily identifiable-not easily identifiable	Recognizable	1.12	0.23	0.81	0.91	0.96	0.68	0.49	0.35
Times with high scores		2	1	1	3	1	1	11	0

Sample 3 shows that except for the two evaluation factors of spatial sense and traditional degree, the scores of the remaining factors are almost the same as the comprehensive evaluation scores of Aba Prefecture (yellow line in Figure 6). A low score for the sense of space indicates that the scene has a strong sense of enclosure, and the traditional degree obtains the highest score among the 19 evaluation factors. The application of traditional elements, such as traditional architectural styles and Chinese characters, makes the scene highly recognizable.

The sample evaluation score of the sample 4 scene is slightly higher than the overall evaluation score of Aba, and only the sense of order gets a lower score (dark blue line in Figure 6). Brightness and color richness, which are closely related to visual communication, are well received by the public. In addition, traditional degrees receive higher scores. The public believed that the scene had a good interpretation of the traditional meaning. Not only did the quaint buildings and sculptures convey a traditional feeling, but the diverse vegetation and colors also enriched the visual experience of the respondents.

In sample 5, this scene is a typical combination of traditional utensil modeling and modern architectural design (Figure 6). At the same time, it indicates that the evaluation curve of the sample floats around the benchmark curve.
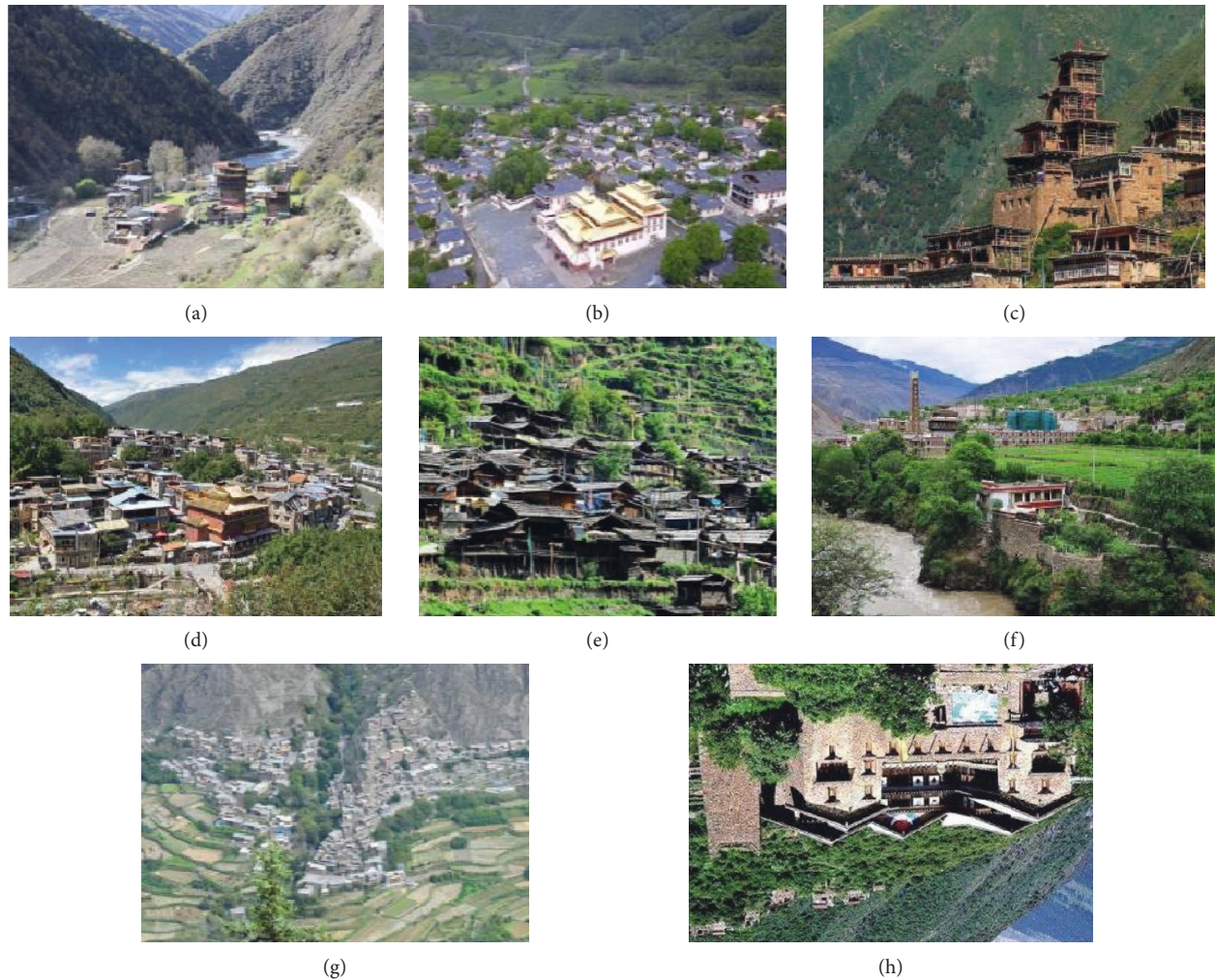
Figure 7: Eight samples in Aba Prefecture.

Except for the four evaluation factors of vitality, novelty, safety, and recognizability, the scores of the remaining factors are all lower than the comprehensive evaluation score of Aba Prefecture. The interviewees pointed out that the "ding" shape of the building is quite novel, and the use of traditional patterns and local bronze materials also conveys the cultural atmosphere well.

By comparing with the benchmark curve, the scene gets high evaluations in terms of space, order, quietness, publicity, and coordination. The scores for patchiness and color richness are slightly lower than the Aba composite score. Most of the respondents believe that the square space is relatively ordinary and lacks visual attraction, but the traditional pattern relief can reflect certain traditional characteristics to highlight cultural characteristics.

The overall evaluation of sample 7 by the public is high. Only in the sense of order, novelty, safety, cleanliness, and recognizability, it got a slightly lower score than the comprehensive evaluation of Aba. Respondents clearly liked the scene because of the rich vegetation, vast waters, and ancient pagodas serving as landscape nodes.

The comprehensive evaluation of this scene is lower than the overall evaluation of Aba Prefecture. However, the sense of patchiness and vegetation richness achieved better evaluations. The sign is located in the green space near the building and has a certain degree of legibility. At the same time, the abstraction of the elements of the horse head wall in ancient Huizhou buildings and the use of ancient Chinese characters convey a certain traditional cultural connotation.

4. Conclusions

In our study, the research takes the application of Chinese traditional art elements in the visual communication design of cultural industry parks as a perspective. Taking Aba Prefecture, Sichuan Province, as an example, the graphic expression and the SD method questionnaire survey analysis were carried out to evaluate the public's satisfaction with the application of traditional art elements to the cultural industry park. First, according to the plane composition theory, the distribution of traditional elements in the park plane layout is analyzed by point, line, and plane. Second, 8 scenes were selected to take photographs in the case, the evaluation factors and evaluation scales were established, and the SD questionnaire was conducted. A total of 81 valid questionnaires were recovered. Through data input analysis

and graphic display, it was learned that the public had different evaluations on the application scenarios of different traditional elements. Generally speaking, the public tended to affirm traditional architectural styles.

In cultural industry parks, scenes with traditional art elements are more likely to be well received by the public than scenes without traditional elements, indicating that the public has a positive attitude toward the expression of traditional culture in the planning and construction of the park. Scenes rich in traditional elements play a positive role in the transmission of traditional culture and the creation of traditional atmosphere.

As far as the application of traditional elements is concerned, it is easier to express traditional architectural styles and landscape layouts in a way that reproduces the traditional cultural atmosphere. This method is easier than applying abstract and simplified traditional elements to modern design, achieving the purpose of attracting public attention, and bringing a rich visual experience to the public.

In view of the public's acceptance and affirmation of cultural elements, in a society with a strong cultural atmosphere, the use of traditional art elements can produce positive effects in visual communication. At the same time, the rational and effective use of traditional art elements can play a certain role in improving the quality and operation effect of the cultural industry park. In addition, cultural leisure and shopping districts have gradually become the main way to provide recreation and entertainment space for the public. The combination of traditional cultural elements and modern design has a certain significance in conveying Chinese traditional culture.

The rational and effective application of traditional art elements to the visual communication design of the park can achieve positive results. Traditional elements (for example, ancient Chinese architectural forms and traditional patterns) are the figurative expressions of Chinese traditional culture, and visual images with traditional artistic conception can directly convey cultural characteristics to the public.

However, the number and scale of China's cultural industry parks are increasing, and previous literature shows that Aba Prefecture usually lacks a unified plan, and the degree of excavation of regional cultural connotations is not enough. In terms of visual communication, traditional architectural styles, ancient figures, traditional patterns, etc. are often used in the design of research areas. The application of traditional elements should not lack dialectical thinking and blindly adopt the doctrine, and should pay attention to the combination of traditional elements and local culture. With the development of modern technology, digital media has influenced visual communication design to a certain extent. In order to improve the design quality of the area, the interactive participation of the public can be considered as an important factor.

In the future, for the SD questionnaire, the selected samples were all scenes shot during the day, showing the visual image of the area under natural light. Therefore, the public's evaluation of the sample space cannot reflect its visual experience at night, such as the influence of the lighting design in the area on the expression of traditional culture. Analysis of the role of area lighting design in visual communication can be supplemented in future research.

Data Availability

The experimental data used to support the findings of this study are available from the author upon request.

Conflicts of Interest

The author declares that there are no conflicts of interest to report regarding the present study.

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