

Study of Cultural and Creative Design based on Narrative Design

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Abstract: Using narrative design method to combine campus culture for campus cultural and creative product design practice, based on the narrative research method, summarise its design key points and combine it with specific case studies to analyse, combine narrative design and campus cultural and creative products to prove the feasibility of the design practice. With the help of narrative design methodology for campus cultural and creative design, campus emotions are used to create emotional resonance with consumers, with narrative design as the entry point, campus culture as the theme, and campus cultural and creative products to express the final effect. Using narrative design as the theoretical basis and shape grammar as the design method to create cultural and creative products with campus culture will touch consumers' hearts, which will help them to be brought into the constructed narrative scenario, feel the narrative theme, and cause emotional resonance with consumers.

Keywords: Narrative Design; Campus Literacy; Shape Grammar.

1. Introduction

Campus culture and innovation is an important branch of cultural and creative design, and its innovative development is conducive to enhancing the campus brand image, spreading the campus culture in depth, and helping to improve the reputation and popularity of colleges and universities [1]. In the context of accelerating the construction of Chinese language and Chinese narrative system, introducing narrative into campus cultural and creative design, enriching the research of narrative theory in the field of cultural and creative design, and constructing the dialogue between people and campus cultural products are of great significance for the development of campus cultural and creative design in the future.

Campus cultural and creative products have high cultural value. Campus culture is a cultural circle constructed with the campus as a creative "space" and teachers and students as a group. Colleges and universities, as an important base for cultural dissemination, is a cultural body with a strong academic atmosphere, with a temperament different from that of other organisations, and a humanistic atmosphere full of the atmosphere of the times and the characteristics of the campus. Campus cultural factors can not only be extracted from the campus buildings, natural scenery in the outline, but also implied in the long history of school development, school motto, school song, school logo outlines the campus cultural labels, the change of the school site carries the campus culture of the historical pulse, the regional style enriches the atmosphere of the cultural construction of colleges and universities, the school's founding figures, celebrities and alumni and their interpretation of the school history story cast the spirit of the campus culture. The founding fathers of the school, famous alumni and their stories of school history have created the spirit of campus culture.

2. Overview of Cultural and Creative Design

2.1. Basic Concept

As a fusion of culture and design, cultural and creative

products convey the intrinsic value of culture by means of design, giving the product itself an indispensable cultural experience, with the significance of both cultural and emotional symbols. Meanwhile, it also plays a very important role in building campus cultural image, inheriting culture and spirit, and the design of cultural and creative products implies a special symbolic connotation and profound meaning, thus realising the social role and emotional power of design as a spiritual culture. As an important medium for interpreting campus culture, campus cultural and creative products are an extension and promotion of the school's philosophy, the core of which is the in-depth excavation of campus culture, and the transmission and presentation of the campus's unique material culture and spiritual culture through creative expression, which complement each other, providing a diversified channel for the dissemination and promotion of campus culture, and also realising the products' unique artistic aesthetic value from a cultural point of view.

The design and extension of campus cultural products, in foreign countries has formed a relatively complete design system, from the design of product positioning, design and development and design and production of publicity and marketing mode, all for the overall campus cultural branding to provide strong support, through the connotation of campus culture and the core idea of the design of graphic design and product processing, so that the formation of the contents of the product as a carrier of items, and achieve social benefits as well as cultural benefits. And achieve social benefits as well as cultural benefits, economic benefits and other benefits of the integration of the effect. Many colleges and universities sell their cultural and creative products as souvenirs to the general public in the form of cultural and creative shops. While obtaining economic benefits, they have also increased their cultural branding to a great extent.

2.2. Analysis of the Current Situation

Overseas campus culture and innovation started earlier, has been constructed from the cultural and creative product design, development, production, sales of the whole process are more mature and complete system, and has a certain market. For example, Harvard University's campus cultural

and creative product design, not only the school logo, the school's theme colour, campus IP image as the campus cultural and creative design of the landing point, will continue to refine and convert into key graphics and colours, leaving a deep impression, but also launched a family series of products, so that teachers and students family members in the use of products to produce emotional integration, strengthen the emotional connection between schools and society, to meet the emotional needs of users, and thus bring a positive impact on social development. This will strengthen the emotional connection between the school and the society, satisfy the emotional needs of users, and bring a positive impact on the development of the society. At the same time, Harvard University itself has a more complete production line, product categories are rich, to meet the needs of users in a variety of applications, and is committed to co-operation with a number of enterprises to create co-customised products, so that the design of the product from the enhancement of the practical function of the rise to the creation of emotional value for the user, more personalised, humane, so as to produce its special value, opening up a new direction of the exclusive custom market.

On the contrary, the domestic campus cultural and creative industry, the major universities started at different times, the competition between the universities to chase. For example, Peking University, Tsinghua University, the Central Academy of Fine Arts and other early start, there is no lack of excellent cultural and creative products. For example, Tsinghua University designed the Tsinghua Four Seasons metal bookmarks, from the school landmark building to extract its cultural symbols, to the artistic expression of the approach, with a clear campus cultural characteristics, so that both practical and aesthetic. 2021 Tsinghua University's admission notice again attracted the attention of the public, the design of these colleges and universities adhering to the concept of people-oriented school, the school is also increasingly important to the campus cultural and creative products. These designs reflect the human-centred philosophy of universities in China and the increasing emphasis on the development of campus culture and creativity, with great improvement in innovation and aesthetics.

The development of cultural and creative products, as well as the overall design of derivative products, is based on product design in the process of implementation and application. Need to meet the design of aesthetic, design functionality and design of product diversity characteristics. As cultural creativity and cultural creativity and derivative products in the process of design expression, in the consideration of art design and cultural connotation of the aesthetic connection between the same time also need to consider the use of the product. The transformation of art design for campus culture is not only the artistic treatment of its connotation and cultural value, but also the need to express the cultural connotation and practical application value conveyed by the object itself. Design itself is the deformation of cultural processing and aesthetic co-ordination. Creative expression of design needs to keep up with the market demands of the times and the implementation of new materials, we are in the process of design and expression as diversified as possible, in order to make the product can be more levels of content presentation.

Product homogenisation phenomenon, from the design itself and the design form content. At present, most of the campus cultural and creative product designs are combined

with elements such as typical campus buildings or school logos to arrange combinations and decompositions. The elements are implemented on seals, mugs, stationery products, mouse pads or clothing. The content of the products and the formality of the products tend to be homogeneous and lack of innovation. The connotation of the campus' own cultural characteristics needs to be clarified. As a campus cultural and creative products, while establishing brand impact, it is one of the ways to transform and convey the campus culture belonging to the campus, which is one of the ways to express personalised business cards. We should explore the information symbols and graphic elements that belong to the cultural characteristics of the respective institutions' cultural heritage for transformation and expression. On the premise of content form, material selection and integration of regional cultural characteristics, the extension of more product categories and product content.

3. City University of Macau Cultural and Creative Design Practice

3.1. Preliminary Research

City University of Macau was founded in 1981, formerly known as the University of East Asia, and was renamed City University of Macau in 2011. The main campus in Taipa is the former address of the University of Macau. The university has nine faculties: Business, Data Science, Finance, Humanities and Social Sciences, Innovation and Design, International Tourism and Management, Education, Law, and the Institute of Portuguese Speaking Countries. The motto of City University of Macau is "To be Virtuous, to be Knowledgeable, To be Conductive", which expects all students to be knowledgeable, to be virtuous, and to be conductive.

Through the research on the cultural and creative products sold on the campus of the City University of Macao, we found that the types of campus cultural and creative products sold by the City University are relatively simple, and it is difficult to distinguish them from other schools in terms of colours and logos. When we interviewed the students at the campus, the students did not have deep memories of the City University, and they lacked their own cultural heritage of the campus. At the same time, we also conducted surveys on various platforms on the network, and found that City University also has no sales channels on the network, and the publicity efforts are inadequate. Most students buy souvenirs only for "commemoration", not for collection. Such products are not common on campus because most of the souvenirs in these souvenir markets are finished products made by merchants and do not reflect the cultural characteristics of the campus. From the above, we can see that the souvenir market on campuses is very chaotic and devoid of characteristics.

Through market research, it is found that the development categories of campus cultural and creative products of domestic universities are concentrated in the categories of daily necessities, learning supplies, handicrafts, and clothing and apparel (as shown in Figure 1). In order to better understand the satisfaction and opinions of the users on the existing campus cultural and creative products, a questionnaire survey has been adopted for the research and study, and the results show that 74% of the users will choose to buy the cultural and creative products in the category of daily necessities, and 56% of the users will choose handicrafts, followed by learning supplies, clothing and apparel, and so on (as shown in Figure 2).

creative industries	Specific products
living goods	Mugs, keychains, table mats, canvas bags, fridge stickers
school supplies	Pens, bookmarks, notebooks, calendars, card holders, postcards
handicrafts	Stamps, badges, ornaments, envelopes
Clothing and apparel	Cultural shirts, masks, pins, caps

Figure 1. Data table

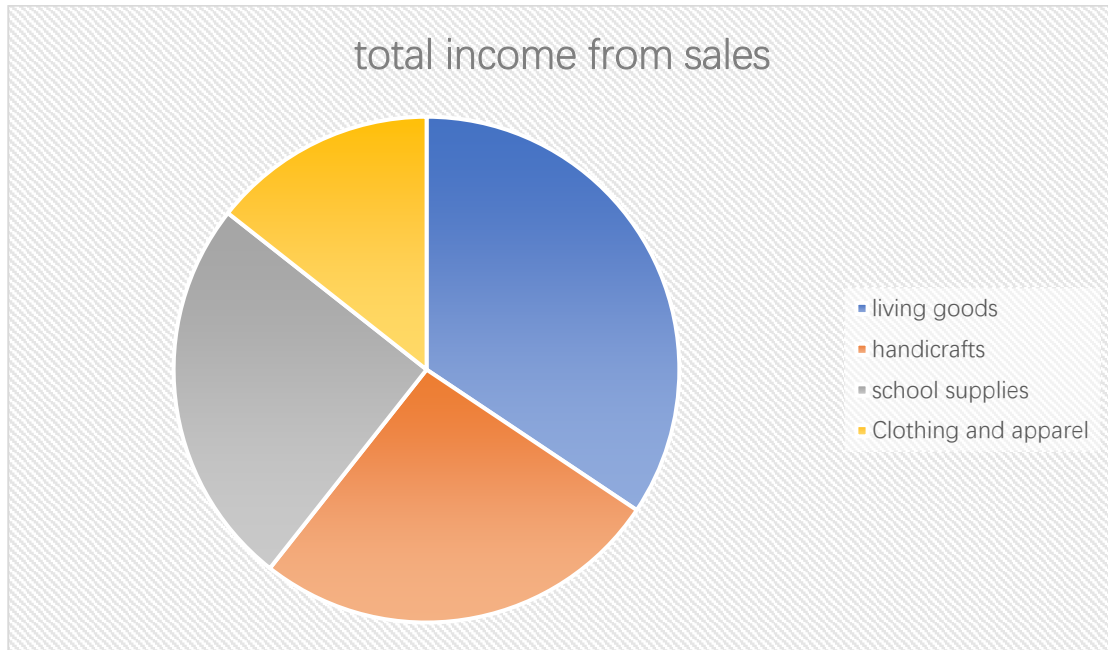


Figure 2. Cultural Creations Classification Chart

3.2. Campus Elements of City University of Macau

In the process of campus field research on the City University of Macau, we chose to conduct research and observation and analysis from the campus characteristics of the building and the campus card place, etc. At the same time, we put forward the design strategy focusing on the problems found in the research of campus souvenirs, so that each product in the design can be associated with a certain degree of narrative, and ultimately design a whole series of campus souvenirs, which will avoid the occurrence of a wide variety of products designed and inconsistent situation, and also better publicity for campus souvenirs. This will avoid the situation where the designed products are too diverse and incoherent, and at the same time, it will be a better way to publicise the campus souvenirs.

Rectangular, triangular and circular structures can be seen everywhere on the CityU campus. The triangle gives a sense of stability, the circle gives a sense of harmony, and the rectangle gives a sense of solemnity and authority, which is exactly what the school can bring to the students in the campus life, so we can incorporate the element of structure into the design, and at the same time show the elements of the campus of the City University. Colour in the campus is mainly in bright colours, the representative colours of CityU are

green, orange and yellow, the school is designed in bright colours, and the representative colours of CityU can be seen in the facade of the teaching building, railings, landscape sketches and so on (e.g. Figure 3 and Figure 4).

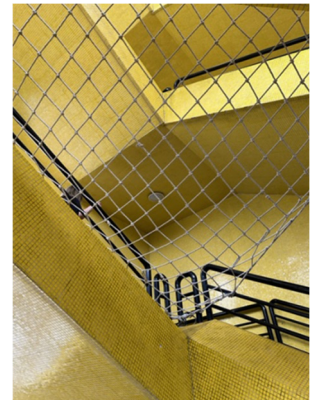
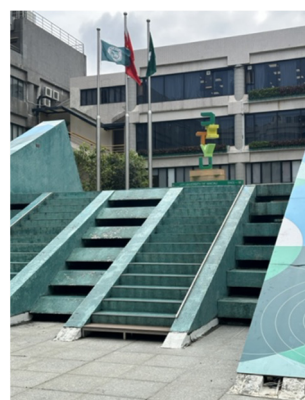


Figure 3. Campus environment Figure 4. Environmental elements

3.3. Theoretical Foundations

We have used the theoretical basis of narrative design in our design. Narrative, commonly known as storytelling, is a basic way of organising experiences into events that have real-world significance. Its scope extends beyond the narrow field of literature to all aspects of human culture and life.

Narratology as a discipline was born in the 1960s, and the term Narratology was first introduced in 1969 in the Russian Todorov's Grammar of the Decameron. (Ngan, Ting-Min, Chen, Zi-Ho, Wang, Lu-Yao & Li, Yi Nan, 2023) Design is often only a very small facet of the human world, and the underlying motives that shape its changes have to be found in a wider macro-context that examines the social structure, production methods, and cultural patterns of the time when the design activity takes place. Therefore, the relationship between design and narrative has been increasingly emphasised in recent years, with the fundamental aim of allowing people to recall a period of history and safeguard a culture through narrative elements such as characters, scenes, themes and stories.

On the basis of this theory, I firstly carried out the establishment of the narrative theme, extracting the architectural elements such as the Kowloon Wall, the Turtle Pond, the garden of the Sino-Portuguese Building, the Cultural Centre, the Administration Building, etc. from the environmental and cultural levels, and established the theme of the architectural narrative. Secondly, it is the construction of the narrative, outlining the narrative scenes of teachers and students stopping in front of the Kowloon Wall, walking into the cultural centre, strolling in the garden of the CPLP building, etc., and adopting the way of juxtaposition of the mood, through the narrative method of prose to combine multiple narrative scenes together to complete the construction of the narrative.

In terms of the choice of narrative paths, different design carriers adopted different narrative paths, for example, the keychain cultural and creative products chose the appearance of the narrative, in the shape of the metaphorical rhetorical techniques, the outline of the administrative building and the school logo is highly abstracted and simplified, the user through the cognitive, experience, etc., can be associated with the complete campus buildings. The design of the cultural and creative products of the Mark Cup also focuses on the external view and functional narrative, extracting the elements of the scene and expressing these pattern elements to show a different campus scenery, combining the characteristics of Macao with the campus culture.

Finally, through the narrative design of the campus cultural and creative products, individuals are linked to their cultural memories, combining functionality, artistry and experience to convey the spirit of the campus culture of the City University of Macao, thus realising the narrative purpose of the campus cultural and creative products.

3.4. Design Method

Shape Grammar is a concept of shape grammar introduced from abroad, which was proposed by George Stiny and James Gips, and was firstly used in painting and sculpture creation. Shape Grammar is a generative system, which generates new elemental modules through the collection of different forms in a multitude of samples, and uses rules to interrelate the collections to finally form new shape patterns. (Zhang, Beiming & Miu, Ling, 2023)

We have taken the approach of analysing the colours and structures of the CityU campus to find the visual characteristics and extracting the design elements from the colours and structures, extracting the patterns for the secondary creation, and at the same time combining the patterns on the Portuguese tiles which are typical of Macao, extracting them, and then combining the two, which not only

embodies the culture of the campus, but also the characteristics of the regional culture. (As shown in Figures 5 and 6)

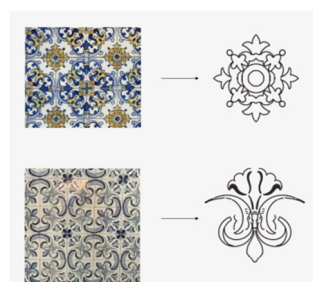


Figure 5. Portuguese Brick Patterns

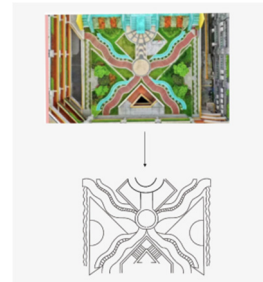


Figure 6. Garden Graphics

4. Design Practice

We found that the school will give each student a campus card when they enter the school, but there is no matching card package, and due to the school's accommodation mechanism, many students live in Zhuhai, Zhuhai and Macao cross-border school (Figure 7), based on this, many students will need to carry the Hong Kong and Macao Travel Permit and the campus card two cards, so we chose the card holder this cultural and creative product design, its practicality is higher compared to other cultural and creative products for practical use. Therefore, we selected the card holder as a cultural and creative product for design, which is more practical than other cultural and creative products. When we extracted the elements from the school, we found the characteristic staircase of the school (Figure 8), where many students come to take photos, so we selected this element as the element in the card holder, extracted the characteristic architectural staircase view of the City University of Macao, and geometrized it to form a layered block-shaped visual element. The colours were extracted from the school's architecture, with red representing positive and optimistic, and yellow representing harvest and warmth (Figure 9). Secondly, we interviewed the students in the school, we found that most of the students are influenced by the city university is climbing the slope and the first glimpse of the administration building (Figure 10), so we extracted the school logo of the book shape silhouette and the campus of the main building silhouette modelling fusion design according to the school's geographic location, because of the school's geographic location at the top of the hill, so there are clouds as the elements of the key to the key as the bearer. The main shape of the keychain, together with the characteristic buildings of Macao around the school, also adds to the overall richness.

In the design of the speakers, we extracted the recognisable features of the main building of the City University of Macao and the columns used in many places in the campus architecture, and fused and reconstructed the design of the appearance of the Bluetooth stereo. And the overall use of green and gold colour combination, so that the overall design becomes more advanced, the top of the stereo to increase the campus garden building cityu art installation shape, in the shape of the beautiful at the same time also rich in campus cultural characteristics (Figure 11). Finally, we selected the mug as the carrier of cultural and creative products, mugs are essential in life, we design the pattern on the mug inspired by the overlooking map of the garden of the City University of Macao, firstly, the overlooking map is sketched, and then appropriately selected the classic colours of the City

University, such as green and yellow, and combined with the pattern elements of the Macao Portuguese Brick, to form a

unique pattern (Figure12). The pattern is unique (Figure 13).

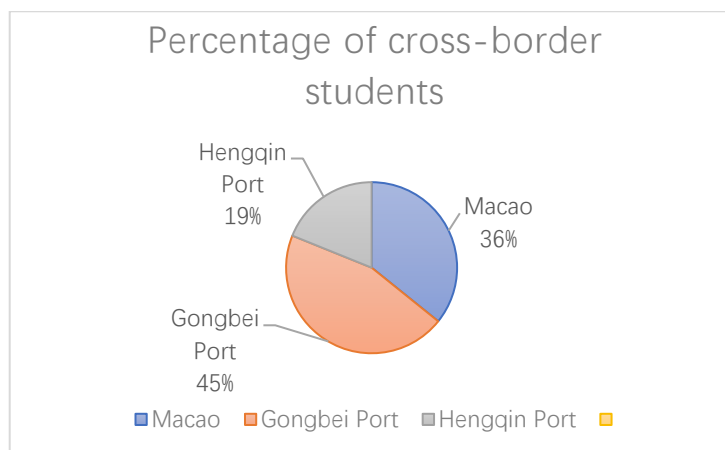


Figure 7. Cross-border students



Figure 8. Staircase elements



Figure 9. ferrule



Figure 10. Administration building



Figure 11. mugs



Figure 12. acoustics



Figure 13. cultural pavilion

5. Conclusion

College cultural and creative products is one of the ways to present the culture of colleges and universities, but also to enhance the cultural soft power of colleges and universities of the external embodiment, we hope that through the narrative design to emphasize how to better convey the work of the culture, from the fundamental to make the campus cultural and creative products have a deeper significance. At the same time, for the rapid development of information nowadays, to increase the extension of campus culture and brand influence, through the use of cultural and creative products in the form of expression. In the application of new media technology and the dual role of new media communication, the realization of cultural and creative products, in the form of the theme of the content of the profound connotation, the design of institutions of cultural and creative products and has the versatility and individuality, the design of cultural and creative products in line with the needs of the contemporary market and consumer recognition. And then achieve to show the cultural connotation of the institution at the same time to further enhance the brand value and cultural and creative influence.

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