

### Integration Research of Series Cultural Creation Based on Regional Features on Interactive Packaging Design -- Taking Luoyang Peony Crisp as an Example

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#### ABSTRACT

Nowadays, the packaging becomes one of the main ways to improve the brand competitiveness, and there are more twodimensional surface designs with the unique styles, so the products with the regional features could perform its characteristics. Some designers are considering to transform the design from 2D to 3D to improve its competitiveness, so they need to show more product-related information on the limited packaging area, and achieve the coordination and unity of packaging vision and texture between the packaging and design by combining with the bionics. Besides, they shall integrate the cultural creation related to the regional features to achieve echo relationship between packaging and products and enhance the two-way communication of products and consumers through 3D particularity. This paper takes Peony Crisp (a special local product of Luoyang) as the research object, and study how to make a breakthrough in package after combining with the local features, laying the foundation for the sustainable development of the subsequent products.

Keywords: Cultural Creation; Regional Features; Packaging Design; Interactive Packaging

### **1. INTRODUCTION**

At present, China's economic system has been developed more and more mature. The increasingly progressive material and cultural living standards lead to higher pursuit, and with the social development and reform of local policies, the combination with Chinese culture has become a trend. The Chinese culture is diverse and the local culture generated by different regions also varies, so it shall establish the market advantage, so as to compete with other commercial packages whose brands have been established. In additional to the local policy support, the local cultures could be divided and uniformly supported in the commercial value attribute of goods to increase its "quantity", so as to achieve the advantages, which will promote the competitiveness of the single commercial brand.

## 2. RESEARCH BACKGROUND AT HOME AND ABROAD

Under the current development, the foreign countries

highlight the museum marketing with "ruins" as the theme in the application of regional culture. For example, the official store of British Museum developed 60 kinds of derivatives with Rosetta Stone as the prototype, and the store of The Metropolitan Museum of Art established in 1871 became an independent brand from the special cultural brand with the regional culture and its brand application is undoubtedly successful. In China, the "Imperial Palace Taobao" featured with the palace culture is a successful case that becomes popular through the national enthusiasm on e-commerce platform, and it leads to the trend for the brands related to the imperial palace. However, it is easy to make the packaging "vulgar" in the current product packaging for those with the strong regional characteristics. For example, some rural local specialties highlight the product IP or own brands, but ignore the packaging style and lack of the interactive mode (Figure. 1), so that the consumers have no consumption impulse after seeing the products. Actually, the impromptu consumption is quite important to achieve the sustainable consumption, so no matter how the quality is excellent, the normal packaging may play the negative role in the publicity.





Figure 1 Common packaging

### **3. INTEGRATED REFLECTION OF INTERACTIVE EXPERIENCE DESIGN IN PRODUCT PACKAGING**

### 3.1. Enrich cultural image with the interactive experience design

The interactive experience design refers to the bidirectional transmission relationship between the consumer and products in the concept, and more information shall be presented to the consumers in a short period via the packaging technology, including the product appearance, development background and value expansion, and the consumers could also respond to a series of emotional resonance generated by the product or purchase desire to the product manufacturer through packaging.

There are various packaging designs, but the information on the packaging is limited. Its main significance falls on the consumption memory and such output efficiency is the key to whether it is suitable for the current market. Thus, the interactive experience design is applied to show the regional characteristic culture and product information to consumers via packaging, so that the consumers could have the purchasing experience different from other brands, to form the certain reputation and popularize the products in the market<sup>[1]</sup>.

Under the rapid development of the technologies, the livestream and we-media platform have been developed in 2015 under 4G era. Nowadays, 5G has been popularized, but the impact of 5G on the market has not been fully explored. The AR technology is strongly adaptive to 5G technology, and the infinite information is integrated in the limited packaging via the reasonable application of high-speed 5G flow. Actually, the interaction between the consumers and packaging is not only limited to the selection and recognition of the purchased products, it focuses on the expectation and purchase desire on the further "subsequence" and relevant derivatives under the same IP.

In view of the packaging, the original painting, shape design, material and font are shown with two dimensions and the consumers could view and touch the products. If extending to 3D, AR could be utilized. For example, if the consumers are interested in the packing, they could scan the QR code to the product introduction page, to find the products with the profound development background. Actually, the products with the regional features do not only contain the cost values, but serve as the carrier rich in profound history and culture. The two-way interaction of interactive experience design will be more perfect by studying the design strategies, and the products will be large-scale and integrated from the perspective of history or market value after combining with a series of cultural and creative products, to enrich the cultural image to the maximum extent. The art and emotional guidance on the products are integrated in the packaging design by applying the packaging space to the maximum limit.

# 3.2. Interaction and consumption based on the consumers' emotional experience after combining with the regional features

Different regions also breed a variety of regional characteristic cultures due to the longitude and latitude, and the regions have different food or customs in China. The cultural and creative products have the unique advantages caused by the cultural deposits. In view of the packaging interactivity, the consumers deem the emotional experience as the priority. In 1990s, Donald Arthur Norman proposed the user experience in the packging design. He put forward that "the design shall focus on the user, to meet their demands and guarantee the users' interests, so the consumers mainly pay attention to the usability and understanding." If the interactive experience of the package is only limited to the product's attribute, the regional feature could bring new breakthroughs in interaction for consumers' emotional experience. The research takes the local specialty of Luoyang, Peony Crisp made of flowers as the research object, and the specific research strategy divided into two main aspects after the research, the rational use of sensory memory and the two-way communication between the consumers and products<sup>[2]</sup>.

The first one is about the rational application of sensory memory. Consumers' purchase desire can be stimulated easily by the visual comfort of packaging. Besides, a kind of excellent packaging would leave a favorable visual memory to consumers after purchase to induce them to conduct the secondary consumption, especially integration of regional characteristics into a series of cultural and creative plane designs can effectively attract attention of consumers. On the current market, each IP industry centers on the IP to create brand value online and offline, for example, when the "THREE SQUIRRELS" IP is mentioned, consumers would associate it with high-quality dried fruit foods. In Luoyang, there is a kind of pastry named with peony- "Peony Crisp", and its one of main raw materials is the characteristic peony of Luoyang. "peony after blossom shocks the whole capital of a country" in ancient speech describes the luxury and gorgeousness of peony, so the peony is popular in the whole country. Various characteristics of peony are reflected in cultural creation because the color and fragrance of peony can divide the cultural and creative products into a series of cultural creation<sup>[3]</sup>.

For example, different colors of peony are divided in combination with plane design, which can provide the established design style for a series of cultural and creative packaging designs and make consumers receive the same series of products easily. Peony Crisp can combine with other foods for different tastes, such as colocasia tonoimo taste, cheese taste and egg yolk taste. Different Peony Crisp tastes would apply different peony petals for certain tinting so that it seems to be more delicious. The color combination can also be applied in the taste experience. There is a sentence in China to acclaim the food appearance- "it looks delicious", which applies the synaesthesia, and reaches consensus with consumers' taste through vision. Taking KSAMIYA's "Wanluo" Peony Crisp series as an example, consumers would associate the "purple sweet potato" or "Colocasia tonoimo" with high starch contents and feel dense after eating when seeing the Peony Crisp (Figure 2) of Colocasia tonoimo taste with purpose as dominant tone. Such feeling only originates from preliminary judgment of vision.



Figure 2 KSAMIYA's "Wanluo" Peony

Next, the smell is combined. Currently, many brands neglect the packaging texture. peony as a kind of flower would make people spontaneously associate flower fragrance. So the flower fragrance is associated in Peony Crisp so that consumers can position product in a kind of pastry which can clear away the heart-fire after meal after hearing the product name. The materials containing flower fragrance are combined with the packaging texture of product, then the commodity can enhance the purchase desire through certain extent of smell experience when consumers are interested in product appearance and get close to product.

Of course, the sense organ also includes the touch experience. Most flat packaging adopt the coated paper with relatively high cost performance as texture. Indeed, cost is absolutely a consideration factor, but in cultural and creative design field, when a series of cultural and creative designs form the trend market due to its particularity, its market incomes are considerably higher than the cost. The juice packaging box (Figure 3) designed by Japanese Designer Naoto Fukasawa applies the texture bionics design of classic fruit color to bring extremely fresh experience. Especially after seeing such packaging design, consumers would be curious about touching it, and then know about such product. The design of Peony Crisp can also adopt some merits of it, namely the texture of petal of peony is printed on packaging box and the bionics is used for packaging design to highlight the texture and create a kind of atmosphere returning to nature<sup>[4]</sup>.



Figure 3 Design work by Japanese designer Naoto Fukasawa

The integrated design of different sense judgment or many sense judgments can attract consumers from many aspects<sup>[5]</sup>. Peony Crisp shows certain regional representative. It belongs to ordinary pastry in essence, but it is the first choice of many tourists as present during traveling due to the particularity of raw materials. The peony element can be reflected in the packaging design more stereoscopically through the vision, smell and touch so that product is unique and is more conducive to establishing favorable interactive emotional experience with consumers.

The second one is about the two-way communication between consumers and product<sup>[6]</sup>. In current market development, network We-media and e-commerce platform develop very rapidly, and the information value presented on product Packaging also becomes more abundant with the expansion of network platform. The information can be integrated through network for science popularization of product background and propaganda of the same series of products, for example, the QR code can be added at the packaging position of non-subject, by scanning which the holographic projection screen of AR can be seen and the desired information can be known at the official website of product. For another example, if the consumers are interested in the culture method of raw materials of foods or the processing process of foods, they can know about more relevant information through packaging or can reflect conditions to the official producer of product through network platform, then official producer of product can obtain more accurate and direct user feedback. In the meanwhile, users can intentionally conduct simple promotion of regional culture when using product so that they can own higher additional value of commodities and the overall efficiency of cultural and creative packaging development can be boosted<sup>[7]</sup>.

## 3.3. Market value of interactive packaging and compatible expansion of three-dimensional design

As the gradual popularization of 5G era, product packaging can be displayed in three-dimensional method,

rather than being confined to two-dimensional method, such as the application (Figure 4) of AR (Augmented Reality). In respect of design, the peony on packaging box of Peony Crisp as raw materials can be watched more stereoscopically by scanning QR code so that the consumers who purchase Peony Crisp due to peony raw material can observe the amazing appearance of peony more intuitively. In the interactive packaging, the technology hasn't been completely developed, so it owns more extensive development prospect<sup>[8]</sup>.



Figure 4 Augmented Reality Technology

### 4. INTEGRATION OF INTERACTIVE PACKAGING DESIGN AND ENVIRONMENTAL AWARENESS

Interactive packaging design owns higher cost and relatively complex process. If such kind of packaging doesn't give play to other functions after product use, there would be certain waster. So the interactive packaging needs to combine with the environmental protection (world consciousness). Of course, the conformance to the environmental protection concept isn't only confined to repeated utilization, but also refers to the full utilization of the product's packaging materials, for example, Peony Crisp has relatively crispy peel and easily falls off the crispy peel, so a storage structure is requisite for improving foods experience during taste; for another example, the product packaging as shown in Figure 4 is shown based on plate as inspiration, so the packaging of Peony Crisp can provide placement position for the Peony Crisp after opening through special display structure<sup>[9]</sup>.

### **5. CONCLUSION**

In respect of a series of cultural and creative packaging elucidated based on regional characteristics, interactive method shall boost consumers' consumption experience through a kind of simple and rapid immersive purchase experience in combination with the sense judgment of vision, smell and audition, rather than only being confined to the visual impact or comfort. In the meanwhile, a kind of culture is applied in a series of cultural and creative packaging to enhance the utilization rate of culture. Due to the quantity cause of a series of cultural and creative packaging, certain cultural depth can be added in commodity so that the commodity among similar products can leave more obvious consumption memory to consumers upon purchase, laying a foundation to the subsequent development of public praise of products. The breakthrough of two-dimensional visual perception and application of AR and other hightech can boost the market competitiveness of cultural and creative design with regional characteristics. A variety of experience of consumers is interconnected through packaging to shape IP brand more efficiently and propagandize the regional distinctive culture, promoting a series of subsequent cultural and creative research and development and driving the local economic development.

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