

Innovative Design Strategy of Lamps in Zhongshan Guzhen Based on Consumers' Emotional Needs

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Abstract

This Article aims to study (1) the development status and main problems of lamps market in Zhongshan Guzhen. (2) Explore the emotional demand hierarchy of potential major consumer groups in the Guzhen lamp market. (3) According to the above investigation, the innovative design strategy of lamps in Zhongshan Guzhen based on consumers' emotional needs is put forward. The research objects are college students from Guangdong universities in China, in-service workers in the lamp industry, and people from other industries outside the lamp industry, and consumers between the ages of 20 and 50, who respectively represent the potential major consumer groups of different age groups in China's domestic lamp market. Samples were obtained through field investigation, online questionnaire and case study of lamp design. Quantitative data were collected and analyzed by online questionnaire platform and SPSSAU software, while qualitative data were statistically analyzed by field investigation and case study of lamp design. The research results were found as follows;

1. The homogenization of lamps in Guzhen market is serious, with single product shape and lack of brand characteristics.
2. The emotional needs of potential major consumer groups in China's domestic lamp market mainly include the following parts: the need to show personal aesthetic taste, the need to get emotional closeness and sustenance, the need to show national characteristics, the need to inherit national culture and the need to enhance national self-confidence.
3. The innovative design of lamps in Guzhen can be promoted by paying attention to consumers' emotional needs, thinking about the design, digging creative materials, and abstracting the modeling elements of lamps by emotional expression.

Keywords: Emotion demands, Zhongshan Guzhen, Lamp Modeling, Innovative Design

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Introduction

Zhongshan Guzhen, as "the lamp capital of China", plays an important role in China's lamp industry. As a regional trading platform for international lamps in China, it is an important window for China to display its lamps. Its products not only sell well in the domestic market of China, but also export to Hong Kong, Macao, Taiwan, Southeast Asia, Japan, the United States and Europe, enjoying great popularity. However, with the rapid development of the market economy, the international trade competition is becoming more and more fierce. If the Guzhen lamp market does not pay attention to the characteristics of the products in the future development process, it will be difficult to highlight its own advantages in the highly competitive international market and grow stronger. Therefore, from the perspective of satisfying consumers' emotional needs, this paper puts forward the innovative design strategy of lamps in Zhongshan Guzhen.

Research Objectives

1. Through the on-the-spot investigation of the lamp market in Guzhen, this paper reveals the present situation and existing problems of the lamp market in Guzhen.
2. Starting from the emotional needs of consumers, this paper explores the hierarchical relationship of emotional needs of potential major consumer groups in the Guzhen lamp market under the background of contemporary consumer culture.
3. According to the above investigation, the innovative design strategy of lamps in Zhongshan Guzhen based on consumers' emotional needs is put forward.

Literature Review

1. *Design philosophy*

Design philosophy is to explore the knowledge of design from the perspective of philosophical theory, and its essence is to "seek the source of design by philosophical thinking", thus solving the problem of "why does design exist?" And "How does it exist?" The problem. Therefore, the design philosophy has certain guiding significance for modern design. Kong & Zhang (2011) wrote that the ethics of "unity of nature and human" in Chinese ancient design "not only to make the design objects has the function of being used, but also focusing on the emotional communication between design and material selection and users" (p.782) . From the above viewpoint of Kong & Zhang, it is believed that China's ancient philosophy not only emphasized the functionality of the design object, but also emphasized the emotional communication between the design object and people. The value concept of "unity of nature and human" reflects that modern design should correctly treat the relationship between people, things, environment and society. It can be seen that the "humanism" thought in China's ancient design philosophy has something in common with the western modern humanism thought, both of which embody the "people-oriented" concept.

2. *Humanism.*

Zhang & Wang (2021) found that "humanist ideas have promoted the progress and development of art. If people's needs are neglected, and art creation no longer pays attention to

the principle of people-oriented, then art will be water without a source, and wood without a root” (p.174). Bonsiepe (2006) also put forward that “Design humanism is the exercise of design activities in order to interpret the needs of social groups, and to develop viable emancipative proposals in the form of material and semiotic artifacts” (p.30). From the viewpoints of the above two scholars, we can all find that scholars have linked design, humanism and demand, and emphasized that designers should guide design practice with the viewpoint of "humanism" in the design process, that is, the purpose of "design practice activities" is to meet the needs of social groups, which embodies the application of "humanism" in the field of design. Therefore, this paper attempts to explore the innovative design of Chinese lamps and lanterns from the perspective of consumers' emotional needs. From the perspective of research, this research also reflects the concept of "people-oriented" in Chinese and western philosophical thoughts.

3. 3. Creative design.

With the rapid development of science and technology and social economy, the competition in the commodity market has become more intense. At present, almost all enterprises realize that continuous development and design of new products and improvement of old products are the premise for enterprises to survive and develop. Therefore, innovative design aims at creating new products to meet the ever-increasing new demands of human beings. Van Der Bijl Brouwer & Dorst (2014) wrote that “how to innovate through design, and how to find the ‘latent needs’ of consumers, are therefore everpopular topics for research in the design and innovation field” (p.280).) Therefore, in order to make products better adapt to the consumer market, how to find the "potential demand" of consumers is the key factor to improve commodity sales.

“Braun, a West German consumer electronics producer, and Zenith, a Swiss watch manufacturer, have captured valuable market segments by attracting customers through their innovative designs” (Berkowitz, 1987, as cited in James, 1985, p.274). It can be seen that the commercial value brought by innovative design to products is the concern of product developers at any time. It attracts consumers better through the way of consumer recognition, thus driving the sales of products and enabling product users to gain new experiences. Therefore, the essence of innovative design is to explore how to better meet the "potential demand" of contemporary consumers from the perspective of consumer demand.

4. 4. Emotional design.

López et al. (2021) argue that “in today’s market, consumers value the functionality, usability, safety, and price appropriateness of products, and the emotions and feelings that they trigger. In an increasingly competitive market, a good product should meet all consumer expectations, but especially provoke a positive emotional response” (p.6532). According to Yu et al. (2022) “As an effective method to bridge the cultural gap between consumers, emotional design has become an important driving force for the development of cultural and creative products” (p.1). Based on the views of the above two scholars, we can conclude that designers should design products from the perspective of satisfying consumers' emotions, that is, emotional design, based on the concept of "people-oriented". With the improvement of people's daily living standard, consumers' demand for lamp modeling has changed from pure instrumental material form to emotional ideology, that is, people's demand for lamp modeling has gradually risen to the stage of meeting consumers' emotional needs. People pay more and

more attention to the deep-seated spiritual and cultural needs such as interesting, innovative, symbolic, symbolic value, emotional pleasure and so on. As a household ornament in people's daily life, the use value of lamps is not limited to meeting the needs of lighting, but is increasingly becoming a spiritual object for people's emotions. Therefore, this paper attempts to explore the innovative design strategy of Guzhen lamps from the perspective of consumers' emotional needs, It has certain research value and significance.

Conceptual Framework

This research is a research study. On the basis of exploring the current situation of Guzhen lamps market and the emotional needs of potential consumers in Guzhen lamps market, this paper puts forward the innovative design strategy of Guzhen lamps. The researcher defines the research conceptual framework based on the concept of “the emotional needs of consumers”, together with “innovative design of lamp modeling”. The details are as follows.

Independent variables: Individual differences of potential consumers in Guzhen lamps market, such as age and education level.

Dependent variable: include different consumers' cognitive differences on the beauty of existing lamps products in Guzhen; different consumers' satisfaction with the existing lamps in Guzhen, and the emotional needs of different levels and different age groups are different.

The research process is as follows: First of all, through the on-the-spot investigation and research on the lamp market in Zhongshan Guzhen, the present situation and existing problems of the lamp market in Guzhen are revealed. Secondly, through the questionnaire, we know the emotional needs of potential consumers in the domestic lamp market, and then reveal the emotional needs of potential consumers that should be paid attention to in the design of lamps in Guzhen. Thirdly, according to the above investigation and research, based on the design of lamps and lanterns, the innovative design strategy of lamps and lanterns in Zhongshan Guzhen based on consumers' emotional needs is put forward.

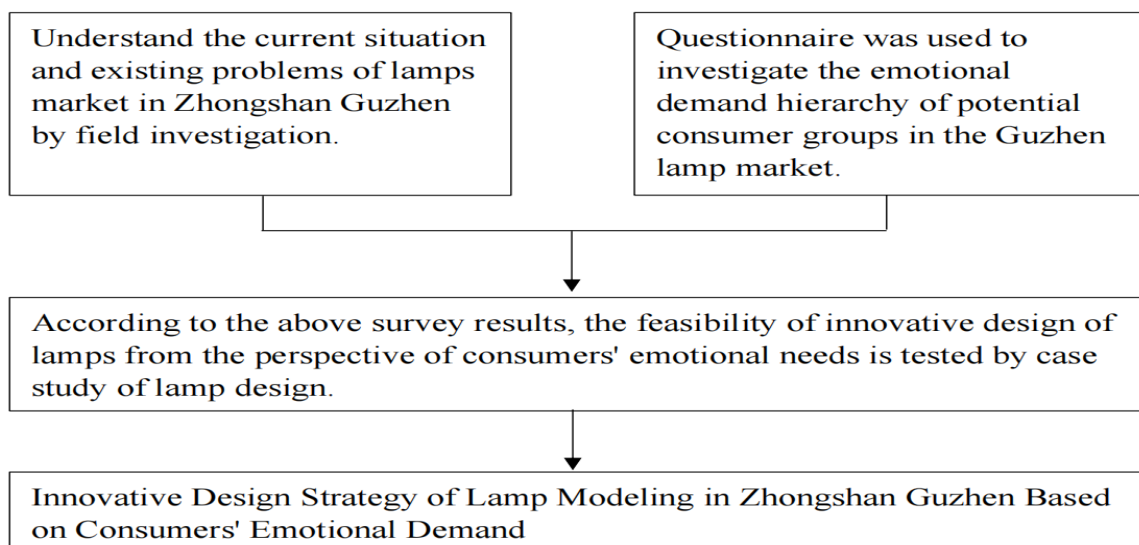


Fig.1 Conceptual Framework

Research Methodology

This study mainly adopts a combination of qualitative and quantitative research methods. Quantitative research mainly adopts the research method of questionnaire survey. Through the investigation of the emotional needs of potential major consumer groups in Guzhen lamp market, the quantitative data were collected, and the data were analyzed by SPSSAU software, and the conclusion was drawn to reveal the emotional needs of potential major consumer groups in domestic lamp market. Qualitative research mainly adopts field investigation and case study of lamp design. On-the-spot investigation through visiting large, medium and small lamp brands in the lamp market, comparative analysis of lamp shapes, and obtaining qualitative data; The case design of lamps and lanterns tests the feasibility of innovative design of lamps and lanterns based on consumers' emotional needs through experiments.

Research Results

Objective 1. The results showed that the types of lamps and lanterns displayed by small and medium-sized lamps and lanterns enterprises in Guzhen are relatively single, and the styles of lamps and lanterns displayed by different enterprises are similar, and the identification is not high. When consumers enter Guzhen lamps and lanterns market, it is difficult to tell the difference between the products of the same type lamps and lanterns brand at a glance, which means that the homogenization of products is serious, and small and medium-sized enterprises should pay attention to the personalized design of their own lamps and lanterns brands.

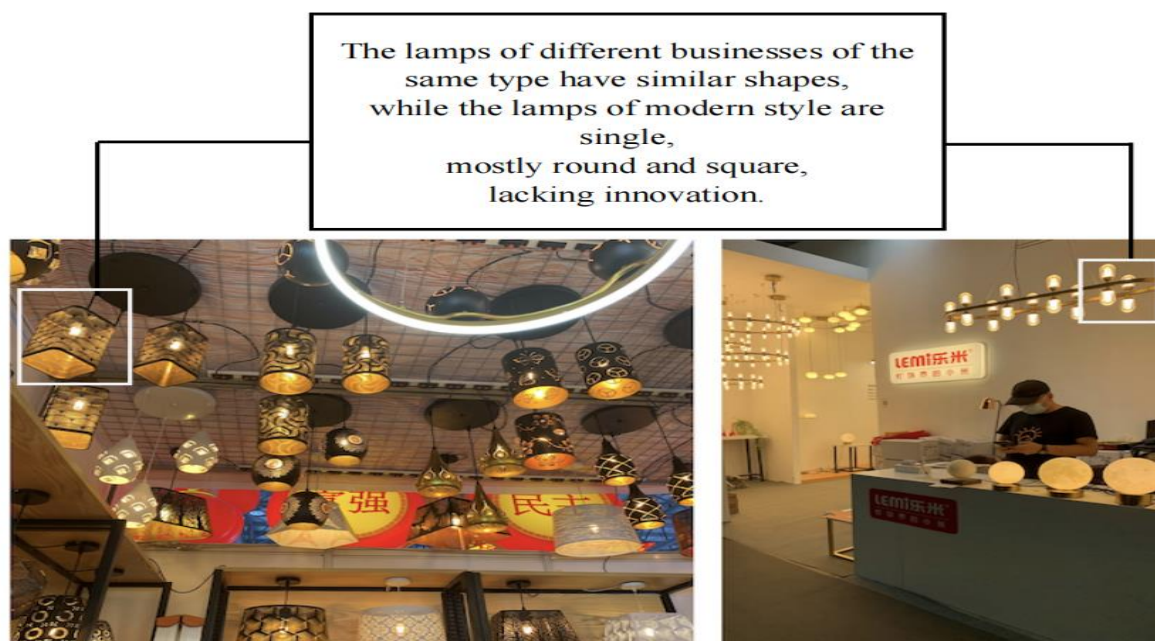


Fig.2 Lamps displayed in the 25th China Guzhen International Light Expo

Source: Author's field investigation and shooting



The picture shows that there is almost no difference in the shapes and styles of lamps produced by different lamp enterprises, and the similarity is close to 90%, so the competitive advantage is insufficient.

Fig.3 Lamps displayed in the 25th China Guzhen International Light Expo

Source: Author's field investigation and shooting

Objective 2. The results showed that 89.3% of consumers think that paying attention to consumers' emotional needs in the design of lamp products can meet consumers' needs of "showing their personal aesthetic taste"; 71.2% of consumers think they can "get emotional closeness and sustenance"; 63.6% of consumers think that they can "show national characteristics"; 57.6% consumers think that they can "inherit the national culture"; Another 45.4% of consumers think it can "enhance national self-confidence".

Table: 1 Investigation on the opinion of potential consumers about "paying attention to consumers' emotional needs in the design of lamp products"

| Frequency analysis results | | | | |
|---|---------|------------|----------------|----------------------------|
| name | Options | Frequency□ | Percentage(%)□ | Cumulative Percentage (%)□ |
| Do you think that paying attention to the emotional needs of consumers in the modeling design of lamp products can obtain the satisfaction of the following aspects: obtaining emotional belonging and sustenance (n=47). | 1.0 | 47 | 100.00 | 100.00 |
| Do you think that paying attention to the emotional needs of consumers in the modeling design of lamp products can obtain the satisfaction of the following aspects: showing personal aesthetic taste (n=59). | 1.0 | 59 | 100.00 | 100.00 |
| Do you think that paying attention to the emotional needs of consumers in the design of lamp products can be met in the following aspects: inheriting national culture (n=38). | 1.0 | 38 | 100.00 | 100.00 |
| Do you think that paying attention to the emotional needs of consumers in the modeling design of lamp products can obtain the satisfaction of the following aspects: showing national characteristics (n=42). | 1.0 | 42 | 100.00 | 100.00 |
| Do you think that paying attention to the emotional needs of consumers in the design of lamp products can be met in the following aspects: enhance national self-confidence (n=30). | 1.0 | 30 | 100.00 | 100.00 |
| total | | 66 | 100.0 | 100.0 |

Source: Data and information from this research

Objective 3. The results showed that the innovative design of lamps in Guzhen can be promoted by paying attention to consumers' emotional needs, thinking about the design, digging creative materials, and abstracting the modeling elements of lamps by emotional expression. The experimental results are as follows: The design of "Taiji" series lamp.

This work is inspired by the idea of "ancient country and ancient philosophy": Taiji. Taiji culture, as China's ancient philosophical thought system, embodies the profoundness of China's traditional cultural thought. Therefore, this design tries to use Chinese excellent traditional culture "Taiji" as the main body of communication and apply it to modern lamp design, so as to convey Chinese excellent traditional culture and endow lamp with "nationalization" emotion.

This work highlights Taiji culture through three aspects: light and shadow, lines and colors. Among them, the thickness and straightness of the lines reflect the sense of flow, and the internal light source adopts the point light source. The round bulb retains the symmetrical segmentation morphological characteristics of "Taiji diagram" in the visual image, and the black and white tones of "Taiji diagram" are also selected in the color treatment, forming visual contrast, implying both positive and negative aspects of things. The overall style of lamps follows the modern and simple style, abstracting the visual image and generating the basic shape of lamps.

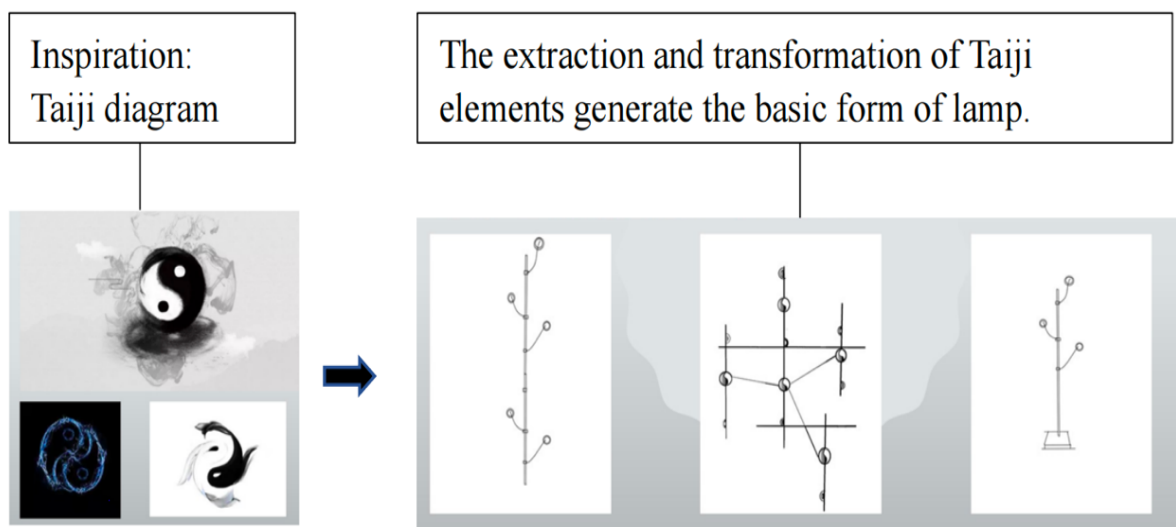


Fig.4 *Extraction of Modeling Elements of Lamps*
Source: Author draws according to the creative

The final effect of the lamp scheme is shown as follows



Fig.5 *Taiji Series Floor Lamp*

Source: Author draws according to the creative

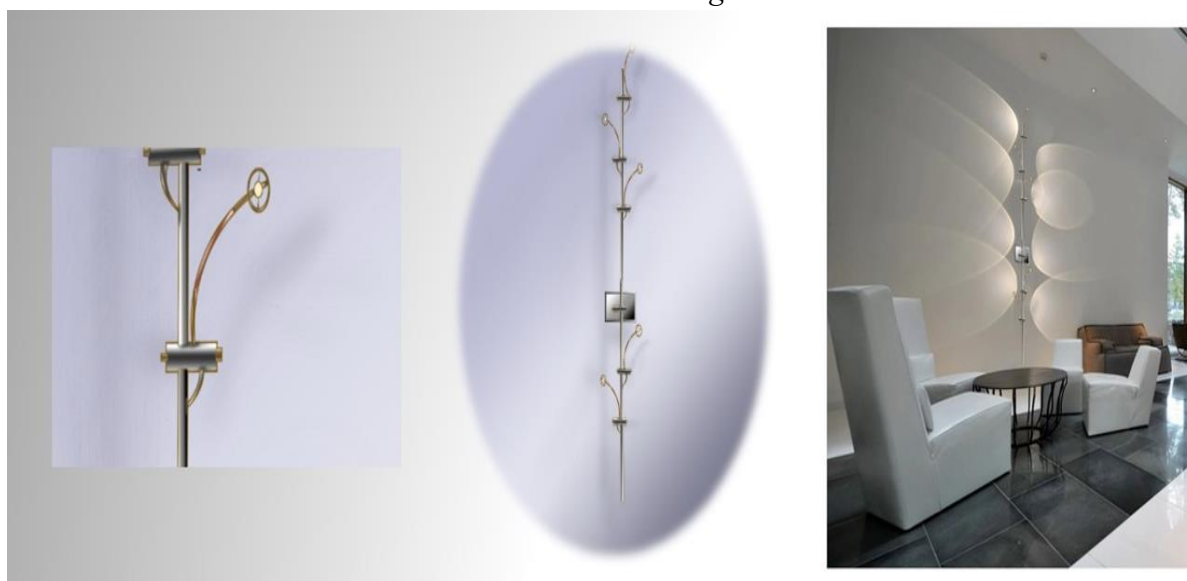


Fig.6 Taiji Series Wall Lamp

Source: Author draws according to the creative



Fig.7 Taiji Series Hanging Lamp

Source: Author draws according to the creative

Discussions

Through the above investigation and research, it is found that the homogenization phenomenon of lamps and lanterns products in Guzhen lamps market is serious, and the lamps and lanterns products have a single shape and lack of local characteristics, so the market competitiveness is weak compared with foreign lamps and lanterns brands. Therefore, in order to break the present situation, it is necessary to enhance the independent innovation consciousness of lamps brands in Guzhen and improve the visual expressive force of lamp product modeling.

At the same time, through the investigation of the emotional needs of potential consumers in China's domestic lamp market, it is found that the hierarchical relationship of emotional needs is as follows: the need to show personal aesthetic taste > the need to get emotional closeness and sustenance > the need to show national characteristics > the need to inherit national culture > the need to enhance national self-confidence. This conclusion provides a certain method path for exploring the innovative design of lamps and lanterns in Zhongshan Guzhen.

Knowledge from Research

Based on the investigation of the Guzhen lamp market and the investigation of the emotional needs of potential consumers in the domestic lamp market, this paper explores the innovative design of "lamp shape" from the perspective of "people's emotional needs", which provides a new theoretical perspective for helping the Guzhen lamp industry realize independent innovation of enterprises. At the same time, it also puts forward the corresponding direction for improving the international market competitiveness of the lamp industry in Guzhen.

Conclusion

Through the investigation of the current situation of lamps market in Guzhen and the emotional needs of potential consumers, combined with the design practice of lamps, it is proved that to promote the innovative design of lamps in Guzhen, we can learn from the ancient design philosophy of China, and integrate the traditional culture of China into the innovative design of lamps in China, so as to enhance the appeal and expressiveness of lamps, highlight national characteristics and meet the emotional needs of potential consumers for "inheriting national culture", "displaying national characteristics" and "enhancing national confidence". At the same time, in the innovative design of lamps and lanterns, we should pay attention to emotional expression, that is, advocate the emotional design of lamps and lanterns, and meet the demand of potential consumers for "getting emotional closeness and sustenance"; Thirdly, in the process of lamp modeling transformation and generation, attention should be paid to the artistic appeal of lamp products, so as to meet the emotional needs of potential consumer groups for "showing personal aesthetic taste".

Suggestions

At present, due to the increasingly fierce market competition at home and abroad, relative to the government, how to make the lamp industry of Guzhen keep its advantage in the market competition is a question that the relevant government management departments should consider. Only by introducing talents, improving production technology, and improving the independent production capacity and innovation ability of lamp enterprises, can we better create a regional brand unique to the Guzhen. At the same time, the government should also encourage lamp enterprises and independent designers in Guzhen to make efforts to develop original designs, formulate relevant policies to protect original designs, and curb

homogenization of lamp products in Guzhen lamp market, so that the lamp industry in Guzhen can go further in the future development.

Compared with small and medium-sized lamp enterprises in Guzhen, only by paying attention to the construction of their own brands and the original design of lamp products can they gain competitive advantage on the international stage. At the same time, only by strengthening the R&D capability of new products and improving the infrastructure can the brand development make a qualitative leap and improve the market competitiveness of lamp products.

References

- Bonsiepe, G. (2006). Design and democracy. *Design issues*, 22(2), 27-34.
- Berkowitz, M. (1987). Product shape as a design innovation strategy. *Journal of Product Innovation Management*, 4(4), 274-283.
- James, B. G. *Business Wargames*. Hammonds Worth, England: Penguin Books, 1985.
- Kong, D., & Zhang, J. (2011). The research on Chinese ancient management philosophies' similarities with contemporary human resources management thoughts. *Chinese Management Studies*, 5(4), 368-379. <https://doi.org/10.1108/17506141111183145>
- López, Ó., Murillo, C., & González, A. (2021). Systematic literature reviews in kansei engineering for product Design—A comparative study from 1995 to 2020. *Sensors*, 21(19), 6532. doi:<https://doi.org/10.3390/s21196532>
- Van Der Bijl Brouwer, M., & Dorst, K. (2014, January). *How deep is deep? A four-layer model of insights into human needs for design innovation*. In 9th International Conference on Design and Emotion 2014: The Colors of Care.
- Yu, L., Feng, X., Wang, J., Kong, W., & Chen, W. (2022). Research on the mechanism of emotional design in Chinese cultural and creative products. *Heritage Science*, 10(1), 1-18.
- Zhang, S., & Wang, Y. (2021, January). *Discussion on the Relationship Between. Humanism and Art*. In The 6th International Conference on Arts, Design and Contemporary Education (ICADCE 2020) (pp. 174-177). Atlantis Press.