

Extraction Method of Brand Symbol Features from the Perspective of Digital Culture

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Abstract: The popularization of modern information technology has driven the rapid development of digital cultural services. The brand symbol is the core part of the brand and the bridge between enterprises and consumers. This paper mainly adopts the online questionnaire survey method, takes the brand symbol as the research object, takes two pairs of competitive brands in soft drinks as the research case, focuses on the TV advertisements of the four brands of Coca-Cola and Pepsi, Wanglaoji and Jiaduobao as the main blueprint, and according to Need, a throwback to Coca-Cola and Pepsi's highlights in brand symbol building. The purpose of this paper is to take the long-lasting brand as an example, and summarize the characteristics of the brand symbol in the context of visual culture from the analysis of the current situation and development process of the long-lasting brand symbol. According to the online survey conducted in this article, only a little more than 25% of the people understand the ins and outs of the "Wanglaoji" trademark competition, what consumers want is simple key information.

Keywords: Digital Culture, Brand Symbols, Extraction Methods, Feature Extraction

1. Introduction

With the continuous development of society, human beings have experienced different cultural forms, from primitive oral culture to modern visual culture, forming a communication system centered on visual symbols. This cultural change makes visual communication the main way of cultural communication in the visual culture era [1]. To explore the characteristics of timeless brand symbols in the context of digital culture, in fact, this is also a debate on the fusion of "traditional culture" and "modern graphics". Under the new cultural background, developing famous brands and updating brand symbols should not only inherit the traditional culture of the brand, but also adapt to the aesthetic habits of modern people. Find the best match between tradition and modernity, and realize the unity of inner culture and outer symbolic form [2].

Based on the extraction method of brand symbol features from the perspective of digital culture, scholars at home and abroad have started related research and accumulated a lot of theoretical results over the years. Dalimunthe F I examines the variables that influence loyalists and customers who switch hotel brands. The data used was obtained from 42 respondents located in the international departure terminal of Kualanamu Airport. The research methods used were descriptive quantitative methods. The data were analyzed using discriminant analysis method by SPSS 12.0 program. Other constraints for this study are 5-star hotels and international chains in Medan. Discriminant analysis showed that one factor in need of search change differentiates brand loyalists from brand switchers. The brand transition matrix shows that all hotels in Medan serving consumers have low customer loyalty [3]. Alnsour MS uses a quantitative approach. To collect data from the sample, we developed and administered a questionnaire. Using the method of cluster sampling, 160 questionnaires were distributed to the marketing staff of the enterprises in the sample, and 138 questionnaires were recovered and analyzed (131). Data analysis was performed using the Statistical Package for Social Sciences (SPSS) to examine study variables and test hypotheses. After analyzing research data and hypotheses, it was found that the most commonly used brand elements by Jordanian companies were names, logos, symbols, packaging or signage, which had a positive impact on creating and maintaining brand equity [4]. Harrison CK applies Robert's love logo branding theory to explain two approaches to photo-inspired academic/sports brand representation. Findings showed that many participants

responded well to photo-induction for both academic/exercise terms and signs. Participants also criticized both representations in the context of broader and specific discussions about the student-athlete experience in U.S. higher education. Suggestions and suggestions for scholars and practitioners [5-6]. Taking the eternal brand as an example, from the analysis of the current situation and development of the eternal brand symbol, the characteristics of the brand symbol in the context of visual culture are summarized.

This paper takes the brand symbol as the research object and the soft drink brand as the research case. In the research dimension, from the development process of the brand symbol, the brand symbol is divided into three stages: the initialization of the brand symbol, the social contracting of the brand symbol and the realization of the value of the brand symbol, and the construction and management of the brand symbol is longitudinally explored, trying to find the value methods and strategies to maximize the realization of brand symbols, in order to better guide the management of brand symbols, better shape the brand, better realize the brand value, and do something for the formation and expansion of the theoretical system of brand symbols try.

2. Path Exploration of Brand Symbol Feature Extraction Methods from the Perspective of Digital Culture

2.1. The Role of Brand Symbols

- (1) The brand can be used to reflect the core value of the product

When enterprises sell products to consumers, they always hope to obtain longer-term operation, broader market space and more stable customer base. In order to achieve such a purpose, then advertising should try to establish the word of mouth of the product, so that consumers have a good impression of the product before or after purchase, realize repeated purchases, and finally establish the inertia of use. This is called brand loyalty. In fact, consumers will store the relevant experience in their memory every time they consume. If the user is satisfied, a benign stimulus will be established and stored in the relevant location of the brain. When the next consumption, the brain will automatically extract the relevant experience as a reference for secondary consumption decisions. And vice versa [7-8].

- (2) Brand is the guarantee of credibility

Enterprises design brands, and the initial purpose of creating a brand is to establish an image that can be accepted by consumers. When consumers see this brand, they will feel that the quality of products and matching services are guaranteed, which is the so-called "famous brand" effect [9]. On this basis, enterprises can also use their popularity to continue to develop markets, lead new products into new fields, and use the brand's operational capabilities to authorize franchising and expand the company. Of course, this kind of behavior needs to be carefully considered; after all, any business authorized by the enterprise will affect the brand's own impression in the minds of consumers, and even destroy the brand image built after years of operation [10-11].

2.2. The Characteristics of Brand Symbols in the Era of Digital Culture

- (1) Brand symbol value and brand symbol maintenance

Symbolic value is the core content of the new consumer culture, brand symbols and the specific manifestations of symbols-goods and services are priced according to the social status and power represented by the object and other factors, rather than according to the cost or service of the goods or services.

- (2) The combination of brand symbol recognition and cultural heritage

Recognition is a modern product, inheritance is a continuation of tradition, recognizability is mainly from the graphic of brand symbols, it is the signifier of symbols, and cultural inheritance is for the signified by symbols. The two are two parts that make up the brand symbol, and only the perfect combination of the two can form a good symbol.

- (3) Innovative realization of brand symbols

With the development of the times, modern brand symbols will eventually become traditions and need to be constantly updated. From the innovation of "time-honored brands", we can find the

unspoken rules for the renewal of general brand symbols. The renewal of the old brand symbol is actually to use modern graphics to convey the cultural connotation of the brand tradition, and to find a point of convergence in the opposition between tradition and modernity. Combined with the characteristics of the times that brand symbols should have, designers should grasp the scale in the process of realizing brand symbol innovation [12].

2.3. Brand Symbol Feature Extraction

(1) Simplified formal criteria

Any form must have the possibility of being clearly understood by people when it conveys its meaning, and people's understanding of artistic symbols depends on the coincidence of the symbolic form of art and people's life experience, which requires removing all possibilities in the expression of the form. Trivial things that obstruct obscure logic. The principle of simplification has two meanings in practical application. The first is "simplicity" from a quantitative point of view. However, in the field of art, "simplification" often has certain opposite to "simplicity" kind of meaning. When a work of art is called simplification, it means that the meaning and diverse forms to be conveyed by the work have reached a high degree of unity.

(2) Balanced Formal Criterion

For a thing to have a balance in perception, it must be that the distribution of the various elements that cause the balance or equilibrium has reached a certain equilibrium state. From a physical point of view, the balance of an object must be the degree to which the forces acting on the object cancel each other out. Such a definition of balance is also applicable to vision.

3. Investigation and Research on the Extraction Method of Brand Symbol Features from the Perspective of Digital Culture

3.1. Investigation Method

This paper mainly adopts the online questionnaire survey method, takes the brand symbol as the research object, takes two pairs of competitive brands in soft drinks as the research case, focuses on the TV advertisements of the four brands of Coca-Cola and Pepsi, Wanglaoji and Jiaduobao as the main blueprint, and will also involve the content related to the brand symbols of these four brands in the field of public relations and marketing, and according to the needs of the article, it goes back to the highlights of the construction of Coca-Cola and Pepsi's brand symbols.

3.2. Data Collection

The questionnaire survey method mainly conducts online questionnaire surveys on consumers' cognition and favorability of Wanglaoji and Jiaduobao brand symbols. 300 questionnaires are distributed online, and the recovery rate is 95%. The case study mainly refers to the selection of the brand symbols of two pairs of competitive brands in the soft drink industry (Coca-Cola and Pepsi, Wanglaoji and Jiaduobao) as research cases. The t-test formula used in this paper is as follows [13]:

$$t = \frac{\bar{X} - \mu}{\frac{\sigma X}{\sqrt{n}}} \quad (1)$$

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2} \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}} \quad (2)$$

Among them, formula (1) is the single population test, which is the sample mean, s is the sample standard deviation, and n is the number of samples. Equation (2) is a double population test.

4. Investigation and Research Analysis of Brand Symbol Feature Extraction Methods from the Perspective of Digital Culture

4.1. Brand Preference of Brand Symbols from the Perspective of Digital Culture

The purpose of Coca-Cola's new logo in 2019 is to attract more young consumers. Therefore, after the new logo, Coca-Cola launched three male stars (A, B and C) and three female stars (D, E and F). , shot a 5-part series of TV commercials for "Be Cool by Yourself" and continued to broadcast for 6 months. These five TV commercials present continuity in time and plot. After the 6-month broadcast of the "Be Cool by Yourself" series of advertisements, Coca-Cola's brand preference in 2020 has increased by nearly 4 percentage points compared with the same period in 2019, As shown in the figure 1.

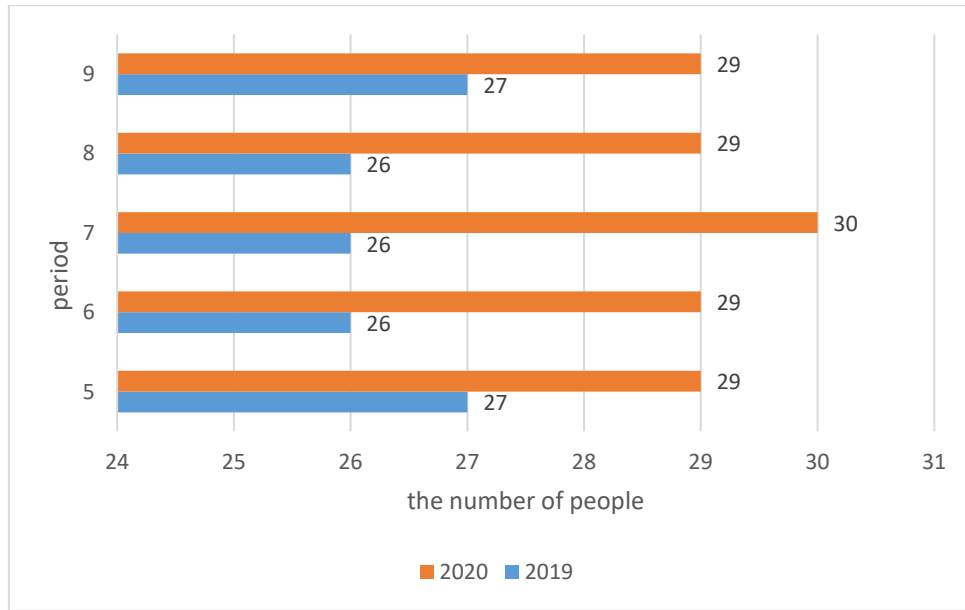


Figure 1: Brand preference time comparison chart

4.2. The Distribution of Brand Symbols Scene Symbols from the Perspective of Digital Culture

The presentation of warm and reunited family reunion scenes and the interpretation of different "homecoming stories" have become an important way for Coca-Cola to express its feelings for "home". In the Coca-Cola TV advertisements collected in this article, according to the different scene symbols of the advertisement screen, the TV advertisement scenes of Coca-Cola are roughly divided into five main scenes: home, public place, unreal scene, outdoor and other scenes. According to statistics, the distribution of scenes in Coca-Cola advertisements is shown in the Table 1 and figure 2 below.

It can be seen from the above statistics that Coca-Cola's "home" scene is the most frequent in TV commercials. "Home" and "pictures where families get together happily" are just simple signifiers, and the real signifiers are there are spiritual symbols such as "reunion", "family affection" and "happiness" extended from "home" and "family reunion". In these advertisements, the storylines of the advertisements all run through the meanings of "reunion at home = happiness" and "reunion with family = happiness", and also use the method of "pointing a deer as a horse" in the advertising scene to continuously deepen the happy scenes such as "family reunion" and "new year together" The association with Coca-Cola adds the meaning dimension of "the joy of reunion" to the "happy" meaning of Coca-Cola.

Table 1: Brand symbol scene symbol distribution table

Place	Public places	playground	Family	Unreal scene	Main Street	other
The number of occurrences	10	8	20	5	9	13
Proportion(%)	14.3	11.4	28.6	7.1	12.9	18.6

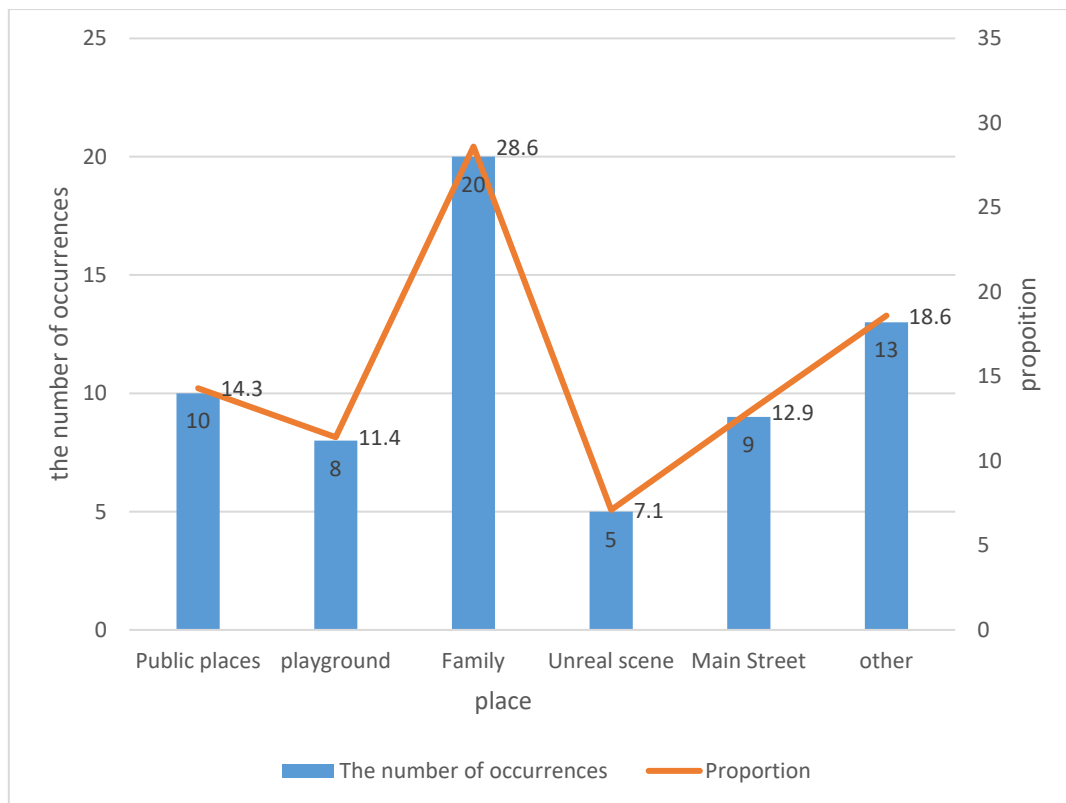


Figure 2: Brand symbol scene symbol distribution map

5. Conclusions

Digital culture exists and develops in digital form and takes the network as the carrier of communication. Digital culture is the most typical manifestation of the digital form of human cultural development. Digital network itself is a manifestation of an emerging cultural form. Digital culture is not only a technical reality and social reality, but also a cultural reality. Although a lot of energy has been invested in this research, there are still many problems and shortcomings in this paper due to the limitation of ability and experience. For example, this paper chooses soft drink brands as the research case. According to the category of beverages, soft drinks not only include tea drinks and Carbonated beverages also include mineral water, functional beverages, fruit juice beverages, fruit-milk mixed beverages and many other categories. However, due to time and capacity constraints, this paper select two pairs of representative competitive brands in the two categories of soft drinks for research analyze. In addition, the data on the consumer cognition and recognition degree in these four stages of brand symbol social contracting need to be further supplemented.

References

- [1] Lawrence V. *Unknown Pleasures*. *Elle Decor*, 2018, 29(4):72-76, 78.
- [2] Ma De Leine S. *Sustainability and learning: Aesthetic and creative responses in a digital culture*. *Research in Comparative & International Education*, 2018, 13(1):135-151.
- [3] Dalimunthe F I. *Behavior Analysis of Brand Loyalists and Brand Switcher in 5-Star Accommodation Services in Medan City*. *Society*, 2021, 9(1):54-71.
- [4] Alnsour M S, Muath L S. *Impact of brand elements on brand equity: An applied study on Jordanian Corporations*. *African Journal of Marketing Management*, 2018, 10(3):17-27.
- [5] Harrison C K, Sutton W A, Lawrence S M, et al. *A Qualitative Investigation of Academic and Athletic Brand Representations: Applying Lovemarks Theory to Cultural Symbol*. *Journal of Higher Education Athletics & Innovation*, 2019(5):15-36.
- [6] Snezana Ristevska – Jovanovska, Marija Magdincheva – Shopova. *Brand and Branding as Important Management Priorities*. *Knowledge International Journal*, 2018, 28(1):209-216.
- [7] Budimir S, Setala O, Lehtiniemi M. *Effective and easy to use extraction method shows low numbers*

of microplastics in offshore planktivorous fish from the northern Baltic Sea. Marine Pollution Bulletin, 2018, 127(FEB.):586-592.

[8] Khodaei A, Feizi-Derakhshi M R, Mozaffari-Tazehkand B. *A Markov chain-based feature extraction method for classification and identification of cancerous DNA sequences. BioImpacts, 2021, 11(2):87-99.*

[9] Lee D Y, Lee H S, Jo J H, et al. *Comparison of Ingredients and Activities of Danggwisoo-san and Jakyakgamcho-tang by Extraction Method. Journal of Korean Medicine Rehabilitation, 2020, 30(4):31-39.*

[10] Madeleine S. *Sustainability and learning: Aesthetic and creative responses in a digital culture. Research in Comparative & International Education, 2018, 13(1):135-151.*

[11] Guo C. *Book Review: Weihua Wu, Chinese Animation, Creative Industries, and Digital Culture. Global Media and China, 2021, 6(1):119-121.*

[12] Thielen Oriaghe. *Exploration on the Win-win Cooperation between Cultural Heritage and Natural Environment Protection Based on the Theory of Cooperation and Competition. Nature Environmental Protection (2023), Vol. 4, Issue 1: 49-59.*

[13] Zhu, Y., & Hsiao, B. (2021). *What Attracts Followers?: Exploring Factors Contributing to Brand Twitter Follower Counts. Journal of Organizational and End User Computing (JOEUC), 33(1), 71-91.*