The Application of Fitting Concepts in Solid Gold Packaging Design

Jian Rao^{1,*}, Chenshi Zhu²

School of Art and Design, Hubei University of Technology, Wuhan, 430068, China ^{*}Corresponding Author

Keywords: Fitting concept, Packaging design, Solid Gold, Pet food packaging

Abstract: With the advent of the 'pet economy' era, adopting a pet-friendly lifestyle is something many young people now admire. Based on this social background, there is increased attention on the quality of life for pets, leading to the rapid development of the pet food market. In today's increasingly competitive environment, besides the quality of the food itself, the importance of pet food packaging design has become more prominent. The application of fatting concepts in packaging design can create forms that integrate functionality and style, which have been recognized and favored by consumers. This article elucidates the application of fitting concepts in Solid Gold packaging design, analyzing the value of these concepts in terms of structure, fun, and emotion. This analysis aims to stimulate consumer purchase desire, drive sales, and enhance brand positioning, effectively improving the brand's market competitiveness.

1. Introduction

The "Cihai" dictionary defines "qi" as to match or to fit together, and "he" as to close, to fold, or to harmonize. The concept of morphological fitting design, as defined in the book "Research on Basic Morphological Design of Products," is the identification of corresponding relationships between forms according to their specific functional requirements, such as top-to-bottom, left-to-right, or front-to-back correspondences [1]. This approach enables the creation of forms that complement and supplement each other, allowing separate forms to integrate into a new unified entity through "fitting." From the definition, "fitting" encompasses concepts of harmony, unity, and wholeness. Morphological fitting in packaging design emphasizes that packaging is composed of different parts. Although each part has its relative independence, it does not lose its integrity. Different individuals are organically combined into one, creating a new exterior image and performing new organizational functions, or dividing the overall into various component parts for specific purposes. Overall, morphological fitting in packaging design features close coordination between forms, exhibiting coplanar and co-shaped relationships; independent entities correspond and complement each other and can form a new unity through fitting design. Regarding packaging design, fitting concept designs include expressions of functionality, intelligence, aesthetics, and marketing [2].

As disposable income per capita increases, people have more extensive and profound choices in pet food on the market. Currently, the pet food industry is gradually becoming one of the fastestgrowing consumer goods industries in China, with the Chinese pet food market entering a vigorous development stage. In China, besides Well pet and Good Owner, many other domestic pet food brands have emerged rapidly [3]. Foreign brands mainly come from two sources: wholly foreign-owned enterprises established in China, such as Mars and Nestlé Purina, and direct imports through agents from regions outside China, such as Royal Canin, Eukanuba, Purina, and Hill's [4]. Solid Gold, an imported pet nutrition brand focusing on gut health, was established in the United States in 1974 and acquired by Health and Happiness Group in October 2020. The Chinese market is one of two major markets in Solid Gold's global layout. Solid Gold's target consumer groups are precisely the young people who highly integrate the pursuit of quality life [5]. They pay more attention to the nutrition and health of pet food, hoping to obtain "one-stop" products that meet the dietary and health requirements of pets. Most pet food packaging on the market is not designed with the organization of the brand as a starting point, resulting in low brand recognition and difficulty in building a strong brand image [6]. Therefore, the application of the fitting concept in the pet food packaging industry has significant prospects and market potential.

2. Fitting concept and pet food packaging

2.1 Overview of the concept of fit

The "fitting concept" refers to the recombination of various parts of a product to create a whole with new functional uses and aesthetic forms. This design philosophy emphasizes the fitting of graphics and shapes through methods such as shared edges, continuous repetition, axial symmetry, collinearity, and coplanarity. It integrates expressions of functionality, intelligence, aesthetics, and marketing.

2.2 Current situation and product analysis of pet food market

Although the pet industry has recently surged in Mainland China, the development pace remains relatively fast, particularly in the pet food sector. As people's living standards improve and health awareness increases, there is a growing focus on health and quality of life, with an urgent demand particularly for pet needs. However, in a highly competitive society where people have limited time to care for pets, the increase in per capita disposable income has led to richer and more profound choices in pet food on the market, moving away from merely feeding pets leftovers. Currently, the pet food industry is becoming one of the fastest-growing consumer goods sectors domestically, with an expected annual growth rate of 30% over the next five years. In 2010, the total consumption of the pet economy reached over 4 million yuan, with pet food consumption nearing 1.6 million yuan. The pet industry is an emerging sector, offering more convenient and efficient services that greatly facilitate residents' daily lives. With the continuous improvement in people's living standards, there is a higher demand for spiritual and cultural enrichment, leading to increased expectations for highquality, nutritious pet products. Presently, over 100 cities in China have opened large pet food supermarkets and chain stores, with Beijing experiencing the fastest growth-its chain size has already exceeded 1,000 stores. Additionally, several major and medium-sized cities have also built distinctive pet cities or pet clubs, along with some small chain supermarkets and specialty stores.

Increasingly, pet owners in cities of all sizes are becoming more aware of their spending, revealing huge potential in the pet food market. This has successfully attracted the attention of international pet food giants, who are intensifying their promotional efforts in China. For the Chinese pet food market, the post-90s generation is poised to become the most significant participants in the pet consumption arena over the next three years. With the development of internet technologies and enhancements in user experience, the traditional pet food industry is undergoing transformations. New generations of consumers are creating fresh market demands. As people's lifestyles accelerate and work pressures increase, more young individuals are joining the ranks of pet owners. The "pet economy" is taking shape, and the pet industry is gradually becoming a burgeoning sunrise industry. For Solid Gold, this signifies greater market opportunities.

2.3 Current status of pet packaging food design

Due to its vast consumer base, China's pet food packaging industry has become a global hub for cultural and packaging products. However, the level of packaging design within the country is uneven. Since the development of China's pet industry started relatively late and has progressed slowly, many domestic companies serve foreign brands, leading to a lack of sufficient understanding of pet products by domestic enterprises.

Firstly, the homogenization of packaging design is a significant issue. Many pet food packages are merely basic designs that often overlook unique features and selling points, resulting in a lack of innovation and distinctiveness. In many cases, pet food packaging simply consists of a generic combination of a cat or dog photo with text, showing high similarity. This makes it difficult to distinguish these products from others in the market and fails to reflect their competitive edge. Secondly, the transmission of brand information is not clear enough. In today's era of booming internet, pet owners can access more knowledge and information online. Younger consumers focus

on dietary health, which is increasingly reflected in their choice of pet food. Compared to the traditional practice of feeding pets with human food, more pet owners are turning their attention to the ingredients in pet foods. However, the majority of packaging on the market does not convey product information clearly, making it hard for consumers to identify what they are looking for, which is not conducive to stimulating their purchasing desire. Lastly, there is a weak awareness of brand packaging. Most pet food packaging on the market, being in its initial stages, lacks targeted brand design. Some are merely simple product packaging designs, with just a brand logo placed on the package. There is no emphasis on establishing a pet food brand image, no integrated brand concept, and no reflection of the product's unique selling points or the brand's demands.

2.4 Positioning analysis of pet food consumer groups

Regardless of the number of pets they own or their spending capacity, the post-90s generation (including those born after 1995) forms the most crucial segment of the pet-owning population. With the booming pet economy, this vast consumer market has attracted an increasing number of businesses and individuals, becoming the new driving force in the pet industry. According to the "White Paper" statistics, this group accounts for 38.1% of the pet-owning population and 40.1% of the high-spending pet owners, indicating significant potential in pet-related consumption. The pet industry is an emerging and opportunistic sector. The post-90s generation, having grown up with the internet, was exposed early to developed countries' pet care philosophies and seeks personalized consumption styles. They have a strong desire to consume and place a high emphasis on the quality of their pets' lives. Additionally, their aspirations for a better life make them the primary consumer group for pet food. Their involvement has also led to significant changes in the pet food market.

On one hand, there is a marked increase in the importance placed on scientific nutritional ratios in pet food among pet owners. On the other hand, pet owners are also beginning to realize the importance of scientific nutrition. Studies on the "White Paper" show that among those who focus on "scientific nutritional ratios," 37.4% are from the post-90s generation, highlighting the high level of attention this group pays to this issue.Furthermore, nutrition and health play an increasingly significant role in the pet-owning population's decisions when purchasing pet food. During the selection process of dry pet food, the "nutritional ratio" is a concern for 68.8% of consumers, making it the most influential factor. Among the post-90s and post-95s pet owners, there is a particular emphasis on "nutritional ratios," with 71.8% and 70.3%, respectively, focusing on this aspect, significantly higher than other groups.

3. The application of the fitting concept in solid gold packaging

3.1 Structural fit

The concept of fit often closely relates to an object's structure, where clever structural composition and a rich variety of external forms complement each other, enhancing beauty while showcasing a blend of emotion and reason [7]. "Packaging" serves to convey a product's essence externally to the purchaser, stimulating their desire to buy, essentially acting as a process of information transmission. Only clear, focused information can captivate attention. In March 2022, Solid Gold welcomed a "Brand New Solid Gold" brand upgrade in the Chinese market. Simultaneously, Solid Gold's launch of five star new products, including the novel Dual-Protein Grain-Free formula, marks a significant expansion of its product portfolio to further satisfy the growing consumer demand.

Currently, Solid Gold's packaging mainly consists of plastic bags and cans. The plastic bag packaging is simple and stylish, while the canned packaging is exquisite and compact. However, whether in plastic bags or cans, the product information is not clearly expressed. Although the five star new products are targeted, it is challenging to discern the real feed ingredients at a glance. Based on this, this paper applies the concept of fitting to the packaging of Solid Gold, innovating and recreating the original packaging structure. For pet food, pets do not purchase their meals and snacks themselves; all these tasks are performed by their owners. As a pet owner, one naturally hasn't tasted the pets' food, so clearly displaying the feed information inside is most likely to strike the owners'

hearts at first glance.

Therefore, in the packaging structure design, I opt for an inner and outer double-layer hollow-out structure (Figure 1). Regarding the outer packaging structure, the design features illustrations of pets holding musical instruments. The instruments held in the pets' paws are hollowed out, allowing the feed itself to be seen through these openings, providing consumers with a more direct understanding of the brand's products and the real feed components, depending on the breed of cat or dog, to choose the appropriate feed (Figure 2). For the inner packaging structure, transparent packaging bags are used, which are hygienic and allow for an organic fit between the design and the internal product. Pet owners can also easily discern product information according to their pets' preferred flavors and suitable physical conditions, improving the product's functionality and making it more user-friendly.



Fig. 1 Solid gold packaging design (drawn by the author)



Fig. 2 Solid gold packaging design (drawn by the author)

3.2 Interest alignment

Humans are emotional animals with a sensitive side. Structural fitting design influences human behavior and interacts with the user, whereas interest alignment elevates the consumer experience to a higher level. In the packaging of Solid Gold, I have applied fitting both in structure and in graphical design [8]. The visual patterns on the packaging are four different cartoon images of pets: a Ragdoll cat, a Golden Retriever, a Maine Coon (Figure 3), a Border Collie, and a Kunming Dog (Figure 4), forming a pet series. In graphic design, pets are combined with Tang Dynasty ladies, literati, and warriors in an anthropomorphic treatment. Each pet is a treasure to its owner, and the primary intention behind purchasing cat and dog food is to hope their beloved pets grow up healthy and strong. The body shapes of Tang Dynasty ladies are typically plump and attractive, while literati and warriors not only symbolize typical characters of the Tang Dynasty but also represent strength and intelligence. For instance, the Ragdoll is known for its high aesthetic appeal and clingy personality, making it a top choice for many first-time pet owners. The Golden Retriever is loved for its round big eyes and tiger-like head shape. The Maine Coon, with its strong physique, dense fur, and lion-like regal demeanor, fulfills many cat owners' dreams. The Border Collie has good thinking ability and strong learning capacity. The Kunming Dog, a breed developed in China mainly for narcotics detection and rescue activities, represents strength. The selection of these five pets perfectly matches the selling points of the "brand new" five star products of Solid Gold. Purple-pink Solid Gold: Good meat for good fur; Purple-gold Solid Gold: High-quality meat, easy to digest and absorb; Blue-yellow Solid Gold: Natural protease inhibitors, boosting feline immunity; Purple-yellow Solid Gold: Developmental protection, enhancing core strength; Purple-red Solid Gold: Easy digestion for better absorption.



Fig. 3 Solid gold packaging design - Cat Food Series (drawn by the author)



Fig. 4 Solid gold packaging design - Cat Food Series (drawn by the author)

Therefore, in graphic design, the images of Tang Dynasty ladies, literati, and warriors align with the product's selling points, reflecting the packaging's interest alignment and adding emotion and fun to the design. Through the concept of fitting, the packaging becomes more than just a single boring form, bringing a new sensation to the purchaser and a sense of pleasure to the user during the product's use.

3.3 Cultural concept alignment

The notion of cultural concept alignment refers to the process of identifying and fully aligning with a company's philosophy during the design process, clarifying and reinforcing the design style, and integrating the company's cultural concepts into the packaging design. This approach not only enhances brand recognition but also allows consumers to experience and feel the humanistic and cultural spirit advocated by the company when they come into contact with the product.

In 2021, Solid Gold officially entered the Chinese market and quickly made its way into the consumer circles of Generation Z, strengthening brand awareness with the trendy pet culture of "Feeding Should Be This Simple." Solid Gold, the mainstay cat food, along with cat cans, dog food, and other products, has entered the Chinese market. Additionally, its pet snacks are continuously

being upgraded and innovated. In the first half of 2021, low-fat, low-calorie diet foods, grain-free chicken that sells well in overseas markets, mini dog food for small breeds, and other products will also enter the Chinese market in succession. Therefore, in my packaging visual design, I chose to integrate traditional Chinese elements. Looking back at ancient Chinese history, the Tang Dynasty was a period of vigorous development in the feudal dynasty and shone brightly in China's splendid culture, characterized by rich cultural content; cultural inclusiveness, innovation, and openness; and politically enlightened, open, and tolerant policies. The Tang Dynasty achieved high accomplishments in economics and politics, but it also had a unique national character and a distinct spirit of the times. Hence, the colorful culture of the Tang Dynasty is universally acknowledged [9].

Integrating with Solid Gold's slogan of "Bold, Playful, Energetic," images of Tang Dynasty ladies, literati, and warriors combined with musical instruments are selected to anthropomorphize pets. The design inspiration for the cat food comes from the famous Tang Dynasty painter Zhou Fang's "Court Ladies Adorning Their Hair with Flowers" (Figure 5). The Ragdoll cat holds a pipa, one of the most popular musical instruments during the Tang Dynasty, in its arms. The hairstyle is the Tang Dynasty's "looking-towards-immortality" style, complemented with a jade comb headpiece, adding a Chinese flair. The clothing is chosen in purple and pink as the inherent colors, consistent with the original packaging, to evoke familiarity in consumers. The golden gradient hairstyle represents the Tang Dynasty's "throwing-the-hairpin-away" style, combined with a step shake headpiece. The clothing is chosen in red and blue, similar to the color scheme of the court ladies in Zhengzhou Opera House's dance performance "Night Banquet in the Tang Dynasty Palace" (Figure 6), which is one of the most well-known color schemes for court ladies' attire [10]. The Maine Coon's hairstyle is inspired by the "high hairpin" style of the flourishing Tang, complemented with hairpins and a jade comb headpiece. The clothing is in purple and gold, close to the original packaging color and more suited to the Maine Coon's temperament.



Fig. 5 Court ladies adorning their hair with flowers. (Image sourced from the internet)



Fig. 6 Night banquet in the Tang Dynasty palace. (Image sourced from the internet)

The design inspiration for the dog food comes from Tang Dynasty poet Li Bai and the Mingguang armor worn by Tang Dynasty warriors on the battlefield. The Border Collie's design prototype is the famous Tang Dynasty poet Li Bai, a symbol of romanticism who has had more or less influence on every Chinese person, fitting his identity as a literatus. The clothing color scheme utilizes traditional Chinese gray-green. The Kunming Dog's design prototype is inspired by the Tang Dynasty's Mingguang armor, the foremost among the thirteen armors of the Tang, named for its brilliance under

the sunlight. The color scheme adopts the original large dog food packaging colors: black, yellow, red, to enhance recognizability. Graphic elements are a crucial marker of design, serving not only to beautify the visual effect but also to convey cultural connotations. By leveraging its resources, the effort is made to explore China's excellent traditional culture and present it more excellently to everyone. When packaging carries a significant emotional value, the cultural concept is subsequently elevated and reflected.

4. Conclusion

The concept of alignment plays a pivotal role in the packaging design of Solid Gold, underscoring the fusion of traditional culture and modern brand philosophy to enhance consumer engagement and brand recognition. This approach has been meticulously applied to bridge the cultural essence of the Tang Dynasty with the brand's vibrant, bold, and playful identity, manifesting in a packaging design that not only resonates with the aesthetic preferences of contemporary consumers but also encapsulates the nutritional ethos of the products. The integration of Tang Dynasty elements—reflecting the period's rich cultural heritage, open-mindedness, and innovation—into the packaging design design serves not only as a nod to China's splendid past but also aligns with Solid Gold's commitment to quality and wellness. By anthropomorphizing pets through the personas of Tang Dynasty figures and blending traditional Chinese motifs with the brand's modern appeal, the design strategy effectively communicates Solid Gold's brand values and differentiates its products in a competitive market. This synthesis of historical cultural elements with a modern branding strategy exemplifies a forward-thinking approach that respects heritage while appealing to contemporary tastes and values, ultimately enhancing the brand's appeal and market position.

References

[1] Cheng, H. "The application of the concept of fit in "M.A.C" packaging design". Package and Design, no.5, pp.148-149, 2022.

[2] Mei, A. M. "The application of the concept of compatibility in rainbow sugar packaging". Popular Literature and Art, no.16, pp.98-99, 2019.

[3] Sun, M. H., Duan, J. J. "The application design of the concept of fit in the packaging of Yellow Crane Tower Cigarettes". China Packaging Industry, no.12, pp.73-74, 2015.

[4] Zhang, X., Wang, J. "Research on pet food packaging design based on emotional design". Industrial Design, no.8, pp.68-70, 2022.

[5] Li, Z. J. "The application of digital illustration in pet food packaging design". Green Package, no.5, pp.109-112, 2022.

[6] Wang, H. L., Zhang, G. B. "Research on pet food packaging design". Journal of Chifeng University (Natural Science Edition), vol.30, no.15, pp.40-50, 2014.

[7] Gao, H. L. "Pet food packaging design in the context of the new era". East China Paper Industry, vol.52, no.02, pp.7-9, 2022.

[8] Wang, Y. F. "Application of traditional visual symbols in packaging design". Packaging Engineering, vol.43, no.02, pp.367-369+386, 2022.

[9] Cao, C. Y., Du, Y., Ma, X. Y. "An analysis of the significance of cultural elements of the Tang Dynasty to the second China-Chic cultural creation". Tomorrow's Fashion, no.09, pp.97-98, 2021.

[10] Zhang, B. "Watching the dance of "Night banquet in the Tang Dynasty palace" - understanding Tang Dynasty culture from four aspects: clothing, instruments, poetry, and dance". BaiHua, no.02, pp.111-114, 2022.