

## The Study of the Symbol Attributes in Product Design

Rui-Bo HU<sup>1,a,\*</sup>, Xiao-Song ZHANG<sup>1,b</sup>, Xin-Yu SUO<sup>2,c</sup> and Yuan HU<sup>1,d</sup>

<sup>1</sup>Guizhou Normal University, Guiyang, P.R.China

<sup>2</sup>Yunnan University of Nationalities School of Vocational technical Education, Kunming, P.R.China

<sup>a</sup>mysjgzs@126.com, <sup>b</sup>407904118@qq.com, <sup>c</sup>1014707295@qq.com, <sup>d</sup>282250069@qq.Com,

\*Corresponding author

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**Abstract.** This thesis analyzes the concept of semiotics. From arbitrariness of the symbol, this thesis classifies it as the signifier and signified. While on the analysis of the symbol's attribute of sociality, this thesis regards the symbol as an important tool to help people thinking and conduct social communication. It gradually finds out that the symbol's attributes have more than one function, namely the diversity, and then concludes that the symbol's attributes include the cognition, universality, constraint, and uniqueness.

### Introduction

The concept of Semiotics. The earliest semiotic research in the history of ancient China can be traced back to the Pre-Qin period. In an age where symbols are not clearly defined, "Fu", the ancient Chinese character, contains the meaning of the symbol. For example, "Fu Rui" refers to the lucky omen; "Fu Jie" and "Fu Qi" are authenticating objects; "Fu Lu" is the mysterious symbol in Chinese Taoism. The Chinese Philosopher Zhuang Zi recorded in his book *Wai Wu* that the meaning is the most important information carried by the text and with the meaning gotten, no words are needed. It emphasizes that the language symbols have the ability to transfer meaning. They are merely tools to explain the meaning, so if the meaning is gotten no words are worthy of paying attention to. In the Pre-Qin period, Gongsun Long wrote in his *Argument of Objects Indication* that everything in the world are referred by symbols but symbols themselves are not the objects. It means that the symbols can be used to refer to everything but symbols themselves can not be regarded as the objects they referred to. From this point of view, the *Argument of Objects Indication* is the earliest writing of semiotics in China. It stated in *Shangshu* that the words are voice of the meaning and texts are record of words. It pointed out that the language is a symbol and the text is the written symbol to record the language symbol. (9) Xun Zi, in the book of *Zhengming* said that names themselves have no meaning. They are rules created by tradition and disobeying rules is not accepted. It means the language symbols are established by people and accepted as a common social practice. The objects the language referred to are also created by people and the culture. In the western philosophy history, Aristotle (BC384--BC322) discussed the characteristics of symbols in the book *Argument of Tools*. He then wrote in the *Category*, *Explanation* that the spoken language is the symbol of mind experience and the text is the symbol of the spoken language. People have no clear understanding of symbolics until the early Middle Ages, when Augustin (354-430) stated that symbol is the thing we used to refer to another objects. It refers to both the object and our psychological feelings.

## **Arbitrariness**

Saussure pointed out that the symbol is composed of two parts. One is the signifier and the other is signified. The arbitrariness of the symbol explains the relationship between the signifier and the signified. Imagining that when human beings see something the first time, they will have its shape or characteristics reflected in their minds. The fact that human beings recognize and identify the physical form and characteristics of the object is the signifier. Recording the object by a sound is the signified. Does it mean the signifier and the signified connected arbitrarily in this process? Let's imagine that at that time, human beings had no other similar objects as the reference, they can only connect them arbitrarily. This connection comes from the demand of human beings to better understand the world. No matter how are they connected, this connection process is passive. The power driving the process is the demands of human beings and the medium is the human's brain. That is to say that the connection between the signifier and the signified is arbitrary. The process of this connection is passive and not necessary, but its power comes from the needs of human beings.

Many facts proved that when symbols are established to a certain degree, the single individual is not allowed to make any change to it. Putting the view of provable and unprovable aside and seeing from the symbol itself, the signifier and signified contained by the symbol are all psychological. Although they are result of the collision between the objective existence and the subjective understanding, this collision creates the inherent demand of the result existence. This demand is the inherent power of the existence and the value of the symbol. This power can be regarded as a kind of tension. It makes the two kinds of passive connection possible. These two passive connection are the signifier and the signified. However once the demand is satisfied, the relationship of the signifier and the signified is settled and not allowed to be changed willingly. This stability is not only the result that the demand is satisfied, but also a result of collective inertia after the stability. However we also have to understand that this demand comes from the process of continuous explanation of the signified. As the demand is satisfied, the power of the demand will increase and the tension will be enhanced. Also the collective inertia created after the stability will form another force which blocks the tension from getting increased. We can name it the inertia force. That is to say that the connection stability between the signifier and the signified is the result of the two forces of different direction that affect each other. Meanwhile we should see that the inertia force is generated when the demand is satisfied. The existence of the inertia force is to stop the demand from further expansion. This stability is not absolute but relative. In other words it means that the arbitrariness is absolute before the demand is satisfied and relative after the demand is satisfied. Just because of the existence of arbitrariness, sometimes the inertia, to increase its power under the joint function of tension and inertia, will restrain the tension from getting stronger to satisfy its needs. However sometimes the inertia will allow expansion of the tension to reach another critical point, where the relationship is more stable. In the field of language, the joint efforts of the two forces result in the development of language.

## **Sociality**

The symbol is an important tool to reflect human's thinking and help people conduct social communication, which itself has the character of non-arbitrariness, the so called stability. The language symbol is a tool that all members of a nation in every generation relied on to communicate. Its role has effects on everyone's every aspect of life and is closely related to people's daily lives. Human beings' dependence on the language symbol is far more important than what we imagine. We even cannot work, study and live without the language. This fact determines that the language

symbol, as the tool to inherit history and realize real communication, is irreplaceable and not allowed to be arbitrarily changed in the revolution of human society. This also requires us to study symbols within a certain social environment. However in a social environment a language symbol does not enjoy the freedom of other systems, or the language symbol is no more freer in the degree of freedom than other systems. This fact is related to the equalization of the historical factor and the realistic factor. Saussure explained that the change of language has nothing to do with the change of generations, because the generations are not like drawers accumulated layer after layer. They are woven and penetrated with each other with each generation contains people of all ages. We can make the conclusion that the overall change of a language is impossible by considering the large time and energy an individual takes to learn his mother tongue. This is the character of inheritance and reality of the symbol. In the combination of symbols, some certain rules and laws should be obeyed. When a symbol entering into a symbol system, it will be constrained by other members of the system. The symbols' order based on some structural system cannot be change arbitrarily.

The arbitrariness and non-arbitrariness are two aspects of a contradiction. It is just because of the arbitrary combination of the signifier and signified that the symbol is established by customs and it form a inherent law to stabilize its expression structure, creating the non-arbitrariness or the stability of the symbol; It is just because of the non-arbitrariness of the symbol that the significant of the symbol as an important tool of inter-personal communication has been realized. Finally, let's quoting the words of Saussure-- the language can be seen as a piece of paper. The thought is the obverse side of this paper and the sound is the reverse side. We cannot cut the obverse side without touching the reverse side. In the language, we cannot separate the sound with the thought and vice versa. Similarly in the world of symbol, we cannot discuss the non-arbitrariness without mentioning the arbitrariness and vice versa.

## **Diversity**

The symbol's connotative meaning and denotative meaning are not always fixed. The objects themselves are changing in their development. Therefore the symbolic meaning is changing accordingly. In different countries and different time periods of the same country, the same word under the different symbolic context shows different connotative and denotative meanings. This meaning is closely related to aspects such as the society, culture and ideology. A nation or a language community is the a group of people developed in a certain historical period. They share the same language, region, and economic life, and they also perform the common psychological quality of the common culture. This similarity not only guides and controls people's mind, but also provides people with the common values, style of thinking and rules of behavior, guiding people to live and behave according to some certain laws and forming common characters in a nation's ideology. This ideology is an important indication that separates one nation from another. It includes spiritual characteristics such as the thought, consciousness, emotion and psychology. The "willow" in Chinese culture is often related to separation and miss. In The Book of Songs the poet said that I left home when the willows were green. I came back from the war with the snow white. The poetry vividly describes the soldiers sickness for their homes and relatives. Many ancient Chinese poetries use willow to express people's feeling of separate. In The Miss of Qin e, Li Bai wrote that the willows are green year after year but my lover never come back. The reason why the willow have such a cultural connotation is that the homophonic words are existed in Chinese characters. Because the "willow" has the similar sound of "stay", it is easy to explain why the Chinese, in their history of using the words, attach to the "willow" the meaning of separation, miss,

and the willingness to have the beloved ones stay. Besides, the willow is tender and pliable, reflecting the long and never ending love between people. It just shows the tendency of Chinese to use objects to reflect people, express their feelings by describing the environment and show their admiration to the nature. The word of “willow” in a poetry sometimes identifies the tone and theme of the entire work. The Chinese painting also emphasizes expression of the meaning rather than the form. Several stroke of the willow in a picture will help people fully understand the deep meaning hidden inside.

Phenomenal symbols such as the eagle and snake have deep cultural meanings. These two figures form a symbolic system which has the traditional metaphoric meaning and the color of morale valuation, playing a very important role in the human being’s mythology system. The eagle and snake have different cultural connotations and symbolic significance in the background of Chinese and Western culture. From the imagination of Chinese ancestors, the Chinese dragon and phoenix, figures created by combining the eagle, snake and bird together, become the nation's most sacred symbol and are widely involved in the creation process of the metaphorical symbols. For example the dragon and phoenix are used to represent the emperor and empress. They are also used to refer to the talented and outstanding people. In the creation of a series of symbols, the ancient Chinese also made themselves better. The “dragon” and “phoenix” become the vivid life in Chinese poetic culture. The eagle is the symbol of courage and noble personality in Chinese culture. Liu Zongyuan, a poet in Tang Dynasty created a brave and aggressive eagle. He wrote that the eagle was flying over the sky, washed by cold rains and whipped by strong wind but it finally got it through. In Western culture, the figures of eagle and snake appeared earlier in the literatures. Shakespeare used these two figures repeatedly to describe people. For example the king Lear said his daughter was the “poisonous snake” and “hungry eagle”. The pretty, cunning and passionate Cleopatra was called by her lover Anthony as the “beautiful snake alongside the Nile River”. Feeling of the ruthless competition in the world of reality, the author usually uses the eagle to represent the tyrant. For example Byron referred Napoleon as “vulture lingering over the sky”. Moore referred to the monarch of the Holy Alliance as “vulture taking robbery as a habit”.

Because of the difference in religion, culture, nationality, ideology, values and social psychology, the difference in the emotional semantics, symbolic semantics, and cultural semantics regarding colors is also complex, sometimes even contradictory. Using different imagination to connect the same color to the different objects also results in the different emotional and symbolic meaning. The color, when connecting to the different cultures, will create different cultural meanings as well. Take “yellow” for example. The “yellow” in Chinese culture has the different sentimental and symbolic meaning from that of the English culture. The color of “yellow” almost becomes the symbol of dignity in the Chinese nation. It is not only because the Chinese have yellow skin, but also because of the “Loess Plateau”, the “Yellow River”, namely the mother river, and the “Yellow Emperor”, a word used to refer to Chinese people. The Chinese flag has “yellow” stars. The “yellow” remains a symbol of dignity in the history of China and it is always related to the emperor. It is said that the emperor wore yellow clothes and yellow crown. In Sui and Tang dynasty, the luxurious clothing are called “yellow clothing” and the emperor must use “yellow” paper to write the announcements, known as the “imperial edict”.

## Conclusion

**Cognition.** In modern design, cognition is the life of symbolic language. For example, many big banks in China use Chinese ancient coins as the basic form of their brands, because the ancient coins can accurately convey the information of financial institutions. It has a very strong character

of cognition. If a design cannot be cognized or it makes people confused, it will lost all of its significants.

**Universality.**Modern design is used to serve common people and the public. The design works will spread widely among people. The symbolic language designed will be accepted by the public only if it has the character of universality. It is common that the designers spend a lot of time on designing their works but the works are hardly accepted by other people. At that time many designers may complain about the customers' low appreciation. However sometimes the customers have a better understanding of the service receivers than the designers. To accomplish an assignment better the designers must find a designing language which will be understood by the designers themselves, the clients and the customers. The universality of symbols is well reflected by slogans in many public places. For example the gender notification in public washing rooms. It will be clearly read disregard of people's gender and age.

**Constraint.** Every symbol is understood within a certain scope that only people having the related cultural background can tell the information carried by the symbol. Only the symbol matching the particular background can be accepted within this range. For example, potato image often appears in works of Gunter Rambow, the famous German poster artist. To people who have little knowledge of Germany, they can hardly understand the meaning expressed by the works. Only those who knows the potatoes' special meaning to the German will understand the why the designer love to use potatoes.

**Uniqueness.** The symbol generally emphasizes uniformity, so that it will be easily understood. However in a design, uniqueness is often the key point. Therefore when comparing the form and content, the latter is definitely more worthy of studying. To a same topic, we must find out as many manifestations as possible to create an unique and outstanding work.

Fund project: ministry of science and technology support project (SQ2013BAJY4603);The protection of ethnic culture and display technology application demonstration ".In composition Triassic palaeontologic heritage site protection and application demonstration of characteristic culture. "125" science and technology major special projects in guizhou province department of education(20012) 007]: guizhou ethnic arts and crafts industrialization development of tourism Author introduction: Ruibo Hu,a man was born in December ,comes form the DaoZhou county of HuNan province, master of lecturer, engaged in the tourism products, landscape, rhetoric art, research of ethnic costumes. E-mail:mysjgzs@126.com

Corresponding author: Renpin Xu,a man was born in 1949, comes from Shanghai province professor, PhD supervisor. Product design, national folk art, national costumes, visual communication design. E - mail: xurenpg@gmail.com

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