

Mild Expression of the Objective World

Explorative Research on the Uncertainty of Modeling Language of Modern Children's Picture Books

Kun Tong

Academy of Fine Arts
Huanggang Normal University
Huanggang, China 438000

Abstract—With the impact of modern art modeling concepts, the modeling language of modern children's picture books presents two characteristics, virtuality and uncertainty. The characteristic of virtuality stems from people's obsession on machine and speed after the industrial revolution. It is reflected by the description of moment in the painting. It has unavoidable sidedness and limitation in the capture of the fleeting motion curve and in the virtual expression of structure. However, children are more receptive to such works and they can experience form relationships and the beauty of the screen in watching and reading. The fuzzy theory can make the explanation of this phenomenon to a proper extent. It is an implicit rule for artists to create.

Keywords—fuzzy theory; modern; creation of children's picture book

I. THE FUZZY THEORY AND THE COGNITION OF CHILDREN

The fuzzy theory was found and put forward in 1960s. This theory greatly broadens the dimension and depth of modern mathematical research. However, fuzzy theory is not a new product. It has been an objective existence, and widely exists in all natural and social relations. It also has a far-reaching significance to philosophy, pedagogy, psychology and all natural sciences. The core idea of fuzzy theory is the uncertainty of order and logic. The judgments that people make are based on the uncertain object of a thing as well as the close position of subject. Therefore, there are many answers for a problem. These answers are not in the relationship between right and wrong, but the relationship of benevolence and wisdom. The fuzzy theory is not the negation of accurate calculation. On the contrary, the final conclusions of both of them are often strikingly consistent. Yet the former is reasoned on conditions and data, and the latter is based on the operations of numbers and symbols. They all point to the starting point of cognition - law. Professor Wang Mingju, a forerunner of fuzzy aesthetics research in our country, deems that beauty is

2015 Annual General Project of Humanities and Social Sciences of the Ministry of Education - Youth Fund Project: Children's Modernism - Research on Modeling Concepts and Methods of Modern Children's Picture Books; Project number: 15YJC760086. The paper is the research results in the middle of the project.

2014 Youth Project of Humanities and Social Sciences of the Education Department of Hubei Province: Final Research Result of Modern Children's Picture Books' Modeling Concepts and Expression Techniques. Project number: 14Q113

flowing, changeful and uncertain. The fuzzy mathematics, theory of dissipative structure and other subjects are the basis theories of natural science of fuzzy aesthetics. The materialist dialectics is the basis of the theory of philosophy. They, from different angles, emit beams of uncertainty. [1]

Fuzzy theory is the premise of the establishment of the concept. The concept is brought forward on general rules and common features. The calculation is only for individual, momentary and exact numbers. To carry out research on same type of things requires different numbers for calculation. But it cannot obtain consistent results. The establishment of fuzzy theory gives possibility. The changes of all conditions and numbers are between two poles, which determine the results of their operations are also between the corresponding poles. The resulted judge is concept. In the education of children, children obtain the concept of shape with the help of fuzzy theory. Take round as example. It is difficult for children to understand the concept of round from the angle of the center of a round and its radius. However, they can find the general rules from similar shapes. Arc lines, closed outline, half round and all closed arc shapes are all considered as round by children. It may not match with the geometric concept of round, but it is in line with the fuzzy concept of round.

Fuzzy theory is the basis of visual language's internationalization. Compared to written language, visual language has a broader international basis. It owes to frequent international exchanges and people's understanding and recognition on the law of general modeling. Take traffic signs as example. Although signs of different countries and regions are different, they have similar functions. Its appearance symbols also have many similarities. It is fuzzy characteristic of symbols that make people have consistent understanding. The symbols of safety, hospital, rescue and other public system are beyond borders. And they have become an international language. It's easy to overlook the subtle differences of symbols, and thus cause psychological resonance on its function. Especially for children, they are more sensitive to the dramatic relationship between symbols, and easier to read the story composed by symbols. It is the ontological meaning of visual symbols. The clear and exact contour feature is already not the gist of pictures. The fuzzy modeling language is the condition to overcome the obstacle of understanding.

Fuzzy theory is the way and method to establish children's cognitive ability. The cognitive ability of children is associated with their age, education, environment and individual differences. But generally they develop to the level of an adult when they are about ten years old. Although the children's understanding ability has just started, their strange feeling to the objective world has disappeared. Maybe they can't tell the exact number, size and position of things and other quantitative data, but they can make a description of its characteristics, can make a comparison among similar things. "Very", "quite", "almost" and "as if" and other words are children's common judgment phrase on things. The seemingly uncertain fuzzy cognition is an important part of the cognitive structure of children. Children build confidence in learning from this, and it can lay the foundation of their accurate calculation and ability formation in later period.

II. METAPHOR OF LINE AND COLOR

Structure is the theme of the plastic arts. The children's picture book is no exception. The picture book artists cause the cognition and association of readers through performance structure. The complexity of the structure lies in the sidedness of presentation. We can only see one side of a structure. Even though one knows the structural relationship clearly by heart, it cannot change the visual sidedness. It can build a "reasonable hypothesis" of a structure on a two dimensional plane with lines. Lines express the association relation of structure by winding and weaving, which has a sense of space, volume and movement, and finally prompt people to guess its "real looks". The magic power of lines lies in the reveal of the essence of things with simple modeling. It can tell people what is it, what is behind and what's in it. Children can receive the forms of animals from pictures in the picture book. And they are similar with images that they've seen in documentary film. Although they are in fact quite different, the former seems more simple and profound, and is easier to be remembered. This phenomenon also reveals the reason why almost all children love drawing. Their performance desire and ability on lines are almost innate. Lines are not limited and strongly plastic, so the movement of line on the sheet is free. At same time line is close to the essence of thing, so all shapes can be formed by lines. Shapes are one of the most profound descriptions of the essence of things. To analysis lines and shapes is the breakthrough point for us to understand the relationship of children's painting, cognitive ability and pictures they draw.

The fuzziness of line lies in that the formed shape is only a one-sided state of the object. Some are familiar to us, easy to identify. But some are quite strange. Sometimes different objects have same shape. The picture book artists make lines and shapes alive using the visual characteristics. A round can be sun, moon, ball, wheel, plate or clock. Even it can be animal's eye, fruit's kernel or bubble in water. In particular environment, the same shape has a specific meaning, and it is consistent with the children's cognitive characteristics. Meanwhile, it is in line with the creation techniques of picture book. Children can build relationship of life experience and symbolic modeling language through reading picture books, and thus resonate and connect in the mind. It can be speculated

that the painter through depicting the other side of the structure, also can get the same effect.

The fuzziness of line also lies in the uncertainty of contour line of the object. The contour line is the perspective of compression of form's turning plane in the space. This concept determines the contour line is a compressed plane in space. The plane has the long and wide properties in two-dimensional space, and also has the deep and tilting properties in the three-dimensional space. In moving objects, this point is especially obvious. Every contour of the object appears only a movement in a moment. It needs to use contour repeatedly to express the full sense of movement. In early twentieth Century, futurist painters first realized this, and they made a bold attempt. It seems to clear up forms to repeatedly superimpose lines. However, the real motion curve is hidden in them. Despite the short existence of the futurism, it has a profound impact on the later Cubism and Dadaism. Expressionist Painter Oskar Kokoschka, Giacometti, Francis Bacon, William Kent Ricci and other painters all were sensitive to capture and express the fleeting movement. Unlike the Futurist, Duchamp didn't pursue a film effect in painting. He was committed to the static expression of movement, so he never thought that *Nude Descending a Staircase* had any relationship with the futurists. But this painting has changed people's view on traditional painting. Even in the face of static objects, painters also are in the relation of movement with objects. An absolute static state does not exist. How to accurately express the movement relations has become the task of children's picture book. Irish Illustrator Edgson chose deliberately blurred lines in the creation of *Snow Kid*. The lines after being smeared and superimposed produce a sense of movement. It is similar to "visual persistence" in animated films. Imitating this phenomenon, painters use uncertain fuzzy lines to express continuous motions in the two-dimensional plane.

In addition to the lines and shapes, color is another important aspect of modeling relations. In fact our first impression of a picture book mainly comes from its color. Modern children's picture book painters have been aware of this point. They compress natural color relations, improve the brightness and pureness of color in color configuration to strengthen main tone and attract children's attention. Before children could read, children use "color and object" to depict a picture book. This color is the main color of the picture book. The object is the protagonist of the picture book. Many early education systems also take color perception as the first step in the children's cognitive education. The color reflects the relativity, subjectivity and generality in children's picture book. The color relations of picture book are hidden in objectiveness and showed in the eyes, and it can produce a sense of detached reality. And they all come from painters' keen judgment on visual psychology and subjective and objective color relations.

The subjectivity of color of children's picture book is expressed in two aspects, painter and reader. In other words, they are what colors do children like and what colors do painters choose. The answer comes from their attitudes to objectiveness. The children's life experience and their physical and mental characteristics are their basis to make judgment. The painter's choice is mainly due to their understand angle and extent on children and story. Of course, an excellent

children's picture book has the ability to make them compromise. Both sides can find the sense of beauty and movement. The subjective expression of color is completed through extraction, deleting, distribution and strengthening. Some colors opposite to main color are neutralized. And it also means some modeling relations are cleared up. The color harmony does not only mean to strengthen main color but also strengthen main modeling.

The relativity of color is a typical performance of fuzzy color relations. Children can feel the temperature from the colors. But they can hardly understand the concept of warm and cold colors. This is because they can probably feel fire flame from red and yellow, water and plants from blue and green. It can be seen that children's perception of warm and cold colors comes from their life experience rather than concepts. Children's judgment is based on their feelings of specific life experience. Picture book painters make full use of the relativity of color to lead readers' judgment and emotion. The bright and dark colors, cold and warm colors, and dark and light colors, and color appearance are all judged according to surrounding colors. Even for similar colors, from one kind of red to another kind of red, one kind of yellow to another kind of yellow, they have many subtle differences. These differences result in children's uncertainty of perception, which is the important value of children's picture books.

Painters reach the goal of strengthening the theme through summarizing complicated color relations. The summary of color is based on the style and theme of the picture book. The principle is to simplify complicated parts and save genuineness. The summarized color relations are pure and clean, just as the stringent requirements of constructivism on color purity, shape and area. Children's picture books have the ability to seize the readers' eyes immediately. The fashionable international style benefits from this. Whether it is color exploration of Malevich, Mondrian and Rietveld in their paintings and product design in the early, or the successful practice of Ikko Tanaka, Paul Rand, Kusama Yayoi and other artists in color language and visual communication, they all proved that highly summarized color is a creation. It is a necessity in daily life and a label of thought and culture. It has the ability to surpass borders and races, and achieve barrier free communication. This ability is revealed from the people's fuzzy cognition on color language in the general sense. Children's picture books meet the general characteristics of "international product". Highly summarized color relations is not only a need, but also booster of the wide circulated picture books. Mondriaan believes that "the basic law of dynamic balance exists, and it is opposite to the static balance formed by particular forms. The important task of all arts is to break the static balance through the establishment of dynamic balance." [2] The uncertainty thus is hidden in the form of lines and colors.

III. THE EXPERIMENTAL CHARACTERISTIC AND INTERPRETED ELASTICITY OF CHILDREN'S PICTURE BOOK CREATION

The essence of creating children's picture book is a kind of experiment. It is to explore and operate modeling language and children's psychological perception. The principles and methods of all art creation are all questioned and changed in

the creation of children's picture book. It not only is consistent with the idea of modern modeling art, but also reflects the basic law of children's cognitive development. The fundamental characteristic of "experiment" is the objectivity, scientificity and uncertainty. The experimental characteristic comes from the testification to phenomena or exploration of the unknown. The experiment of creation of children's picture book focuses on testing a cognitive ability and cognitive domain. Picture book painters try their best to find the relations among graphics and texts, color and heart, and finally express it by pictures to reach the dynamic balance of picture, story and perception. Different from scientific experiments, in the creation of children's picture book, painters don't have exact expectations. These uncertain expectations are difficult to be realized fully. Of course, phenomena beyond the expectation are also very common, which reflects the experimental characteristic of children's picture book creation, and thus lead to the elasticity of interpretation. The experimental creation and elastic interpretation constitute the fuzzy aesthetic characteristics of children's picture book.

The experimental characteristic and elastic interpretation of children's picture book creation are caused by the difference between graphics and word. The word originating from the pictures is a visual symbolic mark. It is for the need of people in memory. For the efficiency and accuracy, word finally was separated from pictures, and became an independent visual symbol easy to transmit. Painting is developed into an elegant artistic form.

Since modernism, the mission of image was redefined. The reproduction function of painting was gradually shrinking. Modern imaging technology revolution has subverted the boundaries of serious art and popular art. Images that can be produced instantly and widely spread come overwhelmingly. The image walks into our life, as words separating from picture walk to scroll. The picture was gradually beyond words. It is endowed with extraordinary circulated qualities – efficiency and internationality. Compared to words, the picture has more space of expression.

The creation of children's picture book absorbs the ideas and techniques of modern modeling art. It skillfully avoids the contradiction between image reproduction and individual performance. Whether it is realistic description or abstract performance, they are based on children's cognitive ability and characteristics, and oriented by active elements of modern aesthetics, and thus creating plenty of witty and inspiring works. Most of picture book creations source from good stories and principles. However, for kids, the most attractive part is lively pictures. The picture book is not only a story book but an independent work of art.

"Picture" is the fundamental reason of making children's picture book artistic. In the creation of pictures and practice of appreciation, there are many uncertainties in the relationships of object and subject, group and individual, modeling language and aesthetic level, artistic style and cognitive ability, and other factors. The dynamic and fuzzy relation is the essence of modern art. It is the attitude of artists to objective world and readers to picture books.

IV. CONCLUSION

In the Nineteenth Century, British Physicist Maxwell believed that traditional logic had no meaning to the research of static object. The real logic in the world is the process of probability calculation. In other words, it is the rational evaluation of uncertainty. American Psychologist Reid Gestl and Robin Dawes have given high praise to uncertain world. They think "uncertainty is the basis of understanding the knowledge system of world. Without uncertainty, there will be no hope, no morality, no freedom of choice in the world." [3] what children's picture book show to kids is not a result, but ways of thinking and approaches. Children's picture book selects a "mild" attitude to the objective world. With "uncertain" painting experiment and modeling methods, it has revealed methods to know the world and experience art. It is the need of children's picture book itself in the creation. And it also meets the basic principles of modern modeling art. In short, it is a beneficial exploration to transfer modern aesthetic spirit in a compromised way. It is an important carrier in the communication of modern art and life.

REFERENCES

- [1] Wang Mingju: Anthology of Wang Mingju Vol. 1", Culture and Art Publishing House, Beijing, 2012, Page 7.
- [2] (America) Robert L Herbert, translated by Lin Sen, et al: Modern Artists on Art, Jiangsu Fine Arts Publishing House, Nanjing, 1990, Page 143.
- [3] (America) Reid Gestl, Robin Dawes, translated by Xie Xiaofei, Li Shu: Rational Choice of Uncertainty World, People's Posts and Telecommunications Press, Beijing, 2013, P. 336.