Visual Thinking Methods and Training in Video Production

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Abstract

"A picture is worth a thousand words". Internet plus has brought people into the era of picture reading. Pictures and videos are everywhere. And dynamic video has the characteristics of sound, sound and documentary. It has become a popular media form for the public. Therefore, mobile phone video shooting and production are convenient, and the popularization of video production and dissemination has become inevitable. However, the creation of artistic and innovative video works requires producers to master certain visual thinking methods in addition to film montage theories and techniques. The article briefly outlines the forming process of the concept of visual thinking, and proposes advanced methods of visual thinking: intuitive method, selection method, discovery method, and inquiry method. In the process of video production, some methods of visual thinking are analyzed through a case, such as the visualization of textual information, the figuration of image, the logic of concreteness, and the systematization of logic. We have studied practical visual thinking training methods, from the three stages of video production: script creation, shooting practice, and video packaging,
Keywords: Visual Thinking; Video Production; Method; Training.

1. Introduction

The popularity of the mobile Internet has dramatically changed the way people transmit information, and the public has entered the era of reading pictures. Visual and image-centered perceptual forms gradually surpassed the status of the rational form foundation centered on words and languages. [1]Videos based on Internet-based learning, social activities, and learning spaces have become favorite media for information dissemination. The popularity of video production has become a development trend. China's WeChat, Douyin, Youku and the US's YouTube, Facebook, Flicker, Vimeo and other platforms have become the original places for the public to create and display videos. However, if you study these videos carefully, due to the difference in the cultural level of the photographers, most of them record their daily lives or entertaining and funny, and there are fewer videos with cultural connotations, regional characteristics and innovative characteristics. Video production has its own rules and unique thinking, how to convert text

materials and thoughts into moving images, and how to use unique pictures to print their thoughts into the audience 's minds, so that the video has more artistic styling and Contagion is something that every video producer must study and consider. This article mainly studies the formation process of visual thinking, visual thinking methods, the realization process of visual thinking in video production, and the training methods of visual thinking, in order to guide all video design producers to master the correct visual thinking methods, produce more and better, Innovative video work.

2. Visual thinking

2.1 Formation of the concept of visual thinking

Vision is a direct reflection of objective stimuli. It is a cognitive psychological phenomenon at a lower level. It is a perception or visual perception. [2] Thinking is based on perception, an indirect reflection of objectively existing stimuli, and a relatively high-level cognitive psychological phenomenon. [3] From these two aspects, two branches of disciplines, "perceptual psychology" and "visual psychology", have been formed. In the early 20th century, M. Wertheimer, founder of Gestalt psychology, experimentally studied Phi-phenomenon. The so-called "like action", that is, two straight lines appear in people's line of sight at appropriate intervals, and people will see it as a moving straight line, that is, in the process of consciousness, people always naturally have the characteristics of pursuing formality or structural integrity of things.

Based on the theory developed by Wertheimer, Rudolf Arnheim explored the rational function of visual perception more deeply. In his book "Art and Visual Perception" [4], he put forward the important idea that "all vision contains thinking, all reasoning contains true perception, and all observations contain creativity." Based on Arnheimer's theory, the American psychologist R.H.McKim put forward the idea of "imagination and construction", and explicitly proposed the concept of "visual thinking" in his book "Experiencing Visual Thinking" [5].

2.2 The concept of visual thinking

Visual thinking originates from the perception of subjective objects on objective objects, and is obtained through direct communication between the subject and the object. The process itself is exploratory, and at the same time, the process also has the agility of using visual image manipulation to facilitate the role of imagination. This operation is accomplished through direct objective object images or symbolic elements that simulate "images", and the process has the practicality that is conducive to producing epiphany or inducing intuition. "Visual imagery" is not simply a faithful, complete and realistic copy and paste of what people see with their naked eyes, but visual thinking actively grasps the overall characteristics of its objective objects through visual imagery.

3. Basic methods of visual thinking

The corresponding creative process from vision to thinking is that our sensory organs are stimulated by external visual imagery, The corresponding creative process from vision to thinking is that our sensory organs are stimulated by external visual imagery, and after inspection and review of sensory organs, they

enter the brain through scatter perspective or focus perspective, and finally the brain thinks, imagines and brews Generate sensory information associated with the subject, and consciously select, choose, edit, organize, conceive, and give mood to external images. Therefore, visual thinking plays a key role in the process of information perception through methods such as intuition, selection, discovery, and inquiry [6].

3.1 Visual method

The human cognitive process is a process from image to abstraction and perceptuality to rationality. And information can affect people's perceptual organs through various channels, forming various types of experiences. But in general this process, direct experience, substitute experience and abstract experience are obtained. No way and method gained from experience can be separated from direct observation. Observation can not only find problems, but also find solutions through observation. A keen, discoverable and observant person can apply intuitive visual thinking methods in ephemeral things to obtain different experiences even in ordinary events.

3.2 Selection method

From the interpretation of the definition of visual thinking, it can be known that the stimulation of visual imagery by perceptual organs should not be all received, but only receive the most interesting part of the stimulus image, and choose to ignore or ignore the other parts. The form of the development of things is not static. The thing we pay attention to is the subject image. What is selectively ignored is the foreground or background environment, meanwhile selective processing from the environment and selecting the required subject image is the visual thinking method. This is selection method.

3.3 Discovery method

Judging from the "kinetic phenomenon" of Gestalt psychology, two static lines are placed one after another at a certain time interval. People see it as if it were a moving straight line instead of two straight lines. Observing from life, when we look at the puzzle, we find the overall graphic pattern instead of the individual pieces. [7]This shows that based on visual thinking as information, we can always find the interconnections between things, and the overall effect is greater than the sum of the individual.

3.4 Inquiry method

On the one hand, the diversification of visual art is the reflection of people's visual thinking. According to the existing experience and observation and thinking methods, different reflections of objective images are formed in the human brain. On the other hand, it is also the result of people's creative thinking. The creator exerts his own creativity and personality, combining three types of experience, and pursuing his own life purpose in continuous pursuit and exploration to realize his own value.

4. Visual thinking in video production

In video production, the method of visual thinking is also applied to all aspects of it. Different novel images are reflected through the comprehensive effect of different visual thinking, and combining the produced

materials and the emotions expressed by the subject on the basis of visual thinking, resulting in a charm that can only be intelligible, sublime and Improve the creativity and artistic appeal of works. Through visual thinking, the aesthetic re-creation of the producer can be actively promoted, and the entire production team can also create a new image from the communication between the actual feeling and another feeling in the imagination. The following sections discuss four different methods of visual thinking in video production.

4.1 Visualization of text information

To understand from the literal meaning, the visualization of text information is to use the vivid graphic images to express the meaning of the text with the time, place, characters, plot, climax, and ending stated in the lines, and strengthen the ideographic effect brought by the text [8]. The visual processing of textual information can transcend the barriers brought by language and realize a wider and richer information exchange. In video production, the visualization of textual information is based on the script and the sub-script. In a completely different way from thinking in words, the textual world presented in the manuscript is expressed through the lens as a medium, and objective objects are used as the object of thinking. And under the lens, various character images, physical images, time images and ideographic images are constructed to discuss the entire text.

Summer noon day outside
Summer is hot but charming. There was no wind at noon, the puppy was so hot that it was sticking out its tongue in the shade of the tree, and we were sweating all over the body. At this time, the mother would make an exception to authorize us to take a bath in the river. Regardless of the promise of his mother, he rushed to the river with his brother, drilled to the bottom of the water, and drank a bite of the river water, not to mention how happy it was. The children from the neighbor's house also came, so we had a water fight together, and we had a good time. (" Hometown Creek " by Zhang Decheng)

The text above organizes the screen language through different visual images, so that the visualization function of the text information can be maximized.

4.2 Figurative representation

The figuration of image refers to the further development and discussion of the original visual image. Grasping a characteristic part of a person or event for more detailed, focused, and prominent portraying and depiction, which is not limited to the generalization of visual imagery. In video production, the figurative thinking mode of the image is not to show the cause and effect of the development of the event, but to choose the most inclusive, representative and descriptive segments. Through a typical lens and picture, people gain an understanding of their events before and after. In the video production, the figurative method of the image brings powerful visual shock to the work, which can better express the unique visual art beauty of the video work. Through the visual art design, the audience has different psychological feelings of visual perception It also deepened the understanding of the work. The film "Snowflake Fan" tells the story of Chinese women's habit of wrapping their feet from childhood in the 18th century. There are not too many shots about the feet in the film, but the emotions are expressed vividly through the figurative thinking method of the image. When Lily wrapped her feet at home, the picture stayed on the

beautiful three-inch golden lotus wearing embroidered shoes. But when the shoes were taken off, blood-stained foot wraps and deformed soles appeared. Through a simple front-to-back comparison, the camera makes the image of the three-inch golden lotus even clearer, allowing the audience to understand the cruelty and inhumanity of the event, and to have compassion and compassion.

4.3 Concrete logicalization

Representational logic means that the existing objective image does not arise out of thin air, but follows the general logic of the development and change of the objective world. It can form the required artistic image based on certain subjective and objective ideological aspirations and according to certain patterns of life [9]. In the video production, the concrete and logical visual thinking mode is characterized by abstraction. Through the analysis and thinking of emotional materials, it reveals the essential characteristics of the image in the works, indirectly reflects the reality, and also reflects the laws and logic of life.

"Evolution of Life" is a science and education film that records the evolutionary history of biology over billions of years and the natural world ranging from the entire universe to cell division. In this film, the director did not falsely create some non-existent images, but discussed some extinct, surviving, and possibly living creatures based on reasoning and evidence. The scenes in the play are not covered by the vast scenes of life. Instead, they cut through their rough appearances and explore the inner core, and according to the concrete logical visual thinking mode, they surround the main theme of "biological evolution" Chain to start the discussion. "Biological Evolution" is also based on the development of reality and the past, and combining the future development situation, tells the biological laws of the past and reality.

4.4 Systematization of logic

The system is an organic whole, which is a combination of two or more factors. The whole of the system is not simply formed by the addition of all local things, it reflects the degree of people's understanding and grasp of the integrity of a certain thing. Systematization of logic starts from the cognition of object, regards the cognition of object as a system, and explores a way of vision thinking of the object of cognition from the interrelation of factors and factors, factors and systems, systems and environments. In video production, this way of thinking, which is different from creative and visual thinking, can greatly simplify the complexity of understanding things and bring us the integrity, systemicity and the totality of the relationships between things.

In "Golden Armor Full of the City", the overall theme is to create the overwhelming luxury and oppressive and imperial rights of emperors with the golden color as the main theme. The magnificent palace, the vast cloisters and the hanging curtains, the low-key extravagant lights, mainly pink and gold, the golden-colored accessories and low-cut breasts, are used in the film to express the theme, tragedy of human relations driven by power and ambition. Throughout the entire pattern in the film, yellow is interspersed throughout the plot, and once it appears, people feel the interconnections and characteristics between the events. The whole color tone of "Kung Fu" directed by Zhou Xingchi strives to create a gray series in the 1970s. From the dress of the actors to the style of the building, it is close to the theme of the system. Although the sweet multi-colored lollipops symbolizing love in the film and the golden lotus that was used to commit murders have jumped in color, they both use gray as their main tone, organically combining them as a whole. Both

of the above can reflect the interconnectedness of the whole system and things from the image of a unified hue.

Visual thinking of the logical and systematic is a kind of guiding thinking that guides the whole process in the later editing and special effects processing of video production. This part of post-production is mainly the secondary processing of the materials collected in the early stage, and the factors to be expressed are integrated into one through cutting and arrangement, and the complete picture is finally presented to the audience. In fact, this is not a simple fusion process, which requires workers to re-create according to the integrity of the system, and use certain technical techniques to fuse the scattered information obtained in the previous period to show the charm of the entire system.

5. Cultivation of visual thinking in video production

In video production, the importance of visual thinking is self-evident. Therefore, we must create a good visual environment to discover and cultivate visual thinking, and boldly use visual thinking, use visual forms to express our understanding, and sensitively capture the resources of perceptual thinking from the living world, and make videos raise to a state of appreciating beauty, experiencing beauty, and creating beauty. Therefore, cultivating visual thinking in video production can be cut from three aspects: script creation, shooting practice, and video packaging.

5.1 Cultivation of Visual Thinking in Script Creation

The relationship between video production and visual thinking is conceivable. The production process can be based on the stimulation of the visual organs, or it can be a germination of the corresponding image in the mind, and then organize, reproduce and edit the image stored in memory according to your consciousness. Through a specific psychological activity and imaginative thinking to shape a script that meets the intention and complete a whole creative process through a series of activities. From the abstract to the transformation of image, the main training methods are:

5.1.1 Brainstorming method

Through mutual exchanges and discussions among peers, various ideas can trigger a creative storm in the mind in the collision, select the viewpoint that is most in line with the logic of the system, and visualize the abstract viewpoint, and then use it in video production to create an appropriate subject image.

5.1.2 Mind movie method

Utilizing the infinite imagination in the heart and combining various existing experiences to create a mind blackboard that belongs only to individuals, and can place materials and materials that can be used at any time. When you need a specific piece of information, you just need to call up the mind blackboard and turn the imaginary thing into a daily familiar image or scene.

5.1.3 Reading method

Reading is the most basic training method. That is, reading a large number of books, including famous

novels, popular novels, and strong plot stories. By understanding and familiarizing with other authors' thinking methods and creative techniques, they strengthened their logical thinking ability and formed different visual thinking modes.

5.2 Visual thinking training in video shooting practice

Specific practice is often based on the process of abstraction to image. On the basis of good discrimination and visual comprehension ability, the proper use of different types of visual thinking can get unexpected results in practice and produce different effects in the video production. The main training methods of visual thinking in practice are:

5.2.1 Shooting practice

You can improve your practical skills through shooting training. Meanwhile, you can participate in the usual shooting process, understand the many aspects of shooting methods, angles, scene scheduling, camera, lens and many other factors, create more shooting ideas and methods combining with the montage of thinking and frame awareness.

5.2.2 Analogy and Association

Analogy association is to use one visual image or image to express another visual image or image. The value of this method lies in the ability to construct the mutual connection between two images or images. Using analog association in the visual thinking training method of shooting, it can connect the shooting process with the experience learned previously. Relevance can help get more information and creative thinking in shooting activities. [10]

5.2.3 Selective observation

In real life, when visual organs are stimulated by external material forms, not all stimuli are transmitted to the brain, but they are screened and ignored to form corresponding visual thinking. Applied in video production, by selecting observation methods, leaving a useful subject image, selectively ignoring the foreground or background environment to generate visual thinking of the situation.

5.3 Visual thinking training in video packaging

Video packaging mainly includes two aspects of post-editing and special effects processing. They are not simply connecting independent picture fragments, nor are they organizing sound, text, and pictures according to straight-line logic. This is a process of creation and re-creation. It not only requires operational cutting techniques and special effects production techniques, but also requires an aesthetic and artistic visual thinking ability [9]. The main training methods of visual thinking on video packaging are:

5.3.1 Reference method

The so-called reference method refers to the use of other people's experience in their own video production through selection, screening and application, combined with their own creative intentions, by watching or learning related video editing methods and special effects adding methods.

5.3.2 Practice method

Post-production cannot be separated from the widely used non-linear editing software, such as AfterEffects, Premier, EDIUS and so on. These are effective tools for post-production. I usually try to practice these software constantly, and use the functions of layer overlay, motion, gradient, mask and other functions in these software to combine visual images. In the same way, the montage of thinking is used to introduce new ideas in a large number of repetitive exercises to form works with different thinking styles.

5.3.3 Painting

The advantage of painting method is that it can embody the appearance and concept, it can be separated from the world of the understanding of things and enter the world of abstract thinking. In post-production, you can also draw the effects that need to be expressed on the drawings, which can not only allow complex phenomena to be reproduced in the mind, but also train the producer's thinking to consider the production plan from an overall perspective.

6. Conclusion

The full use and understanding of visual thinking is an important factor in making a good work. When participating in the production process, creators can not only perceive thinking under the guidance of tangible background through visual image thinking, use their own aesthetic values to creatively express the overall image system of the work, but also consciously and actively take the initiative through visual thinking Break through the limitations and restrictions of works, and carry out unique imagination by subjective will. [11] Therefore, we should use and improve visual thinking to change and reconstruct the original artistic image of the work, so that the finished product of video production can break through the routine and obtain a strong visual impact.

7. Acknowledgments

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