Retraction

Retraction: Innovative Research on the Integration of Boneless Chinese Painting Techniques and Commercial Comics Based on Big Data Analysis (J. Phys.: Conf. Ser. 1992 022005)

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Innovative Research on the Integration of Boneless Chinese Painting Techniques and Commercial Comics Based on Big Data Analysis

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Abstract. Nationality is the world. A new type of comic theme with Chinese characteristics has become a new art form and popular trend, and is deeply loved by people. This article focuses on the development of Chinese comics and the needs of authors and customer groups, analyzes the development and creation of Chinese comics, and analyzes the advantages of introducing unique Chinese painting methods into comics from three perspectives: composition, coloring and character design. To bring the boneless technology of Chinese painting into comics, and at the same time, Chinese commercial comics use the Internet and other media to find more commercial cooperation to make Chinese comics and commercial comics more harmonious.

Keywords: Animation Publishing, Industry Integration, Creativity and Audience Training

1. Introduction

Chinese painting is a shining treasure in the world's national art treasure house, and there are many things that are worth digging by comic designers [1-2]. The composition techniques, line drawing techniques, coloring techniques and so on of Chinese painting can be flexibly applied to the creation of modern domestic comics [3-5]. Applying these techniques of traditional Chinese painting to the design of comics can make up for the shortcomings of the lack of originality and national characteristics of Chinese comics, strengthen the originality of Chinese comics, get rid of the passive situation of relying on the development of other countries' comics, and dig out the classical culture of my country, unique charm. Only by absorbing the nourishment from the traditional national quintessence and discovering the excellent value of traditional Chinese painting as a traditional culture, can we build a national comic brand in the fiercely competitive comic industry [6].

In the development process of Chinese commercial comics, animation production and comic publishing have been in a state of separation for a long time, both of which have explosive works, but it is difficult to maintain the popularity and brand operation, resulting in an unfavorable situation for overall development. First, the situation of "anime hot and cold publishing" has existed for a long time. Second, most of the hot works of commercial comics are short-lived. "Boom is nostalgia, debut is the peak" seems to be the unspeakable pain of Chinese commercial comics, and the media era In order to break through the difficulties, Chinese commercial comics should use new media platforms to seek...
commercial cooperation in multiple fields and promote the deep integration of the commercial comic chain.

2. The integration and separation of Chinese animation production and comic publishing

In the late 1980s, the integration of Chinese animation production and comic publishing accelerated, and the most classic case was "The Calabash Brothers". In 1986, the Shanghai Fine Arts Film Studio produced 13 episodes of the cartoon "The Calabash Brothers", and in 1990, it launched the sequel "The Calabash Little King Kong". The two cartoons established the well-known cartoon image of "The Calabash Baby". The annual sales volume of animation audio-visual products of Shanghai Fine Arts Film Studio is about 20 million sets, among which "Brothers Calabash" accounts for 18% of the total share, which shows the great influence of this animation. Under the temptation of huge profits, the publishing industry at that time launched a large number of comic books, pictorials and other publications based on the Calabash Brothers, many of which were not authorized by the copyright owner of the Calabash Brothers, and more like today's fan comic works. Suddenly, various bookstores and newsstands were flooded with uneven and crude publications such as "King Kong Calabash Girl", "Calabash Baby vs. Black Cat Sheriff", etc. They also destroyed the cartoon image of "Calabash Baby" while consuming the cartoon image. The reputation of this cartoon image. If at that time a publishing organization sought formal cooperation channels, adapted popular animation works into comics, and continued to cultivate the popular cartoon image of "Gourd Baby", it would be possible to achieve a deep integration of animation production and comic publishing. It is a pity that under the influence of various reasons such as the proliferation of pirated works and the difficulty of adapting different industrial models, the integration of animation production and comic publishing has not been truly realized. In the 1990s, as TV watching became the main way of people's leisure and entertainment, and comic strips gradually withdrew from the stage of history, the situation of "anime hot, cold publishing" of Chinese commercial comics gradually formed and continued to this day.

The big data analysis algorithm is an N that tries to reproduce its input, that is, the target output is the input of the model. The algorithm has an input layer, a hidden layer and an output layer. Given a set of training samples \( \{ x^{(1)}, x^{(2)}, x^{(3)}, \ldots \} \), where \( x^{(i)} \in \mathbb{R}^d \), the big data analysis algorithm first encodes the input \( x^{(i)} \) as a hidden representation \( y^{(i)} \) based on (1), and then decodes the representation \( y^{(i)} \) back to the reconstruction \( z^{(i)} \) calculated according to (2), as shown in the figure

\[
\begin{align*}
    y(x) &= f(W_1 x + b) \\
    z(x) &= g(W_2 y(x) + c)
\end{align*}
\]

Among them, \( W_1 \) is the weight matrix, \( b \) is the encoding bias vector, \( W_2 \) is the decoding matrix, and \( c \) is the decoding bias vector; in this paper, the logical sigmoid function \( \frac{1}{1 + \exp(-x)} \) of \( f(x) \) and \( g(x) \) is considered.

By minimizing the reconstruction error \( L(X, Z) \), the model parameters can be obtained, represented here by \( \theta \),

\[
\theta = \arg \min_{\theta} L(X, Z) = \arg \min_{\theta} \frac{1}{2} \sum_{i=1}^{N} \| x^{(i)} - z^{(i)} \|^2
\]

In contrast to China, the industrial integration of Japanese animation production and manga publishing is relatively smooth. Japanese commercial manga adheres to the publishing philosophy of "publishing first, sales are king", forming a "cartoonist submits to the publishing house-the publishing
house adopts a single test popularity-confirms the long-form serialization-launches a single book-animation TV version production-movie and TV series production "Mode. Although this model is fiercely competitive, there are often cases where comics are cut down due to poor response, but the hot comic works are screened out, which effectively reduces the cost of animation production, and makes comic publishing a touchstone for animation production. The launch laid the audience foundation. It can be seen that animation production and comic publishing are completely separated, which will have a huge impact on the development of commercial comics. Of course, nowadays Chinese animation production and comic publishing have failed to achieve integration. In addition to the historical reasons of its own development, foreign animation works have had a large impact on my country's animation market from the 1980s to the 1990s.

3. The advantage of boneless Chinese painting technique to comic creation

3.1. Advantages in comic composition design

In the composition of comics, there are mainly symmetrical composition, triangular composition, S-shaped composition, Z-shaped composition, and "calculating white as black" composition. In fact, they all come from the composition mode of Chinese painting. Take the comic book of "Nezhao Naohai" as an example (Figure 1). It combines the traditional painting techniques of traditional Chinese landscape paintings. In the background drawing, the concept of "business position" is used flexibly, so that the background achieves a virtual reality. The effect of density and density is very good to set off the atmosphere of the story. In comics, the manga artist’s grasp of the language of the perspective of the picture actually uses this compositional technique of traditional Chinese painting to show the near, middle, and far of the picture to reflect different artistic concepts and create different atmospheres.

![Figure 1. The classic picture in the comic book of "Nezha Naohai".](image)

"Empty" means that the "spiritual space" is included in the artistic conception. This "spiritual" space refers to the organic aesthetic psychological field in the painter's imagination that has transformed the Chinese people's cosmic consciousness and life mood. Including this aesthetic psychological field, it possesses a kind of ethereal beauty. In 1988, the design results of "Landscapes" attracted the attention of the world. The comic book of "Landscapes" showed a poetic temperament, and the remote and light pictures have reached the realm of harmony between nature and man, as shown in Figure 2. The film incorporates Chinese Taoist teachings of nature, incontestable thoughts, and the inspiration of Zen's clear mind. The implicit and vigorous "Landscape" emphasizes the freehand brushwork between the ethereal landscapes. The whole work, It is full of poetry and makes people completely intoxicated in the landscape made of ink. Compared with the previous works, it has become more perfect. Both the quiet scene and the living things are completely integrated into the freehand brushwork of Chinese painting, which makes people feel refreshed.

The composition of Chinese painting has this ethereal beauty, with its own unique and irreplaceable
depth, breadth and height. The picture only exists on the plane of the paper, but the artistic conception that the picture can create can go far beyond this plane, it can be magnificent, and it can be far away. In the composition of comics, drawing on the techniques of traditional Chinese painting and landscape painting can make the picture rise to a three-dimensional and boundless realm. What is presented to the reader is far more than just a picture, but also a bridge between the reader and the author. Readers can transcend the limitations of time and space, be impressed by the author's broad mind, and enter a new ethereal realm through flat screens. Another meaning of emptiness is clear and transparent, but it is not empty, but refers to a kind of transparent implicitness, which integrates endless scenery and endless emotion into this seemingly transparent transparency.

3.2. Advantages of pen coloring in comics

Brush and ink is a theoretical term in Chinese painting, which is divided into two aspects: technique and spirit, which are both interrelated and independent. Pen and ink is a Chinese-style painting language. The use of pen and ink techniques in the pen and color of comics can render the unique charm of Chinese painting and make the comics have strong Chinese characteristics.

"Mei Lanfang" by Lin Ying, a new generation cartoonist in my country, won the "Special Award of the 7th China Comics Award" in one fell swoop. This work is based on the famous Peking Opera master Mei Lanfang in my country. Not only is the subject chosen quite well, but it can be seen that great effort has been made in the painting. In the depiction of the characters, the traditional Chinese painting technique is The application is very smooth and in place. In terms of pen and color, the use of ink and the blending of colors render a special meaning of pen and ink, and it also highlights the beautiful mood of the gorgeous scene, which complements the national quintessence of Peking Opera. It broke the embarrassing situation of lack of defensible boutiques in China.

3.3. Advantages in the expression of comic characters

The characters in comics have their own main colors. When a comic artist designs a set of exclusive main colors for the characters, he usually sorts them with the protagonist as the center, and then draws on the coloring techniques of freehand drawing or meticulous painting for coloring. It can achieve a rich, natural and distinct artistic effect. Of course, the perfect shape not only makes the comics have vivid characters, but also can achieve the effect of making the comic stories more full.

The character modeling in the comics uses the boneless technique of Chinese painting in the creation, and the lines of the traditional Chinese painting in the design of the comic characters can achieve unique visual effects that are different from the comics of other countries. Many cartoonists have also discovered the charm of Chinese painting. They have integrated the boneless technique of Chinese painting into the character design of comics, breaking through the consistent "single-line flat coating" character design method, and bringing a unique artistic appeal. A strong Chinese characteristic is added to the comic book of "The Proud General" created by cartoonist Hua Junwu. The fresh and free coloring method of Chinese painting is introduced in the coloring of characters and background, which can effectively improve the comics. The shortcomings of the same pattern in the character design make the picture more colorful and gorgeous. In addition to paying attention to the storyline, it also improves the art of comics and even reaches the standard of collection.

4. The game of Chinese commercial comics in the era of new media

In July 2015, the animated film "Journey to the West: The Return of the Great Sage" was released in China. The gorgeous pictures with great oriental beauty, the more mature and smooth action shots and narrative methods, and the special effects comparable to Hollywood animation, make the Chinese commercial comics in the trough alive. After that, the Chinese animation industry appeared frequently as a stimulant. The movie theater line has successively released animation film masterpieces such as "Big Fish and Begonia", "The Great Protector", and "The Origin of the White Snake", and the TV animation market also has "Qin Shi Mingyue", "Chance of the Heaven", "Fighting Breaking the Sky", and "Drawing the Bad People" "Fox Fairy Little Matchmaker", "Soul Street" and other popular and
quality works. However, Chinese commercial comics still can't get rid of the curse of a large number of explosive works and insufficient stamina. The author believes that this is because the development of China's commercial comics is still shallow and there is still a long way to go before a mature integrated business operation model.

4.1. Unbalanced development of commercial comics in China under policy

Since 2000, the Chinese government has begun to attach importance to and support the development of local commercial comics. From 2002 to 2005, the State Administration of Radio, Film and Television continuously issued relevant opinions to control the duration, time period and number of foreign animation works to escort the broadcast of domestic animation. It is worth mentioning that the support policy of Chinese commercial comics has the problem of "light weight, heavy movement and light comic". Since the start of the "Motive Force" support plan in 2006, the state has established a subsidy system for animation release, but it has rarely clearly specified subsidies and support for comic publishing. Under the influence of large-scale animation funding subsidies, various shoddy animation works flood the screen; openly plagiarizing foreign animation works, the content is low and crude, the production is rough, the content is filled with water, and the content is sold at low prices to TV stations to seek state subsidies. This has dealt a heavy blow to Chinese commercial comics that have not yet shaken off the trough. At the same time, comic publishing has been impacted by the Internet, and the publishing position has been shrinking, and professional publishing houses have struggled to survive. The separation of animation production and comic publishing has once again made China's commercial comics lose their benign development opportunities.

4.2. Shortcomings of Chinese commercial cartoons are prominent under the market economy system

In 2009, in the application of the "Motive Force China Original Animation Publishing Support Program" initiated by the State Administration of Press and Publication, the scope of animation publishing was defined as original comic book works, serial comic works in periodicals, online comic works, online animation works and Publication of original comic book translation works. This definition still separates comic publishing from related industries such as animation production and mobile games. Under the market economy system, this fragmentation highlights the shortcomings of Chinese commercial cartoons.

First, the reputation of animated films is insufficient. For movies, most of their box office appeal comes from actors, directors or themes. Chinese animation films that have gone through several troughs, the lineup of voice actors has not formed a system, most of the directors are unknown, and the only thing that can be publicized is the feelings and themes. This has caused Chinese animation films to be in crisis from the beginning of the investment project. Once the subject matter is not pleased, the appeal of movies released during the same period will be overwhelmed. We can only rely on traditional themes to reduce risks, and even rely on "tap water" marketing and "sell miserable" marketing to win word of mouth. Through in-depth analysis, it is not difficult to find that what Chinese commercial comics really lack is not funding and policy support, but a stable audience group, because the word-of-mouth fermentation of animated films requires the participation of audience groups.

Second, the animation works are too young. In the 21st century, due to positioning deviations and the impact of investment-oriented psychology, China's animation industry began to lean towards the low- and young market, and there appeared "Pleasant Goat and Big Big Wolf", "Bear Infestation", "Blue Cat Naughty Three Thousand Questions", etc. Popular animation works. For a while, animation works and derivative products dominated by the low-child market became popular, and even an animated film competed with an adult movie every year for the box office. This demonstrates the fruitful achievements of commercial comics, but also reflects the deep-rooted concept of low-childhood animation. If things go on like this, it will be difficult to develop animation works and derivative products for all ages.

Third, the comic publishing industry cannot open the door. In the 21st century, China's comic
publishing industry has not only published comics and picture albums adapted from popular animations of the same period, but also found new directions for comic publishing in children's literature, such as various children's science books, children's literacy picture books, and children's picture books. For example, the comic "Naughty Horse and Little Jump" adapted from popular children's literature achieved a sales volume of 15 million copies of 250 million yuan in 2017. However, due to the failure of animation production and comic publishing to truly integrate, this kind of comic strips cannot form an animation trend that affects the whole people.

4.3. The creative achievements of comic publishing should be integrated with animation
The Chinese comic publishing industry has long adhered to the principle of content supremacy. No matter how difficult the situation, creativity has always been the philosophy of comic publishing. The continuous blowout comics have shown the strong vitality of Chinese original comics to people, and to maintain the popularity of the works and carry out the brand operation, it still needs to be integrated with animation. Looking at the overall situation of Chinese commercial comics, the comic publishing industry is full of creativity and limited influence. The animation industry is questioned by audiences due to excessive consumption of traditional Chinese culture. The two can complement each other but cannot truly integrate due to various reasons. On the other hand, European and American commercial comics have gone farther and farther on the way to deeply explore the value of animation brands. After each animation work is hot, there is a steady stream of sequel creativity and derivative works to maintain the popularity. Even if Japanese animation has only occupied the mainstream in the second dimension and encountered creative bottlenecks, its comic publishing industry is still the leader of commercial comics, and it is constantly seeking breakthroughs. Practitioners of Chinese commercial comics should learn from the successful experience of other countries and reflect on their own shortcomings in order to achieve substantial development.

5. Conclusions
In the era of new media, the comic publishing industry has mastered the origin of the animation culture of "creative", and should stand on the shoulders of the predecessors and be reborn. At the same time, funding and policy support can be appropriately tilted towards comic publishing to achieve the effect of "small investment, high return". The foundation of the sound development of Chinese commercial comics. Without an audience base, just a few popular animated films cannot make Chinese commercial comics really rise. Chinese commercial comics can take advantage of new media platforms. For example, once more influential comic works are cultivated on the animation network platform, the IP can be strengthened through book publishing and network animation production, and more follow-up masterpieces can be launched.

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