Retraction

Retraction: Innovation Strategy of Film and Television Creation under the Background of Big Data (J. Phys.: Conf. Ser. 1852 022048)

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The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

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Innovation Strategy of Film and Television Creation under the Background of Big Data

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Abstract. With the advent of the information age, the role of knowledge resources in modern social production is expanding. In today's era, people have mastered a variety of information storage, processing and query methods, thus greatly expanding the scope of automation. At the same time, people have higher and higher requirements for the film and television drama, not only for the rich content and plot, but also for the actor's acting skills. Through big data, we can analyze the types of movies popular with the public, so that the market can create films and TV programs according to their favorite degree of movies. Based on this, this paper analyzes the current situation of China's film and television drama, combined with the background of the era of big data, studies the innovation of film and television creation. In this paper, a questionnaire survey is conducted to analyze the 10 most popular Chinese movies on Douban in 2019. The experimental results show that the public agree with the film quality in 2019. At the same time, among the favorite film types, the public's love for inspirational movies and TV plays was the highest, reaching 86%, followed by social ethics drama with 84%, and youth idol drama with the lowest love rate of only 52%.

Keywords: Big data, Film and television industry, Film type, Film creation

1. Introduction
Big data transforms people's pursuit of rationality into relevant relationships [1,2]. Huge data is followed by relationships between objects [3]. In terms of the development of the film and television industry, industrial innovation is the only way for the development of the film and television industry, and big data search will be a convenient way for the innovation and development of the whole industry [4]. Find the audience's personality characteristics from the information, and then provide data analysis basis for film and television production, content distribution and audience rating. Big data has changed the development mode of the film and television industry, and has an impact on each link of the industry chain [5].

The integration of literature and film and television can achieve a win-win situation of cultural industry and economic benefits, and left-handed script and right-hand novel is also the goal pursued by...
many film and television writers [6]. With the advent of the era of big data, many film and television literature writers constantly adjust the creation type and language style of film and television literature through the results and data generated by big data, which, to a certain extent, promotes the prosperity and development of the film and television literature field [7,8]. However, there are some problems in the process of film and television literature creation at this stage, which makes the language of film and television literature become random and rough, which is against the original intention of film and television literature creation [9]. Therefore, in the context of big data, we should pay attention to the research on film and television literature creation, so as to promote the prosperity and development of China's film and television literature [10].

This paper investigates and studies the current film and television creation, and finds that the current film and television works have appeared the phenomenon of intermingled good and bad. Therefore, this paper mainly studies the creation strategy of film and television under the background of big data. In the research, this paper studies the current development of China's film and television drama. Secondly, combined with the background of big data, this paper provides some creative ideas for film and television literature. In the era of big data, film and television literature shows two characteristics: the popularization of the theme of the works and the transformation of text literature into image literature, which is a good opportunity and Reform for the creation of film and television literature.

2. Analysis of the current situation of film and tv drama development under the background of big data

In recent years, the rapid development of China's film and television drama market, the speed of its development has attracted the attention of the world. China has become the world's largest television producer and distributor, as well as the world's second largest film producer. Today, China has become the world's largest producer and distributor of TV dramas, with 8000 to 9000 episodes of hard data broadcast each year.

2.1. The Overall Performance of the Film and TV Drama Market is Good, But There is Overcapacity

But the above figures are just the tip of the iceberg. Behind this prosperity, some people feel happy while others feel anxious. Take the film data; of the 893 films released in China in 2012, only 315 films, or 35% of them, entered the cinema, while 678 did not. Investors in films that have not been shown are unable to repay a large amount of money in the production of films, leading to the decline of films. With the release of new films in the next year, these films will no longer be put on the market. They will be completely "outdated culture", which will lead to a waste of manpower, material resources, financial resources and resources. TV plays are similar events. Film and TV plays are "cultural giants" and there is a serious problem of overcrowding. Similarly, high quality films and TV series are scarce, and many TV stations and online video companies hijack rare films and TV series at high prices. After the implementation of the new policy in 2015, the potential conflicts in the TV drama market may be alleviated.

2.2. Lack of Data Mining and Data Analysis Ability

Although entering the era of big data, China's film and television industry is still in the enlightenment stage of data mining and analysis, and there is not enough attention to data in each stage. In the production process of TV drama, the choice of script and the construction of actors and actresses are more emotional. Only to examine whether the plot in the script is moving and vivid, whether the plot before and after is tactful and tortuous. Choosing actors pays more attention to famous box office and whether there is a scandal or not, and the data mining behind the stories and actors is not deep enough. In the procurement stage, the criteria for TV series evaluation are still the above two aspects, story and actor. This evaluation system is directly isolated from the market, and has entered a strange circle of "artificial selection before broadcasting and marketization of post broadcast evaluation". After
broadcasting, the domestic television field only uses the data of CCTV sofre and Nelson to judge. This evaluation system is relatively scientific, but the depth of data mining is far from enough, and the data results have not yet been able to reverse the production process.

3. Experimental ideas and design

3.1. Experimental Ideas
Under the background of big data era, China's film and television literature shows two characteristics: the popularization of the theme of works and the transformation of text literature into image literature, which is a good opportunity and Reform for the creation of film and television literature. However, there are still some problems in the process of film and television literature creation, which affect the development of film and television literature. Therefore, under the background of big data era, on the one hand, we should reasonably use big data technology to create film and television literature; on the other hand, we should learn to use big data thinking to create film and television literary works, so as to promote the healthy and prosperous development of China's film and television literature.

In this experiment, the formula of mean square error in the satisfaction of questionnaire survey results is as follows:

$$RMSE = \sqrt{\frac{\sum_{i=1}^{n}(r_i - u_i)^2}{n}}$$  \hspace{1cm} (1)

3.2. Experimental Design
In this experiment, this paper selects the 10 most popular movies and TV works on Douban in 2019 to analyze, observe the rating of Douban films through customs, and observe the development of current film and TV series. This paper also carries on the questionnaire form, the film and television play has carried on the score, simultaneously has carried on the analysis according to whether likes this TV play or not. In this experiment, 231 questionnaires were collected, of which 201 were valid except those with 30 invalid scores.

4. Discussion

4.1. Movie Selection Data

| Movie title         | Douban score | Box office (billion) |
|---------------------|--------------|----------------------|
| Nezha               | 8.5          | 4.934                |
| Young you           | 8.3          | 1.532                |
| Chinese Captain     | 6.7          | 2.884                |
| Wandering the earth | 7.9          | 4.618                |
| Crazy aliens        | 6.4          | 2.183                |
| Me and my motherland| 7.7          | 3.146                |
| Fire Hero           | 6.5          | 1.676                |
| Flying life         | 6.9          | 1.703                |
| Climber             | 6.1          | 1.088                |
| Manslaughter        | 7.7          | 1.197                |

In this experiment, we selected 10 Chinese films from the Douban rating in 2019, including "the Devil
boy of Nezha came into the world", "young you", "wandering earth", etc. the experimental data are as follows:

### 4.2. Analysis of Film and Television Creation

As the result of our questionnaire is roughly the same as that of Douban, we can see that the public review data on Douban is safe and reliable. This paper mainly from the plot of the film, scene layout, and characterization and whether to watch many times four aspects of a satisfactory survey, the experimental results of this survey are shown in the figure below.

**Figure 1.** Survey and analysis of film creation satisfaction in 2019

According to the data in Figure 1, people's satisfaction with the 10 most popular Chinese films in 2019 is very high, and people's satisfaction with the characterization in the films is the highest, which indicates that the actors selected in the current popular films have relatively high professional quality. For example, Wu Jing, Zhang Ziyi, Zhou Dongyu and other actors have high professional standards. 61% of the people were satisfied with the plot of the film. We can see that the Douban score of "the Devil boy of Nezha" is the first, which shows that everyone is most satisfied with the plot of the film. 65% of the people will choose to watch many times, which means that the film quality in 2019 is generally good and more than half of the people will choose to watch more movies.

After understanding the popular movies in 2019, this paper analyzes the popular film types. The film types are mainly divided into the following six aspects: social and family ethics drama, love drama, youth idol drama, costume drama, inspirational drama and technological magic drama.
Figure 2. Investigation and Analysis on the Popularity of Film Types

According to the data in Figure 2, inspirational dramas and social and family ethical dramas are the most popular, with 86% and 84% respectively. The magic child of Nezha, who’s Douban score is the first in 2019, is a typical inspirational drama. The film and television drama "I am not determined by heaven" has once become a popular saying among contemporary people. In recent years, the love degree of social ethics drama is also higher and higher. Social ethics drama reflects some of the main existing phenomena in contemporary society. These social phenomena are generally concerned by everyone, so the love degree of social ethics drama is also higher and higher. The popularity of youth idol drama is only 52%, and the people who love it are mainly under 20 years old. In recent years, people's love for youth idol drama is getting lower and lower. It can be observed that the current youth idol has no advantage in the film and television industry.

4.3. Development Path of Film and Television Industry under the Background of Big Data

(1) Content production process will be based on big data analysis results

Big data not only changes the production mode of the film and television industry development, but also changes the thinking mode of film and television creation. The film and television industry is changing from the production mode based on market orientation and producers to consumers, providing services to consumers and making them like it. For example, "data news" has appeared in TV news production, which uses news points for mining. In the production of movies and TV series, products for video users have been developed. Amazon, for example, has begun to apply big data to film and TV production, selecting data from thousands of scripts, then sampling these scripts, saving them on the Internet and TV, and using powerful data analysis skills to view user responses and ultimately determine which shows to watch. In this way, films and TV series can be customized according to the needs of the audience, and produce public opinion and oral effects.

(2) The existing rating system will be reformed

There are many problems in the rating system of film and TV plays. First, there are problems with the current public rating system. The current rating criteria focus on a small number of television media. Many TV programs and plays are not popular with TV users, but their ratings are very high. At present, many online dramas can only be watched online, so it is not easy to calculate the TV ratings. With the increasing number of receiving terminals, the current rating system cannot be fully considered. Second, there are some problems in the current scoring system navigation method. The existing scoring methods focus on urban residents, but the small sample surveys they use cannot
reflect the overall population, especially for large rural users. Third, transaction-based evaluation fraud has become a taboo topic in the industry. The current problems in the film and television industry are being widely solved. First of all, the largest information system is the media platform itself. The platform data sample covers all users, accurately captures the media consumption behavior of each user, and can pay attention to all TV terminals, not only traditional TV movies, but also PC, intelligent mobile terminals, etc. Second, big data can summarize and analyze all structured and unstructured data. The existing evaluation methods provide structured information, and big data can be used to access unstructured information, such as text information and web information, such as users’ evaluation of watching movies and TV, browsing, searching and other data. The comprehensive analysis of the above two types of data can be used to analyze the results of the relationship to solve the value defects in the current evaluation system.

(3) Industrial management will change
The current applicable laws and regulations mainly focus on the management of film and television, such as "film management rules" and "radio and television management". However, the processing of online video programs is like self-directing drama, and the management system is relatively lacking. With the advent of the era of big data, management issues become obvious, especially in terms of privacy and information security. Each operator can not only use the user's viewing behavior to collect media consumption behavior data, but also access the user's privacy information. According to external media reports, after the location information of the mobile terminal is turned off, the smart device can still upload the user's location information, and even upload personal information, such as email and phone book details. It is believed that if the government does not improve the use of big data, all user behaviors in the geographical area can be obtained at any time in the future by using big data. Therefore, a sound legal system is a prerequisite for the film and television industry to use big data.

5. Conclusion
With the continuous improvement of science and technology, the analysis and application of big data technology plays a more and more important role in the film and television literature creation. Using big data can analyze and predict the film and television types and film and television style that readers and audiences like, making the film and television creation under the background of big data in a state of prosperity and development. However, big data is not only a good opportunity and change for film and television creation, but also a huge challenge. At this stage, there are still some problems in the process of film and television creation. Therefore, under the background of big data era, film and television creation should reasonably and scientifically apply big data technology and big data thinking, and constantly improve the artistic value, artistic level and artistic ideas of film and television works, so as to promote the healthy and prosperous development of film and television creation.

References
[1] Zhang H, Yang C. The Application of Big Data Analysis in the Research of Innovation and Entrepreneurship Education for Humanities College Students[J]. Journal of Physics: Conference Series, 2020, 1648(2):022073 (5pp).
[2] Han T, Zhang Y. Comment and Analysis on the Major National Strategies of Cyberspace[J]. World Cenesis Research Journal, 2020, 6(5):275-281.
[3] Xu W. Research on personal information legal protection in big data era[J]. C e Ca, 2017, 42(6):2667-2670.
[4] Thakuriah P, Tilahun N, Zellner M. Big Data and Urban Informatics: Innovations and Challenges to Urban Planning and Knowledge Discovery[J]. 2017, 10.1007/978-3-319-40902-3(Chapter 2):11-45.
[5] Smyth K B, Croxton K L, Franklin R, et al. Thirsty in an Ocean of Data? Pitfalls and Practical Strategies When Partnering With Industry on Big Data Supply Chain Research[J]. Journal of
[6] Eric, P, Xing, et al. Strategies and Principles of Distributed Machine Learning on Big Data[J]. Engineering, 2016(2):179-195.

[7] Yan Z. Research on the Cultivation of Non-English Majors' English Reading Interest: POA Teaching Mode in the Internet + Era[J]. Journal of Physics: Conference Series, 2020, 1533(2):022090 (7pp).

[8] Diao S. The Reform of Teaching Management Mode Based on Artificial Intelligence in the Era of Big Data[J]. Journal of Physics: Conference Series, 2020, 1533(4):042050 (7pp).

[9] Yang C. Research on the Mixed Teaching Mode of TPACK in Software Testing Course[J]. Recent Patents on Computer Science, 2018, 11(4):302-311.

[10] Xin C, Wang X. Research on the Application of College Physical Education Teaching Mode in the Cloud Computing Environment[J]. Journal of Physics: Conference Series, 2020, 1624(2):022068 (4pp).

Business Logistics, 2018, 39(3):203-219.