

Technological addiction and value displacement: the cultural crisis of Chinese science fiction films under the influence of AI

Bingtao Xu, Zongye Gu

Tianjin Normal University, Tanjin 300387

ABSTRACT

Science fiction films have relied on the continuous advancement of technology, and have attracted audiences with their imaginative visions and profound insights. Currently, artificial intelligence (AI) technology can assist the creation of science fiction films in an efficient and scientific manner. However, challenges such as technological addiction and value displacement have come along with such developments. In this article we discuss AI as a narrative tool and aesthetic object, and accordingly analyze the creative practice of Chinese science fiction films in recent years. We suggest that artistic creation should ensure that form and content complement each other, and jointly build harmony and integrity.

KEYWORDS

cultural crisis; Chinese science fiction films; AI

1 Introduction

In the technological wave of the 21st century, the rapid development of artificial intelligence (AI) has become an important force for social progress. AI has not only profoundly changed people's lives, but also triggered a revolution in the film industry, which is particularly evident in science fiction films. On a theoretical level, Hauser (1958) believes that science fiction films describe dramatic events in a fictional, but in principle possible world. In an early practical example, *A Trip to the Moon* (1902) was adapted and filmed based on two science fiction novels. The film was one of the first to combine science and the art of film, opening the development of science fiction films (Sandner 1998). In the history of science fiction film development, we have witnessed a journey in which AI gradually moved from illusory imagination to reality. In *2001: A Space Odyssey* (1968), the cold, unyielding *HAL 9000* embodies the dangers of unchecked artificial intelligence. In contrast, *Blade Runner 2049* (2017) presents the replicant *K*, who grapples with questions of identity and human nature. These films, reflecting ever-changing values, capture the complex emotions and diverse perspectives surrounding technological progress (Flisfeder 2019).

AI has enhanced film production and has become a common technical tool in the industry. In part due to the power of AI technology, Chinese science fiction films have seen great success in recent years. Works such as *The Wandering Earth* (2019), *Moon Man* (2022), and *Bureau 749* (2024) have demonstrated the high potential of the Chinese film industry on the international stage. However, the current Chinese science fiction film industry must be prepared for the dilemmas brought about by AI, including intellectual property rights disputes, creative ethics and aesthetic values, and the impact of new technologies on the original concept of art. In this paper we discuss AI as a narrative tool and aesthetic object, exploring how science fiction films express values under the influence of AI and how they reflect on technological progress.

2 AI empowers the creation of Chinese science fiction films

Progress in science and technology have profoundly changed life for human beings, and have had a huge impact on human culture (Forster 2006). In the field of film, the development of science and technology has also had a profound impact. Nowadays, AI can to a certain extent assist humans in working more efficiently and scientifically in the stages of film script creation, image processing, picture editing, sound synthesis, and publicity and distribution. This has made the production of science fiction films more efficient (Sadiq et al. 2024).

AI technology can assist filmmakers in creating complete movie scripts. It can create a script with a complete story system, cause-and-effect relationships, and clear character context in a short period. For example, the *Shenbi Maliang* system, invested in by Maoyan Entertainment, has been applied on a large scale in script writing. It can identify characters, scenes, and other content in novels and break them down into script formats. Moreover, it can form differentiated indicators for works of different themes, and evaluate the plot rhythm, scenes, layout, and roles. However, there will also be problems with insufficient details and creativity, which human screenwriters must look over and revise. AI script creation is possible because models have been trained on a large amount of script content. But in this process, there are many subtleties or exaggerations in words and plots, which can be hard for the models to learn. AI cannot

understand the context, life scenes, and character feelings generated by these words, so some nonsensical and illogical text will usually be generated (Goswami 2024).

AI is applied in film image processing to repair, restore, reproduce, and complement the colors in film images. It can also design and modify the resolution and screen size, improving the audience's aesthetic experience and feelings. The China Film Group Corporation has developed an automatic image processing system called *China Film Shensi*, which can automatically process image and video materials of film and television projects, performing tasks such as field pattern removal, restoration, and super-resolution enhancement. It can also generate dynamic expressions on the faces of characters in a short time, by learning from and recognizing human faces. The movie *The Wandering Earth 2* (2023) used such AI technology to achieve accurate facial changes for characters such as Liu Peiqiang, and carefully created a younger image of the characters to present a more realistic visual effect. Looking back to the early development of special effects, for example makeup and motion capture, today's AI face-changing technologies represent another leap forward, greatly reducing the difficulty of film post-production.

In addition, AI editing has been applied in film works with strong results. In 2021, artist Xu Bing, in collaboration with the Hong Kong University of Science and Technology's Artificial Intelligence Research Center, produced and presented an *Artificial Intelligence Infinite Film* (AI-IF). This was a film that had no human involvement in the script, shooting, or editing. This format also enables continuous capture of audio-visual clips based on the audience's choices, and can theoretically form a film of infinite length.

The application of AI in publicity and distribution can develop personalized publicity plans for each movie. Through various data in the database, the behavioral habits, life hobbies, viewing time, viewing preferences, etc. of moviegoers can be retrieved, and deep matching with the movie content can be performed to accurately locate potential moviegoers (Davenport et al. 2020). Alibaba's Lighthouse Professional Edition APP is a platform that uses AI technology to predict audience preferences. Based on user characteristics such as age, gender, interests, and city of residence, it can achieve accurate film delivery and ensure that the film publicity covers the specific consumption scenarios where the target audience is located. This scenario-based marketing strategy has significant advantages. It can accurately and efficiently reach the audience groups that the movie hopes to attract, covering both existing fans and potential moviegoers.

3 The cultural crisis of Chinese science fiction films under the influence of AI

As mentioned above, some relatively mature AI technologies have been applied to various aspects of science fiction film production. But with the integration of this new technology, some problems have emerged in the production of science fiction films. AI has created a new paradigm for film production, but challenges such as technological addiction and value displacement have also followed.

AI technology has caused the creative concepts of filmmakers to shift. Today, when AI technology is widely used in film production, the material world as the subject of shooting has become less and less important, and the film-constructed world and the material world are growing farther apart, even bearing no similarities in some cases. This has led to the phenomenon of technology addiction in the creation of Chinese science fiction films.

Driven by AI, innovation in visual effects and character creation has indeed improved the audience's viewing experience, but the automation of the production process and the dependence of the story on technology may cause creators to ignore artistry and thought in film. For example, the Chinese science fiction film *Shanghai Fortress* (2019) relies too much on special effects and ignores the deep characterization and emotional expression of the characters. This excessive reliance on technology makes the audience's memory of the movie just be of the visual impact, ignoring the value and depth of the story or characters. This deviates from imitation theory and reflection theory to a certain extent, making the movie lack the characteristics of artistic reality.

Looking back at script writing, AI is profoundly affecting creators' thinking patterns. Some creators are tending to rely on the recommendations of AI algorithms rather than their creativity and imagination. This reliance makes script creation, which should be full of innovative spirit and deep thinking, become stereotyped and superficial. Most of the script creation for Chinese science fiction films relies on the adaptation of science fiction novels. For example, *The Wandering Earth* is adapted from Liu Cixin's novel of the same name, and *Crazy Alien* (2019) is adapted from Liu Cixin's novel *Rural Teacher* (2001). Although Chinese science fiction literature has reached a new level, it is still somewhat repetitive to mainly turn novels into films. Therefore, it is important to maintain independent thinking and innovation ability in creators, since overuse of AI technology has become a problem that needs to be solved in creating Chinese science fiction films.

Advancements in AI technology have caused the aesthetic properties of films, as well as the aesthetic values of moviegoers, to shift. The technical logic of artificial intelligence is to transform the content production process into computable steps, thereby establishing a core position of computational aesthetics (Manovich 2017). Moviegoers have begun to regard AI technology and its products as a new aesthetic object, and have developed an almost worshipful attitude towards the novelty and complexity of the technology. Many are attracted by the cultural forms derived from

artificial intelligence.

Under this trend, the audience's pursuit of cultural charm has gradually been replaced by considerations of production efficiency (Bolter et al. 2006). This phenomenon has, to a certain extent, suppressed the true vitality of cultural creation. The authenticity and sacredness of film as an art form have thus been deconstructed and gradually lost their inherent depth and connotation. In this context, the audience is increasingly inclined to pursue a movie experience that is more about the visual spectacle. However, film narrative has become the weakest link, and the artistry and ideological depth of films themselves have been marginalized. Although this change in aesthetic tendencies has brought new development opportunities to the film industry, it has also triggered debate about the balance between cultural values expressed through film and technological progress.

4 The potential impact and inspiration of AI on science fiction films

It is worth affirming that AI technology empowers the creation of science fiction films, which helps improve creative efficiency, shorten the shooting cycle, and save costs. With the participation of AI technology, science fiction films have new aesthetic characteristics, but this also brings some new problems.

Today's social production efficiency has greatly improved, and the pace of life has become faster. In line with this, the sociocultural environment has shown more secular, consumerist, and rapid demands. To meet this demand, the functional demands of art have more so pursued the function of pleasure, and aesthetic psychology has paid more attention to stimulation and experience. This suggests that more formal aspects of artistic works must be adapted. With the support of intelligent technology, the filming of various types of films is no longer limited by camera equipment and shooting angles. For example, lenses that cannot be placed in real space can be replaced by AI technology, and technology can be used to create virtual worlds or dreamlike spaces.

With the popularization of AI technology, filmmaking techniques have repeatedly broken through the limitations of original film shooting. This has created many spectacular action scenes and characters that transcend the everyday world, which greatly satisfies movie audiences. Thus, the aesthetic subject of a film will consciously acquire and recognize the aesthetic object, and then enrich their personal experience (King 2013). Of course, we need to be vigilant about this phenomenon where form is considered more important than content. As a manifestation of spiritual culture, the beauty of a work of art is undoubtedly an important part of its charm. However, we must realize that the pursuit of artistic form is not an endless expansion; it should be restrained and not allowed to overflow. When we pursue the beauty of artistic form, we should maintain moderation to ensure that the form and content complement each other, so as to jointly build harmony and integrity.

With the upgrading of film technology and the increasing diversity of social entertainment methods, movie audiences have put forward higher requirements for film creation. This has forced filmmakers and performers to work harder to hone their skills, strengthen their aesthetic awareness, establish high cognition at the macro and micro levels, and shoot films that are more in line with secular needs. At this stage, most film creators tend to shoot films that meet commercial needs and rarely think deeply about the application of art in the cultural or historical context. This has led to the gradual deformation and secularization of film production, and the loss of the previous independent character, philosophical thinking, and exploration of ideas that characterized earlier eras. Therefore, the independence of film art is becoming increasingly difficult for the audience to perceive. The information contained in popular media is made increasingly easy to decode, understand, and digest, so that the audience can understand the meaning of the artwork without deep thought. However, the artistic value of such artwork tends to be questionable. This degradation in aesthetic thought is the central issue of the development of science and technology, and the transition from the era of text to the era of images.

After entering the 1990s, consumerism swept over the field of film, prompting the intrinsic aesthetic value of film art to gradually take a backset to commercial characteristics (Wasko et al. 1993). The film commercial aesthetics theory, formed around market demand and market economy operations, has become the main guiding theory of the film creation system. Since then, under the influence of capital and commercial factors, film producers have taken box office statistics and attention rate as the core metrics to maximize. The same is true for marketing and consumption after the film is produced. Looking at the current situation, consumer needs and box office numbers have become the decisive factors in film aesthetics.

With the penetration of consumerism and the growth of AI technology, film producers are increasingly focusing on introducing AI to create more commercially attractive films and make more profit. For example, some films will abandon traditional production techniques and introduce intelligent technology to create beautiful, illusory, and attractive pictures to attract the audience's attention, so that the audience will voluntarily pay for the film. At this stage, artistic creation, marketing, and evaluation are being implemented around the needs of the market economy. Commercialization has indeed promoted the development of art to a great extent. But we should also reflect on excessive commercialization and resist profiteering in the field of literary and artistic creation. Literary and artistic works, and particularly film, must

consider marketability, but marketability cannot be placed above artistry.

5 Conclusion

Artificial intelligence has penetrated and transformed the entire chain of film production, streamlining important tasks such as screenwriting, editing, and special effects. The narrative template formed based on such algorithms has promoted efficient assembly line-style usage of AI for film image production. Its cross-modal characteristics have promoted the construction of a cross-media narrative system, and the mimicking of human emotions has enriched the interactive experience of AI-generated film images. However, the deep fake abilities of AI have shaken the trust of the public and the media, machine production has obscured the spiritual charm of culture, and large streaming corporations have homogenized much of the filmmaking process. These are difficulties that come along with the development of the AI film production model.

To promote the AI film production model and maximize its benefits, it is necessary to create a new model of human-machine co-creation and establish a symbiotic relationship in production. In the face of the continuous evolution of media technology, it is important to ponder how to maintain the value of human creativity and artistic choices while following the logic of AI film production. In the future with comprehensive intelligence, the AI film production model will likely be stable and far-reaching under standardized management, injecting new momentum into film ecology and contributing new strengths to the development of the film industry.

About the Author

Bingtao Xu, PhD student at Tianjin Normal University, with a research focus on film and television communication;

Zongye Gu, Master's student at Tianjin Normal University, with a research focus on film and television art.

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