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The Development of Chinese Artificial Intelligence Science Fiction Movies through the Lens of the Film Industry Chain

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ABSTRACT

Since The Wandering Earth (2019) achieved commercial success, Chinese sci-fi cinema—particularly works centered on artificial intelligence as their core narrative and aesthetic—has entered a new phase of industrial development. This paper does not treat this transformation as a mere genre trend; rather, it examines Chinese AI sci-fi cinema as an emerging industrial form shaped by the interplay of creative labor, production technology, capital structure, institutional governance, and intellectual property (IP) management. Using a film industry value chain analysis framework, this study re-evaluates the structural bottlenecks constraining sustainable development: interdisciplinary talent shortages, technological dependence, high-risk financing mechanisms, inadequate legal protections, and underdeveloped derivative commercialization. This paper situates Chinese AI science fiction films within broader discussions of cultural industrialization and IP-driven growth, emphasizing that the core challenges in this field lie not only in technological limitations but also in the incomplete integration of creativity, technology, and institutional coordination. The conclusion proposes an industry-oriented development pathway, highlighting systematic talent cultivation, collaborative technological advancement, diversified risk-sharing mechanisms, strengthened legal governance, and early-stage IP planning. This approach outlines a localized model for the long-term maturation of China's sci-fi film industry.

Keywords: Chinese AI Science Fiction Film, Film IP, Film Industry Chain, Cultural Industries

INTRODUCTION

Chinese science fiction movies trace their origins back to 1939 with *Shanghai Beach 60 Years Later*. After 70 years of ups and downs, the genre entered a new phase of development in 2019. The release of *The Wandering Earth* that year marked a significant milestone, paving the way for a series of films such as *Crazy Alien*, *Warriors of Future, and Moon Man, which have further advanced the growth of Chinese science fiction cinema.*Despite the rapid growth of science fiction movies, China's film industry chain remains relatively underdeveloped. A key component of this chain, film IP development, also shows room for significant improvement.Even while Chinese AI science fiction films and the science fiction industry have grown rapidly since 2019, they still have a lot of room to grow. Though there are still numerous shortcomings when compared to American Hollywood AI sci-fi films, Chinese AI sci-fi films have generally improved in recent years in terms of subject matter and inventiveness.China's science fiction film market is thriving. While Hollywood sci-fi blockbusters continue to dominate a significant share of the market, Chinese domestic sci-fi films have developed a relatively mature system after several years of growth.This progress is largely attributed to Chinese filmmakers adopting and adapting Hollywood's mature market production system. While a

noticeable gap remains, local Chinese sci-fi films are gradually establishing their own industrial chain system with unique Chinese characteristics. From pre-production to post-production, localization has begun to take shape.The domestic science fiction film market was once as barren as the desolate ice fields depicted in the movies. As a bold pioneer, *The Wandering Earth* ignited a spark of hope and set a benchmark for the development of China's sci-fi film industry（Shangxue Gao & Xin Li,2019). From pre-production and filming to post-production, and from content creation and capital investment to marketing, distribution, and derivative product development, it has offered valuable local experience. The small step taken by *The Wandering Earth* marks a giant leap in the evolution of China's sci-fi film industry chain.

The Development of the Chinese Science Fiction Film Industry

Pre-1949 Early Exploration

Before the founding of New China, only two science fiction films, S*hanghai Beach 60 Years Later* and *The Man-Ape*, were produced in China. Both films featured complete production, distribution, and screening processes, making them early explorations in the development of China's science fiction film industry（Tianhui Hou,2021). As early as the 1930s, Hollywood classics like *King Kong* and *Frankenstein* were screened in China, where they were well-received by audiences. These films even influenced the creation of early Chinese science fiction cinema.In 1939, Xinhua Film Company produced *Shanghai Beach 60 Years Later*, widely regarded as China's first science fiction film and praised as an "ideal science comedy."At the time, film publicity and marketing methods were quite comprehensive, including trailers, neon advertisements, special editions, still photo posters, brochures, and newspaper ads. Xinhua Film Company even launched the *Xinhua Pictorial* to promote its films. Additionally, Xinhua signed an exclusive contract with the Shanghai Jincheng Grand Theater, stipulating that all its films must premiere at Jincheng and could not be screened at other theaters during their first run, in accordance with the agreement（ Jianjian Zheng,2011).

Exploration of the Science Fiction Film Industry after the Founding of New China

During the 17 years between the founding of New China and the start of the Reform and Opening Up, the era of the planned economy saw all private film studios nationalized. Film production models were heavily influenced by the Soviet Union, characterized by administrative control and a lack of market orientation. During this period, film studios operated under the principle of state distribution, adhering to a "supply-based distribution" model. Within these 17 years, two politically charged science fiction films were produced: *The Thirteen Tombs Reservoir* and *Little Sun*.

The Reform and Opening Up Era Heralds New Development

Following the Reform and Opening Up in 1978, China's film market was revitalized, giving rise to many notable films during this period. In 1980, Shanghai Film Studio produced *Death Ray from the Coral Island*, a standout science fiction film of the time. The following year, Changchun Film Studio released *The Submerged Shadow*, and in 1986, Xi'an Film Studio introduced *Misplacement*. Throughout the 1980s, approximately six science fiction films were released. While their overall quality could not yet match Hollywood sci-fi productions of the same era, they broke away from the rigid production models of the past and laid the groundwork for future rapid development.

The Marketization Era of Chinese Science Fiction Films

From the late 1990s to the early 2000s, China's science fiction film industry continued to explore suitable development models. In terms of content, the industry produced both children's sci-fi films and commercial sci-fi films, including *CJ 7* and *Robot*.In terms of investment and financing, China's science fiction film industry involves state-owned film companies, private enterprises, and foreign capital, with a growing trend toward co-productions(Tianhou Hui,2021).By developing Chinese superheroes and raising production costs, Chinese science fiction films attempted to imitate Hollywood's expansive commercial film model during this time. However, because of cliched narratives, inflexible character depictions, and a lack of unified values, these attempts failed and produced subpar box office results. Furthermore, the mechanical duplication of Hollywood science fiction films and a lack of consideration for the local cultural context in China hurt the standing of domestic science fiction films and reduced viewer trust in them.

The Developmental Phase of Intellectual Property-Driven Chinese Science Fiction Cinema

China's science fiction sector has been booming since 2013, and particularly after 2015. Works like The Three-Body, which has won numerous international honours, are examples of this. China's sci-fi film industry has entered a new era driven by IP development, marked by notable changes from the past. This is in addition to the internet's growth and the increasing significance of intellectual property (IP). Science fiction intellectual property is currently

being actively acquired by the major financiers and investors, who use it as the basis for planning the creation of motion pictures. They have considerable influence over the creation and release of science fiction films.

Many Chinese-themed science fiction films were made during this time, and they were well received by viewers and did well at the box office. The *Mermaid* made close to 3.4 billion dollars at the movie office, despite costing $300 million. With a box office total of 4.655 billion and a Douban score of 7.9, The *Wandering Earth* is a notable example of both high critical praise and success. The same day's release of *Crazy Aliens* brought in 2.2 billion dollars as well. Chinese sci-fi films now have the confidence and motivation to advance thanks to The *Wandering Earth*. Unquestionably, Chinese viewers and the film industry have begun to recognise homegrown sci-fi films, despite the failure of later films like Shanghai Fortress and *Gone With The Light*.

The Proposal and Composition of the Chinese Science Fiction Film Industry Chain

Science fiction films have long been commercialized as a popular genre with a sizable following in the US. As of December 2024, American science fiction films made up more over half of the top 100 highest-grossing films in the history of the film industry, according to data from Box Office Mojo. Chinese science fiction movies, on the other hand, began somewhat later, had a difficult development route, and have expanded gradually without yet reaching an industrial size. Sci-fi movies get the most engaged audience in the genre and are a vital part of the larger science fiction business（Jianming Hao,2014).As a highly industrialized genre, science fiction films feature a more mature industrial chain system compared to other film genres. This system primarily consists of five key links: story creation, scriptwriting, film production, distribution and screening, and derivative development（Xueping Cao,2022).The screenplay of a science fiction film at the work layer derives from the narrative notion at the idea layer, both converging in the externalized manifestation at the product layer—the science fiction film itself. Upon entering the commodity layer, the film perpetuates value under the aegis of intellectual property and copyright legislation. To augment its commercial viability, producers or investors must develop the derivative layer. The evolution of science fiction cinema derivatives encompasses several mediums, such as toys, comics, theme parks, and advertisements.

The Current State of China's Science Fiction Film Industry Chain: Lack of a Comprehensive Science Fiction Film System

Interdisciplinary Talent Shortages

China produced its first science fiction film in 1939, but no true science fiction films emerged in the following decades. Those that were made were either heavily ideological or lacked essential science fiction elements.The release of *The Wandering Earth* in 2019 marked a new stage of development for Chinese science fiction movies, offering a sense of renewed hope. However, the subsequent release of *Shanghai Fortress* cast a shadow over this progress.*Shanghai Fortress* was released in the summer of 2019, with hopes that it would build on the momentum created by *The Wandering Earth* and push Chinese science fiction movies to greater heights. However, the film's poor quality proved to be a significant disappointment.

Shanghai Fortress falls short in both its plot and the production quality of its sci-fi elements. Despite being marketed as a sci-fi film, it leans heavily into romance, making it more of a sci-fi romance hybrid. The movie is saturated with romantic scenes, which feels inconsistent with its sci-fi-focused promotion.Additionally, the special effects and costumes in the film fail to meet expectations. Although 300 million yuan was reportedly spent on pre-production, the special effects appear amateurish, resembling the basic visuals of *Ultraman* battles. The costume design, too, is unremarkable, bearing a strong resemblance to the uniforms of foreign armies during World War II.From a global perspective, the dominance of the American science fiction film industry lies in its ability to capture a key characteristic of the genre: its "science fantasy" essence. For example, *Tenet* (2020) grounds its storyline in scientific theories such as quantum mechanics and relativity, offering a thought-provoking narrative. Similarly, *Dune* (2021) presents a richly imagined alien ecosystem and constructs an expansive civilization, intricately detailing the politics, culture, ecology, technology, and religion of its alien inhabitants（Xueping Cao,2022).

Science fiction movies serve as the foundation for an entire industry chain. One of the primary reasons for the lack of outstanding Chinese science fiction films is the shortage of professional science fiction practitioners. A great movie begins with a strong script, but China lacks a solid foundation in science fiction literature. While there are notable works like *The Three-Body Problem*, the overall scarcity of quality science fiction literature remains a key factor behind the slow development of Chinese science fiction films.Science fiction demands a combination of rich imagination, excellent writing skills, rigorous thinking, logical reasoning, and a solid understanding of scientific concepts. These complex and interconnected requirements present significant challenges for creators. In China, there are relatively few specialists in science fiction literature. While the success of *The Wandering Earth* has raised the profile of science fiction as a literary genre, most Chinese directors and screenwriters lack both professional

scientific knowledge and a deep understanding of technology. This gap has contributed to the lukewarm reception of science fiction films.

Lack of Technical Expertise

The production of science fiction movies relies heavily on advanced technology. From content creation and actual filming to special effects production and screening, technological support is essential at every stage. Technology is a critical element that underpins the entire process of science fiction movie production. However, the gap between China's overall level of scientific and technological development and that of the United States has indirectly contributed to the slower growth of China's science fiction movie industry compared to its American counterpart（Yiming Wang ,2011).The United States boasts the world's most advanced film production system and cutting-edge film technology companies, which drive the industry's development. The production budgets of modern Hollywood science fiction movies often reach hundreds of millions of dollars, with the majority allocated to post-production special effects. These films leverage sophisticated post-production techniques, including motion capture, facial tracking, and related technologies, to deliver visually stunning experiences.In the science fiction movie *Ready Player One*, Spielberg's team utilized VR and related technologies to create the immersive virtual reality world of "Oasis," leaving a profound impact on audiences.In contrast, while the post-production of Chinese science fiction movies has made significant strides in recent years, with the emergence of visual effects companies like MOREVFX, a substantial gap remains compared to Hollywood. Even the success of *The Wandering Earth* cannot fully obscure the industry's challenges. The primary reasons for this lag are the lack of independent innovation and limited production experience within domestic teams.

Moreover, the advanced technology required for science fiction film production imposes greater demands on the professionalism of technical personnel. However, highly skilled professionals with expertise in high-tech fields remain scarce in China, and those specializing in science fiction film production represent only a small fraction of the workforce(Chaokai Hu,2020).The audience's overall perception of the film is significantly diminished by immature technology and poorly developed plotlines. For instance, in the aforementioned *Shanghai Fortress*, the special effects, particularly in scenes featuring battleships and other equipment, come across as low-quality and unconvincing. The lack of realism in these sequences makes it difficult for viewers to immerse themselves in the story.

Lack of a Sound Investment and Financing System

Science fiction movies are the most expensive film genre to produce, making investments in them inherently risky. Hollywood mitigates this risk through a mature and diversified investment and financing system, which is supported by the government, film companies, and various consortia.James Cameron's *Avatar* had a pre-production investment of up to $270 million. The film relied heavily on post-production technology, with its nearly three-hour runtime presenting significant challenges for special effects. However, high risk often leads to high reward: the $270 million investment resulted in a global box office revenue of nearly $3 billion.Investment and financing in China's film and television industry have progressed relatively slowly. Prior to the 1990s, the state primarily funded film production. However, with the advent of the new century, private film companies such as Huayi Brothers and Enlight Media emerged as leading players in the industry.These film companies have adopted investment and financing practices from Hollywood, expanded China's film market, and gradually developed a diversified system for film investment and financing.For example, during the production of *The Wandering Earth*, the crew frequently encountered financial difficulties. The plot required the construction of numerous on-site sets, while the post-production phase demanded the creation of a significant number of special effects shots. As filming progressed, the financial demands of the project steadily increased, to the point where the film's completion was almost jeopardized by funding issues（Silong Li & Manfang Wu,2022).Significant investment is a major constraint on the development of China's science fiction film industry. Film production requires substantial funding across various stages, including pre-production, post-production, publicity, and distribution. The high capital demands, extended production cycles, and lack of reliable benchmarks for return on investment make science fiction films a particularly high-risk venture. As a result, film companies often deliberate extensively before committing to such projects.While the success of *The Wandering Earth* has spurred the development of Chinese science fiction films and demonstrated the potential returns on such investments to film companies, establishing a diverse and mature investment and financing system is essential for advancing the science fiction film industry's maturity.

Lack of Laws and Regulations

The government plays a crucial role in advancing the industrialization of the film industry. In the United States, the science fiction film industry has become a significant pillar of the broader film sector, contributing substantially to the export of American science fiction culture and driving economic growth.The U.S. government promotes scientific literacy among the public, implements tax incentives, actively engages in macroeconomic market

regulation, and establishes various associations and foundations to support the film industry（Songye,2019).In China, the absence of relevant policy documents had long hindered the development of the science fiction film industry. It was not until the implementation of the *Film Industry Promotion Law* in 2017 that external support for the sector began to take shape. In August 2020, the State Film Bureau and the China Association for Science and Technology jointly issued the *Several Opinions on Promoting the Development of Science Fiction Films* (hereinafter referred to as the *Opinions*). The *Opinions* outlined ten policy measures aimed at strengthening support for various aspects of the industry, including script creation, distribution and screening, financial support, special effects technology, and talent training. For the first time, the document emphasized the goal of making science fiction films a significant growth driver for the high-quality development of the Chinese film industry.

The release of the *Opinions* has provided a significant "boost" to future practitioners in the science fiction film industry. On November 12, 2021, the State Film Bureau issued the *14th Five-Year Plan for the Development of Chinese Films* (hereinafter referred to as the *Plan*), which emphasized the need to "accelerate the development of film special effects technology." The *Plan* encourages the allocation of diverse resources toward the research and development of public special effects technologies and advocates for the establishment of a linkage mechanism to advance the science fiction film industry. This mechanism aims to drive improvements in film special effects by providing robust support for science fiction films. Additionally, the *Plan* calls for enhanced coordination, management, and services within the special effects industry, promoting its standardized and regulated development.From the promulgation of the *Ten Rules of Science Fiction* to the *14th Five-Year Plan*, the Chinese government has demonstrated strong support for the development of science fiction movies at the policy level, showcasing its determination to advance this genre. However, despite these policy initiatives, the broader film and television industry, including science fiction movies, still lacks a comprehensive and mature legal framework.

One of the primary reasons American science fiction films have long dominated the global market is their strong emphasis on intellectual property (IP) protection. Robust IP protection laws allow science fiction films to realize their full commercial potential. In the United States, major production companies prioritize profit-generating activities such as film copyright trading and derivative product development, which collectively account for approximately 65% of their total revenue（Hong Yin & Yiyi Yin,2013).China has historically placed limited emphasis on the protection of film copyrights, resulting in a significant gap compared to Hollywood. The lack of robust copyright protection has made multi-level authorization of film copyrights challenging and has hindered the ability to safeguard the rights and interests of film producers. Recognizing the severity of this issue, the Chinese government has begun introducing laws aimed at protecting intellectual property rights. However, the legal framework remains in its infancy, and the urgent need for stronger legal protection of film derivatives persists.

Lack of Development of Science Fiction Movie Derivatives

The derivative value of science fiction movies can far surpass their box office earnings. This is because such films often feature creative elements beyond real-life experiences, making them highly conducive to secondary development and offering significant potential for derivative works(Feiyue Cao,2012).Film derivatives come in various forms, including theme parks, advertisements, toys, and more. Among the most notable examples are the derivatives from Marvel's superhero film series. Action figures of characters like Iron Man and the Hulk are particularly popular. Hollywood film studios in the United States design products that cater to the current aesthetic preferences of consumers, drawing inspiration from the living habits and consumption patterns of their domestic audience.In contrast, Chinese science fiction movies primarily rely on box office revenue and advertising for cost recovery, often neglecting the development and utilization of derivative products. The production of these derivatives typically begins only after the movie has been released, reflecting the absence of a well-established derivative development industry. Additionally, the quality of these products tends to be relatively low, and their market potential is frequently undermined by piracy（Xiaofang Han,2012).Irregularities in China's film industry have hindered the development of film-derived products. In contrast, the United States has successfully integrated its tourism and film industries, resulting in iconic theme parks like Disneyland and Universal Studios. These attractions, including numerous film-themed parks, draw movie fans from around the globe. While China has recently begun combining film and tourism with projects like Hengdian World Studios and Wuxi Three Kingdoms City, market feedback has been less favorable.

Construct a Local Chinese Science Fiction Film Industry Chain

Establish a New Model for Talent Development

Chinese universities offer courses in drama, film, and television studies. At the undergraduate level, students take general courses that explore film and television from both Eastern and Western perspectives. While the curriculum emphasizes theoretical learning, incorporating science fiction elements into these courses could provide students with a foundational understanding of the genre while they master the fundamentals of film and television

production.Compared to other film genres, science fiction films require a strong scientific foundation in the script, placing higher demands on the participants. In addition to classroom teaching, universities should establish platforms for campus engagement, such as science fiction clubs and themed symposiums, to promote the popularity of science fiction within academic settings.

In terms of faculty, universities should focus on a mix of renowned science fiction writers, critics, and scholars. Additionally, universities should regularly invite experts from various academic fields, both domestic and international, to film schools. These experts can deliver lectures—online or offline—on the latest developments in science and technology, helping students stay informed about global advancements and fostering their scientific literacy（Xueping Cao,2022).

The Wandering Earth has sparked the growth of Chinese science fiction cinema, but new talent is needed to sustain and further develop the genre. To encourage this, we can organize various science fiction film competitions to attract young people into the creative process. Film schools and related research institutions should host more of these events, providing a platform for exchange and collaboration between science fiction enthusiasts and emerging talent in the field.For example, the third "Blue Planet Science Fiction Film Week," held in 2021 at Nanjing Niushou Mountain, featured themed screenings, academic forums, and drama project roadshows. It also included events such as the "48-Hour Science Fiction Film Extreme Competition.By connecting the talents and resources from various sectors, the successful execution and establishment of science fiction film projects can be promoted. Organizers should leverage diverse media resources to attract attendees, such as partnering with mainstream video platforms to feature competition entries and provide voting channels for viewers. Additionally, news topics can be pre-designed for social media placement, helping to attract more potential science fiction film enthusiasts through various methods.

Enhance Innovation Capabilities and Strengthen International Cooperation

The development of science fiction films is closely tied to advancements in science and technology, with technological progress playing a crucial role in both the storytelling and the visual effects. As we enter the digital age, the demands for post-production in science fiction films are becoming increasingly stringent. To stay competitive and match the standards of Hollywood, Chinese science fiction films must invest more in the research and development of post-production technologies, continuously updating their production methods to keep pace with the times.The development of artificial intelligence has significantly impacted film creation. AI can analyze and generate screenplays during the pre-production phase and assist with editing in post-production through deep learning techniques. By incorporating AI, filmmakers can drastically reduce resource costs while also pushing the boundaries of content creation.Scientific researchers should keep pace with AI advancements and actively contribute to the creation of complex scenes, character development, and special effects in sci-fi films. Accelerating AI's role within the film industry will help upgrade the entire industry chain. Additionally, the sci-fi film sector can collaborate with high-tech enterprises to cultivate talent, ensuring professional cooperation in film production and enhancing the overall quality of films. Investing in and nurturing sci-fi film talent is a crucial step toward the success of the genre.

Improve the Investment and Financing System

Investing in films carries inherent risks, particularly with science fiction movies. To mitigate these risks, it is essential to enhance investment and financing guarantees and establish a robust credit guarantee system for sci-fi films. This not only provides security for investors but also encourages greater participation in the genre.Before granting a loan, lenders may require film companies to provide collateral, submit a distribution guarantee, or sign a negative take-over agreement. Film producers can also implement a performance guarantee mechanism by securing insurance through a third-party insurer, which typically charges a fee based on the production's risk level. To strengthen their loan application, producers can present banks with a third-party-issued film production agreement, an evaluation of the film's projected revenue, and an assessment of the company's repayment capacity（Shaojin & Xinning Liu,2021).The insurance company should oversee the entire film production process to ensure it proceeds as planned. If deviations occur, the insurer would cover the relevant losses on behalf of the bank. This approach reduces credit risk for both parties while allowing producers to mitigate their own risks by diversifying investments. For example, producers can co-invest in films with multiple studios, and private investors can spread their investments across different films to minimize risk（Jianqi He & Xiao Zhang,2021).

Strengthen Legal Protection to Promote the Development of the Science Fiction Film Industry

In 2020, the China Film Administration introduced the *Several Opinions on Promoting the Development of Science Fiction Films*, marking the first time solutions for the growth of the science fiction film industry were proposed through legal provisions.On November 12, 2021, the State Film Bureau issued the *14th Five-Year Plan for the Development of the Chinese Film Industry*, which further emphasized the promotion of science fiction film production

and presented detailed guidelines to the public. The plan highlighted the importance of developing science fiction films, clarified the relationships between various stages of the creative process, and outlined the future direction for the genre through legal provisions.

China's legal framework for the film and television industry remains relatively underdeveloped, and further efforts are needed to introduce robust legal provisions, particularly for science fiction films. Creators and developers should prioritize intellectual property rights by signing authorization contracts before releasing their works and taking immediate action if their rights are infringed.The government should strengthen the legal foundation for addressing intellectual property violations in the film industry and expedite the refinement of regulatory details（Xueping Cao,2022). Establishing specialized intellectual property trial agencies can improve the efficiency and quality of case resolution, ensuring that creators can protect their rights effectively and promptly under the law.For serious violations, authorities should impose stricter penalties and swiftly enforce bans. Additionally, it is essential to promote the rule of law for intellectual property rights to the broader population, including creative workers, managers, students, and civil servants, to raise public awareness about intellectual property protection(Bei Wei,2022). This will foster a healthy environment for the growth of science fiction films and the broader movie industry.Institutions related to science fiction films should actively promote and uphold legal responsibilities, standardize their operations in accordance with the law, and adhere to professional ethics. By setting an example, these institutions can drive the standardized and sustainable development of the entire industry.

Promote Derivative Product Development and Create Domestically Produced Science Fiction IP

Investors in science fiction films should recognize the critical role of derivative product development in extending the film's impact and profitability. They should carefully identify elements within the film—such as characters, technologies, or iconic scenes—that have the potential to capture the audience's imagination and maintain their interest long after the film's release.By strategically planning for derivative products during the early stages of production, investors can ensure that these elements translate effectively into merchandise, games, or other media, creating additional revenue streams and building a lasting connection with the audience.

Once the design of the derivative products is finalized, the production company should plan the authorization, production, pricing, distribution channels, and promotion as early as possible. This ensures that the launch of derivative products aligns with the movie's release, maintaining seamless communication and consumer access. By doing so, the company can secure a favorable market position and minimize space for pirated merchandise.It is crucial for the production company to tightly control the production process to ensure high product quality（Rongjing Zhao,2012). Given the short life cycle of films—typically lasting only one to two months—and the decline in popularity afterward, the sales of derivative products are also affected. To maximize their value, the company can promote and sell these products in advance, allowing them to "feed back" into the success of the film.After the release of Marvel's superhero movie series, a wide range of action figures appeared on the market. These figures serve as one of the best examples of successful derivatives. After watching the movie, audiences purchase superhero action figures to express their admiration for the characters. In addition to enhancing the fan experience, these action figures generate significant revenue for the movie studios.

Marvel superheroes benefit from a vast IP ecosystem, which has generated substantial wealth for Marvel Studios through film derivatives.

Chinese science fiction films can adopt a similar model. *The Wandering Earth* has already been released in two parts and has become a major film IP among Chinese sci-fi fans. It is now one of the first titles that come to mind when discussing Chinese science fiction cinema, marking a significant success. *The Wandering Earth* has also expanded into a range of derivatives, including toys and everyday consumer products, which is a crucial step in effectively managing and capitalizing on science fiction IP.In the future, as more Chinese science fiction movies emerge, Chinese sci-fi IP will experience a more diverse range of development opportunities. For instance, it can be integrated with industries such as tourism and gaming, as well as with new forms of entertainment like blind boxes and scripted murder games, creating opportunities for cross-border cooperation.

CONCLUSION

Chinese science fiction films have made significant strides since *The Wandering Earth*, but several challenges remain. From the perspective of the film industry chain, the lack of a complete ecosystem continues to hinder the development of science fiction films for audiences. This article uses Hollywood science fiction movies as a model, analyzing key aspects worth emulating and how to adapt these lessons to develop a localized science fiction movie industry chain.Science fiction films are representative of industrialization, and focusing on the development of the industry chain can help propel Chinese science fiction films toward a more industrialized and intelligent future. Measures such as talent training, strengthening the science fiction legal system, enhancing domestic and

international exchanges, improving investment and financing mechanisms, and bolstering domestic science fiction IP all provide a roadmap for the success of China's science fiction film industry.

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