DHSFS

Journal of Digital Humanities and Science Fiction Studies

***DHSFS*, Vol. 1, No. 1, 2026, pp. 181-185.**

Print ISSN: 3105-1278; Online ISSN: 3105-1286

Journal homepage: https://www.dhsfs.com

DOI: Https://doi.org/10.64058/DHSFS.26.1.17

HIEP
Academic Publishing

Two-way Innovation of Science Fiction and History of Science—A Review of *New History of Science: Science Fiction Studies*

Zhang Sirui

Abstract: The core contribution of the joint work by Jiang Xiaoyuan and Mu Yunqiu, *A New History of Science: Science Fiction Studies*, lies in its adoption of an "anti-Whig historiography" as a theoretical framework. The book systematically critiques winner-centered narratives in traditional histories of science. It reintroduces into scholarly focus the long-neglected speculative hypotheses, failed scientific explorations, and science fiction narratives. The book argues that science fiction is not merely a popular adjunct to scientific knowledge. It functions as a public reproduction mechanism for scientific hypotheses, but rather a mechanism through which scientific hypotheses are reproduced and circulated in public cultural spaces, serving as a public extension of scientific thought experiments. While offering a model of historically self-aware interdisciplinary research, the book also leaves room for further exploration in its treatment of life science themes and literary narrative analysis.

Keywords: *A New History of Science: Science Fiction Studies*; History of science; Anti-Whig historiography; Science fiction

Author Biography: Zhang Sirui, Ph.D. candidate at the College of Humanities, Shenzhen University. Research Area: Comparative Literature and World Literature. E-mail: zsrmq2023@126.com.

Received: 02 Mar 2026 / Revised: 09 Mar 2026 / Accepted: 13 Apr 2026 / Published online: 30 Apr 2026 / Print published: 30 May 2026.

题目：科幻与科学史的双向革新——评《新科学史：科幻研究》

摘要：江晓原、穆蕴秋合著《新科学史：科幻研究》的核心贡献在于以“反辉格史学”为理论出发点，系统批判了传统科学史的胜利者书写，将长期被遮蔽的幻想性假说、失败的科学探索及科幻叙事重新纳入科学史的研究视域。该著论证了科幻并非科学知识的通俗附庸，而是科学假说在公共文化空间中的再生产机制，是作为科学思想实验的公共延展。该著为跨学科研究提供高度自觉的史观示范的同时，其在生命科学主题覆盖及文学叙事分析层面亦有可拓展空间。

关键词：《新科学史：科幻研究》；科学史；反辉格史学；科幻文学

作者简介：张思睿，深圳大学人文学院博士研究生，研究方向：比较文学与世界文学。电邮：zsrmq2023@126.com。

For a long time, science fiction has occupied a marginal and ambiguous position in both the study of the history of science and literary studies. In histories of science, it was often treated as popularization. Within the historical narrative of science, it has often been viewed as a form of popularization of scientific knowledge, while in literary studies, it has largely been treated as a genre of literature, with its dimensions of intellectual and knowledge history frequently downplayed. Jiang Xiaoyuan and Mu Yunqiu’s co-authored monograph *A New History of Science: Science Fiction Studies*（Shanghai Jiao Tong University Press，2016）emerges as a significant contribution within this academic context. Upon my first reading, I was struck by its subversive academic perspective. It does not cling to disciplinary conventions, but instead breaks through the long-standing barrier between the history of science and science fiction studies. In an era where contemporary academia increasingly emphasizes interdisciplinary integration, such groundbreaking work is especially valuable.

Rather than attempting to “legitimize science fiction,” the book is more fundamentally concerned with reflecting on and transcending the Whig history that has long dominated the history of science, thereby offering an alternative understanding of the production of scientific knowledge without defaulting to narratives of “inevitable progress” or “eventual correctness.”

In this sense, science fiction is not a random choice of subject, but a methodologically significant entry point. Scientific development is not a linear path of progress toward contemporary science, but rather a process constantly intertwined with fantasy, detours, and uncertainty. Science fiction is precisely the crucial form through which these thought experiments obscured by Whig history are narrativized and publicized. These narratives therefore constitute indispensable materials for understanding the history of science.

1.

The book’s theoretical starting point is a deliberate critique of the “Whig History” that long shaped the history of science. “Whig History,” as Herbert Butterfield reveals in *The Whig Interpretation of History*, is a historiographical approach that retrospectively judges past ideas by today’s standards deemed “correct.” “Taking ‘the present’ as the measure and reference to examine ‘the past’ is a crucial part of Whig historical

interpretation." (Butterfield, 2012, p. 12) In the history of science, this view often depicts scientific development as a steady march toward modern science, keeping only those theories and figures proven "correct."

Under the Whig interpretation of history, many theories, thought experiments, and speculative hypotheses that did not lead to the contemporary scientific system have been systematically excluded from historical narrative. Jiang Xiaoyuan states in the preface, his "scientific-historical study of science fiction" seeks to "incorporate science fiction—some successful literary creations, some failed scientific explorations—into the scope of scientific history research," because "the traditional scientific history's unwritten rule of 'only dealing with the successful and the accomplished' has obscured a significant portion of the historical development of science" (Jiang and Mu, 2016, p. 3).

It is precisely under this critical awareness that the author clearly articulates a historical perspective distinct from Whig historiography. They emphasize that the true history of scientific development is not a smooth, upward trajectory, but one filled with detours, reversals, and failures. Many theories later proven false still held significant heuristic and methodological value within their historical contexts. The book cites discussions by Olbers, Gauss, and Bessel on the possible habitability of the Moon as an example. "Such debates have deep historical roots. Orthodox history of science often filter them out completely as whimsical, unfounded 'errors'." (Jiang and Mu, 2016, p. 129) The book makes a significant contribution by bringing anti-Whig historical approaches to Chinese scientific historiography (Liu, 1996, p. 47).

Therefore, fantasy and imagination are no longer opposed to scientific rationality, but are now understood as genuine components of scientific exploration which were long obscured by Whig historiography yet persistently present throughout the history of scientific inquiry. The author broadens the research perspective from established scientific theories to seriously considered yet ultimately unsuccessful scientific conjectures, thereby laying the ground for a more open and historically rich approach to writing the history of science.

What is particularly noteworthy is that the book does not merely remain at the level of conceptual endorsement of relevant theories, but through a series of specific and detailed case studies, it puts anti-Whig historiography into practicable research. This very aspect constitutes one of its most significant scholarly contributions.

2.

If the reflection on Whig historiography forms the theoretical premise of the entire work, defining "science fiction" as a public extension of scientific thought experiments constitutes the author's pivotal methodological advancement. Jiang Xiaoyuan emphasizes that science fiction film reviews and popular writings are merely "byproducts of the historical study of science in science fiction" (Jiang and Mu, 2016, p.3). Beneath them lies a clear and conscious academic problem awareness .

Traditionally, scientific thought experiments have been regarded as highly specialized activities conducted by scientists within the realm of theoretical reasoning, with their audience primarily confined to

the academic community.

The New History of Science: Science Fiction Studies argues that when those scientific thought experiments enter the public cultural sphere, they often take on new life through science fiction narratives. Here science fiction is not merely a “literary packaging” of science, but rather a reproduction of scientific hypotheses across diverse media and contexts.

This argument is fully developed through the analysis of multiple core cases. For instance, in the discussion of the Fermi paradox and extraterrestrial civilizations, the authors not only systematically trace the historical evolution of related scientific hypotheses, but also demonstrate how these hypotheses are transformed into narrative motifs about cosmic solitude, civilizational conflict, and survival ethics in science fiction. In this process, science fiction does not deviate from scientific discourse, but rather becomes a crucial space where scientific uncertainty is fully unfolded and critically examined. To truly understand the role of science in modern society, one must examine how it enters the public through media, literature, journals, and even rumors and hoaxes. Literature affords humans “unprecedented freedom to think, where anything may be true, somewhere, sometime, and there is no heresy” (Jameson, 2011, p. 28).

In the discussion of time travel, the authors places science fiction texts alongside theoretical conceptions of time in physics, demonstrating that both share the structural features of “thought experiments.” It is precisely through this comparison that science fiction is revealed not as mere imaginative entertainment, but as a cognitive mechanism which transforms highly abstract scientific problems into tangible, narrative forms. This approach fundamentally challenges the Whig historical perspective which evaluates the ideas by their correspondence to established scientific outcomes.

As the discussion unfolds, the book gradually shifts its focus from knowledge production within the scientific community to the dissemination and transformation of scientific ideas in broader sociocultural spaces. This transition naturally leads the book into the domain of scientific cultural history in its latter half.

Particularly striking is the authors’ discussion of *Nature*’s long-standing practice of publishing science fiction. By tracing this institutional practice, the book demonstrates that the scientific community and science fiction have never been strictly separated, but rather maintained complex and subtle interactions over an extended historical period. This insight powerfully challenges the stereotype of science fiction as mere "non-scientific culture," and also reveals the occluding effect of Whig historiography in historical writing.

3.

Overall, the primary academic value of the book lies not in proposing numerous novel conclusions, but in successfully demonstrating an interdisciplinary approach with a keen historical consciousness. By persistently and systematically reflecting on Whig historiography, the authors brings back into the historical fold, fantastic speculations, failed hypotheses, and science fiction texts which were long excluded from orthodox narratives. In doing so, the work expands the scope of science history while laying a solid history-of-knowledge foundation for science fiction studies.

Within the context of Chinese academia, the book's strengths are particularly evident. First, the authors demonstrate a solid command of English-language scholarship and international research frontiers. They internalize rather than merely transplant theories. Second, the case studies are concrete and in-depth, effectively avoiding the tendency toward generalization often seen in interdisciplinary research. Third, the writing balances academic rigor with vivid storytelling and problem-oriented approach, which demonstrates the authors' passion in and dedication to the subject matter.

Admittedly, the book is not without its limitations. For instance, the discussion focuses primarily on physics and astronomy, with relatively little attention paid to life sciences. The discussion on literary forms and narrative strategies is not fully exploited**.** These limitations should be viewed not as flaws that undermine the work, but rather as opportunities for future study.

As a work about the history of science that takes science fiction as its entry point, the book successfully disrupts the cognitive inertia imposed by disciplinary boundaries. Through a systematic reflection on Whig historiography, it reminds us that the history of science is not merely a monument to successful theories, but should equally record unfulfilled speculations, forgotten divergences, and imaginative endeavors.

Funding: This research received no external funding.

Conflicts of Interest: The author declares no conflict of interest.

ORCID

Zhang Sirui [ID] https://orcid.org/0009-0004-6166-8108

References

赫伯特·巴特菲尔德（2012）：《历史的辉格解释》，张岳明，刘北成译。商务印书馆。

[Butterfield, Herbert (2012). *The Whig Interpretation of History*, translated by Zhang Yueming & Liu Beicheng. Commercial Press.]

江晓原、穆蕴秋（2016）：《新科学史：科幻研究》。上海交通大学出版社。

[Jiang Xiaoyuan, Mu Yunqiu (2016). *New History of Science: Science Fiction Studies*. Shanghai Jiao Tong University Press.]

刘兵（1996）：《克丽奥眼中的科学——科学编史学初论》。山东教育出版社。

[Liu Bing (1996). *Science in Cleo's Eyes: An Introduction to the Historiography of Science*. Shandong Education Press.]

詹姆逊等著（2011）：《科幻文学的批评与建构》，王逢振等译。安徽文艺出版社。

[Jameson, Fredric, et al. (2011). *Criticism and Construction of Science-Fiction Literature*, translated by Wang Fengzhen et al. Anhui Literature & Art Publishing House.]