

Analysis on the Copyright Issues of Academic Publishing Against the Background of Media Convergence*

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Abstract—With the development of digital technology, a large number of digital media have emerged. These digital media have caused great impact on the traditional publishing industry. Therefore, China proposes the strategic requirements for the integration of emerging digital technologies and traditional publishing. In the academic publishing industry, with the university journals and academic monographs as the representative, the innovation path and integration path of traditional publishing are constantly explored in the context of media integration. However, against the background of media integration, the new path of academic publishing poses a challenge to China's current Copyright Law. The new path of academic publishing faces the problem of copyright and copyright infringement. It is proposed that the integration and development of academic publishing should be based on the legislative response, with the aim of improving copyright awareness and technological perfection, so as to achieve the balance between copyright protection and social benefit value of academic publishing.

Keywords—media integration; academic publishing; copyright; fair use; block chain

I. INTRODUCTION

The continuous development of media integration will promote the transformation of the academic publishing industry. On the one hand, the change brings readers a diversified reading experience, and the new communication system based on mobile Internet, big data, artificial intelligence and other technologies can realize the deep integration of technology, content, channels and platforms. On the other hand, the new communication system will challenge the relatively lagging law. This paper uses the literature research method to sort out the concept of academic publishing, the scope and the development path of academic publishing in the context of media integration. Further, through the analysis of cases and current legal provisions, it is concluded that the new path of academic publishing faces the problem of copyright infringement and copyright infringement. Finally, it comprehensively analyzes the three aspects of legislation, management and technology, and proposes countermeasures for the copyright protection of academic publishing in the context of media integration, in order to clear the legal obstacles for the integration and

development of the academic publishing industry, promote the development of the academic publishing industry, and realize the value of social benefits.

II. AN OVERVIEW OF ACADEMIC PUBLISHING IN THE CONTEXT OF MEDIA INTEGRATION

Academic publishing, as one of the four major publishing fields, its main function is the window of academic development and the carrier of academic achievements. It has the characteristics of high professionalism and social benefits as the core value, which is essentially different from other publications. Therefore, it is useful to clarify the concept of academic publishing, the scope and the development path of academic publishing in the context of media integration, which is conducive to defining the scope of the research and better analyzing the problems of copyright infringement and copyright infringement. Put forward a coping strategy.

A. Concept of the Principle of Proximity Cause

In the 1990s, Professor Puer of the Massachusetts Institute of Technology first proposed the concept of media convergence, which meant that various media presented a trend of multi-functional integration. American scholar Park believes that technology is the basis of media integration and can gradually influence the ecological value chain of media integration [1]. Veglis focuses on the research of media publishing technology. He believes that cross-media publishing contains many elements such as text, pictures, audio, video, etc. Media integration puts higher demands on media publishing technology [2]. Jenkins H. mentioned the cultural logic of media integration in *The Cultural Logic of Media Convergence*. He believes that the strong demand for multiculturalism is one of the important reasons for media integration [3]. Media convergence has developed to the present day. With the further development of digital technology and the widespread use of electronic device hardware, the form of media convergence has been manifested as a complex system of content synthesis and technology, and has become a mobile Internet, big data, artificial intelligence, and a new communication system based on technology.

Daniel Coit Gilman, the founder of Johns Hopkins University, the first research university in the United States, originally proposed the concept of academic publishing in the 19th century. He has discerned the university press as an important platform for the dissemination of scientific research results. With the development of higher education, many ordinary people have gradually become readers of academic books. Daniel Coit Gilman believes that academic publishing is represented by university presses, relying on government research funds, and researchers are content producers, specializing in academic publications [4]. Little, Geoffrey Robert believes that academic publishing has always been one of the missions of modern research universities. Since 2013, Concordia University in Montreal has been working to create a library-based academic publishing house. Create a dual publishing model: free e-books and open access without any restrictions, printed versions can be sold to individual readers, libraries and suppliers [5]. Today, with the change of communication technology, academic publishing has become a publishing industry with academic journals and academic monographs as its core functions based on its highly professional content and its core functions of displaying academic frontier content and achieving social benefits.

B. The Status Quo of Academic Publishing Against the Background of Media Integration

In 2014-2015, China issued the "Guiding Opinions on Promoting the Digital Transformation and Upgrading of the Press and Publication Industry" and the "Guiding Opinions on Promoting the Integration and Development of Traditional Publishing and Emerging Publishing" Two major documents. Among them, in 2015, the Ministry of Education, the State Administration of Press, Publication, Radio, Film and Television also issued the "Opinions of the Ministry of Education, the State Administration of Press, Publication, Radio, Film and Television on Further Strengthening and Improving the Publishing Work of Colleges and Universities", encouraging university publishing units to support advanced technology and content construction. Fundamentally, it is strived to achieve the complementary and integrated development of traditional publishing and emerging publishing. The above policies have greatly promoted the development of academic publishing in China under the background of the media. China's academic publishing industry is constantly exploring the development path of academic publishing in the context of media, and is committed to the integration of technology integration, content integration and channel integration.

At present, academic publishing in China mainly achieves integrated publishing through two ways: one is the digital path fusion method of academic journals represented by university journals, and the other is the deep fusion publishing method represented by academic monographs and higher education textbooks. The academic journals are mainly through the cooperation with China Knowledge Network and other paper databases, and the editorial department of university journals to open the self-media accounts of social media such as official Weibo and WeChat

public account as digital publishing. The form of this digital path is relatively mature. However, only the digital publishing forms of traditional publishing journals are presented and disseminated, and the forms of content separation and distribution are not innovative enough, and the deep integration of content, channels and platforms is not realized. The other is a deep-integrated publication represented by academic monographs and textbooks of higher education. The expression is in the form of paper books, which can be realized by adding two-dimensional codes through technical means and scanning the two-dimensional codes in the books through electronic devices. Paper books and video, audio, online community, related links and other forms of content display convergence, technically achieve personal reading and reader community exchange, content on the static text content and video, audio and other integration, to give readers a diversified reading experience, truly realize the deep integration of technology, content, channels and platforms. Among them, China National Press and Publication Administration published the "Digital Paper Book" of the RAYS system, which was built and integrated by the Key Laboratory of Fusion (Wuhan), as a typical representative of deep integration publishing.

III. THE COPYRIGHT ISSUE IN THE DEVELOPMENT OF ACADEMIC PUBLISHING AGAINST THE BACKGROUND OF MEDIA INTEGRATION

The way the public obtains information will change with the change of communication technology. At present, China's academic publishing industry gradually explores the path of traditional media digitization in the context of media integration, and continuously innovates and develops the integrated publishing industry of academic works. However, in the process of change, it is bound to challenge my current copyright law, and the emerging communication technology will make the copyright of academic publications more vulnerable. In addition, in the process of achieving integrated publication of academic publications, if the academic publishers have a weak sense of copyright, they will expose academic publishers to the risk of infringement of the author's copyright neighboring rights.

A. Copyright Protection Is More Difficult in the Context of Media Integration

In the process of exploring the integrated publishing path in China, based on the social product microblog and WeChat public number has a billion user base, the editorial department of university journals will use Weibo and WeChat public number as the primary choice for digitizing academic works to pass the media. The efficient dissemination efficiency and influence of the era demonstrates the brand and influence of academic journals. However, in the context of new media, emerging digital technologies make copyright protection more difficult. Compared to traditional publishing environments, emerging technologies have made academic publishing copyrights less costly to infringe in the context of converged media. In the context of traditional publishing, piracy is the main form of copyright infringement. For pirated academic works,

scanning, copying, binding, etc. are required, and there are many infringement processes and high costs. In the context of "one-time production, multi-distribution" of the fusion publication, the content of academic works published through Weibo and WeChat public account makes the copyright infringement cost of academic works lower, and only needs to be copied and pasted on electronic devices. . With the development of technology, it is difficult to prevent copyright infringement of academic works from the preventive measures of academic websites such as China Knowledge Network and Wanfang. The software market introduces files such as CAJ format, and PDF files are converted into WORD document files, making it easier to copy and modify only the content. More seriously, hackers write cracked academic database pages to read the prohibition of copying technical code, making the technology to protect copyright means. The development of text recognition technology has made it possible to extract text from pictures through mobile phones. These emerging technologies make the copyright protection of academic publications face various forms of challenges, and copyright protection is extremely difficult.

B. Frequency of Neighboring Rights Infringing Copyright in the Context of Media Integration

In recent years, there have been many cases extended power of copyright infringement in the publication of academic works in China. The representative case is the plaintiff Sun Weitao v. the defendant "Chinese Academic Journal (CD-ROM)" Electronic Magazine (referred to as the magazine), Tongfang Zhiwang (Beijing) Technology Co., Ltd. (referred to as Tongfang Zhiwang Company) infringement of copyright disputes. In this case, the plaintiff's master's thesis was not authorized to the magazine and Tongfang.com. The plaintiff found that the second defendant had submitted the paper to China Knowledge Network without the right to disseminate the master's thesis. The online reading and downloading service is profitable for external sales. The final court ruling: According to Article 12, paragraph 12 of the Copyright Law of China, the copyright owner has the right to disseminate information network, that is, to provide works to the public by wire or wireless. The public can obtain the right to the work at the time and place selected by the individual. The magazine and Tongfangzhi.com have included the article in the Dissertation Database and sold it to Beijing University of Technology for transmission through the local area network without the author's permission. The plaintiff's copyright to the article shall be legally responsible for stopping the infringement, apologizing, and compensating for the loss.

China's academic journals and magazines have been affected by the above-mentioned cases, which has enhanced the awareness of copyright in the publication of academic journals. Most magazines require authors to authorize the network communication rights of journals when they sign copyright agreements with authors. Right, some magazines will also ask the author to authorize the work exclusively to the magazine. The author only reserves the right to use the individual in academic exchanges. Personally believe that the

content of the above copyright agreement has caused the author's rights to be restricted, and whether it complies with the provisions of Articles 39 and 40 of the Contract Law of China: If a contract is concluded by using the format clause, the party providing the format clause shall follow the principle of fairness, determine the rights and obligations between the parties, and take reasonable steps to draw the attention of the other party to the terms of exemption or restriction of their responsibilities, and explain the terms according to the requirements of the other party. At the same time, the provision of the format clause is exempt from liability, aggravating the other party's liability, and excluding the other party's main rights. Whether the format clause in such a copyright agreement is valid is debatable.

On the other hand, in recent years, the development of deep integration of academic monographs is also faced with the problem of infringement of neighboring rights. The deep integration of publishing on the content to achieve static text content and video, audio and other integration, while providing external related links to readers. The reading experience, under this publishing mode, also requires the publisher not only to obtain the copyright authorization of the original work, but also to obtain the right of network communication and other neighboring rights to record audio and video works. In addition, links to externally relevant content used in published academic monographs also require corresponding rights to network communication. The problem of copyright infringement that may be faced in the deep integration of academic monographs will evolve with the continuous development of technology, far from the content discussed above.

C. The Lag of China's "Copyright Law" Cannot Cope with the New Communication Environment

China's current "Copyright Law" was revised for the second time in October 2010. After nearly a decade of development of communication technology and changes in the communication environment, the legislative environment and legislation to be solved at that time were significantly different from today. At present, China began to enact the third revision of the Copyright Law, and in June 2014, it published the "Draft for Review", which adjusted the copyright protection exception to a certain extent. The most representative of these is the current China's current "Copyright Law" is not clear about the rational use of provisions, China's "Copyright Law" Article 22, paragraph 1, on the exemption of copyright provisions, the provisions are: for individuals Learning, researching or appreciating, using the works already published by the author does not constitute copyright infringement, and may not be paid without the permission of the copyright owner, but the name of the author and the name of the work shall be specified.

At present, there is a problem in the application of the law, that is, whether the user shares his favorite works for the purpose of learning, research, and communication, whether it conforms to the scope of fair use of Article 22 of the Copyright Law, and whether it constitutes infringement, the current law. In the legislative environment at the time, the use of scenes for study, research, and communication was

academic discussion, classroom lectures, etc. Today, the vigorous development of social networks, coupled with the development of academic publishing in the context of media integration, learning, research, and communication. The purpose of whether the use can be expanded to explain to sharing, or reference to knowledge payment, and so on. Regardless of the time when new legislative amendments or legal interpretations should take into account the fissile spread of social media, there is a need to show the balance between academic frontiers and social benefits and the interests of authors.

IV. COUNTERMEASURES AGAINST COPYRIGHT PROBLEMS IN ACADEMIC PUBLISHING AGAINST THE BACKGROUND OF MEDIA INTEGRATION

The media integration of academic works has also opened up a new era of accelerated development. However, from the historical experience and current situation, the copyright issue has become a major bottleneck restricting the media integration of academic works. The dominant manifestation is that various copyright infringement situations in the media age are varied; the existing copyright laws and disputes are constantly controversial. How to reconstruct a new copyright order that can not only protect the interests of academic journal copyright holders, but also promote the smooth dissemination of journal academic papers is a prominent topic in the industry and learning interface.

A. *Legislation: Modifying the Constituent Elements of the Reasonable Application of Copyright*

China began the third revision of the Copyright Law, and in June 2014, it published the "Draft for Review", which adjusted the copyright protection exception to a certain extent. For the rational use of copyright, China's current law adopts the "limited exhaustive enumeration" approach. However, with the development of media integration, there have been some cases outside the law enumeration, and local courts are faced with the dilemma of how to apply the law. The reason is that the reasonable use system of copyright lacks the criteria for the identification of "constitutive elements". China should refer to the provisions of Article 9(2) of the Berne Convention on the system of fair use of copyright. "The laws of the member states of this Union are allowed in certain of the above works and are reproduced under special circumstances, as long as such copying does not impair the normal use of the work and does not infringe the author's legitimate interests for no reason." In the third revision of the Legislation Law, the establishment of the "three-step test" became a test for the rational use of copyright. The first step is to judge whether the act constitutes copyright infringement. The second step: the act should not be normal with the right holder. The use conflicts; the third step: the act does not unreasonably infringe the legitimate rights of the right holder.

B. *Management: Enhancing Copyright Awareness and Promote Industry Development*

The academic publishing industry should improve the copyright law awareness of industry practitioners through training and assessment, and deal with the violation of copyright and copyright infringement. If the academic publisher's copyright awareness is weak, it will expose academic publishers to the risk of infringing the author's copyright and neighboring rights, and will assume legal responsibility. On the other hand, the promotion of copyright awareness in the academic publishing industry will help protect its rights and interests. When the copyright of academic works is infringed by new methods, it can correctly collect evidence and safeguard the rights through law enforcement and judicial procedures to promote the development of the industry.

C. *Technically: Using Blockchain Technology to Strengthen Copyright Protection*

When blockchain technology matures, blockchain technology is used to protect copyright. Compared with traditional copyright works, copyright works in the context of media integration are more easily copied, and the cost of copying is close to zero, but the detection, forensics and rights protection of infringements require extremely high costs. Because online information can be modified and deleted at any time without leaving traces, online infringement is difficult to obtain evidence. If someone publishes another person's work on the website, they can obtain the evidence through screen capture and camera shooting. However, if there is no other evidence to prove, it is more difficult to prove the infringing work, if the website has deleted the infringing work. The choice of notarization for evidence is very expensive. Blockchain technology has the technical characteristics of being difficult to tamper and decentralize. All nodes in the blockchain network are jointly booked and maintained together, and any single node cannot tamper with the records. These technical principles and features can effectively solve the problems in the dissemination of works and judicial protection, and provide a new opportunity for copyright protection.

V. CONCLUSION

Media convergence, as a new communication system based on mobile Internet, big data, artificial intelligence and other technologies, has a huge impact on the academic publishing industry. In terms of the emerging industry of academic publishing in the context of media integration, this paper only discusses the comprehensive legislation, management, and technology to deal with the violation of copyright and copyright infringement in academic publishing, in order to realize the copyright protection and social benefit value of academic publishing. However, the problems involved in this field are far from the above discussion. It is expected to lay the foundation for the improvement of China's legislation while promoting the development of new technologies and industries.

REFERENCES

- [1] Song C U, Park M Y. The Analysis of the Media Convergence Ecosystem Value Chain based on Broad-cast and Communications Media Convergence Technology [J]. International Journal of Multimedia and Ubi-quitous Engineering, 2015, 1(10).
- [2] Veglis A, Dimoulas C, Kalliris G. Towards intelligent cross-media publishing: media practices and technology convergence perspectives [M]. Media Convergence Handbook-Vol.1.Springer Berlin Heidelberg, 2016.
- [3] Jenkins H. The cultural logic of media convergence[J]. International journal of cultural studies, 2004, 7(1)
- [4] Camhi J. A Dam in the River: Releasing the Flow of University Ideas[M]. New York: Algora Publishing. 2013:149.
- [5] Little. Geoffrey Robert.Old Traditions and New Technologies: Creating Concordia University Press[J]. Journal Of Scholarly Publishing, 2018, 49(2): 213-230.