Original Paper

The Development Dilemma and Institutional Breakthrough of Fair Use of Copyright in the Network Environment

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Abstract

As a core mechanism for balancing the exclusive rights of right holders and the public's need to access knowledge, the fair use system of copyright is facing multiple challenges in the network environment. By analyzing the current status of the system, this study points out the predicaments it is conconfronted with, such as the limitations of the legislative model, the imbalance of interests between right holders and the public, and the ambiguity of the "reasonableness" judgment criteria. To respond to the new requirements of the internet era for interest balance, innovation incentives, and public expression space, it is necessary to improve the system from three aspects: innovation of the legislative model, reconstruction of value concepts, and refinement of judgment criteria. This aims to achieve a balance of interests among right holders, users, and the public, and promote the coordinated development of copyright protection and cultural communication in the network environment.

Keywords

network environment, copyright Law, fair use system

1. The Value and Function of the Copyright Fair Use System

1.1 Balance between Fairness and Efficiency

The fair use system embodies the rational concept of fairness and justice, ensuring a fair environment for creative works. By allowing the use of others' works under specific circumstances, this system also breaks the copyright holders' exclusive position over knowledge, enabling knowledge to be disseminated and shared on a broader scale (Gao, L., 2023, pp. 41-52). It achieves a balance of interests between creators and users, ensuring that everyone can enjoy and use intellectual wealth on a fair basis. The fair use system improves the efficiency of the dissemination and utilization of works. It permits the use of works without the permission of copyright holders or the payment of remuneration under specific conditions, thereby reducing transaction costs, accelerating the speed of information

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circulation, contributing to the optimal allocation of social resources, and promoting the development of cultural and scientific undertakings.

1.2 Interest Coordination and Balance

The fair use system is a restriction on copyright rights. In traditional concepts, copyright means that the author or right holder has absolute control over their work. However, the fair use system stipulates that in certain circumstances, others can use the work free of charge without the copyright holder's consent. This essentially limits the scope of copyright exercise, clarifies that non-commercial use of copyrighted works in specific situations does not constitute infringement, thereby providing a legal safe haven for the public to use these works and effectively reducing the risk of legal disputes arising from unintentional infringement (Wu, H. D., 1996, pp. 30-38). Although the fair use system imposes certain restrictions on the rights of copyright holders, such restrictions are reasonable and necessary. They prevent copyright holders from excessive monopoly and abuse of their works, and promote the healthy development of the cultural industry.

2. Changes in the Impact of the Fair Use System in the Network Environment

2.1 Expansion of the Scope of Copyright Holders' Rights

The ongoing expansion of copyright has sparked concerns about the public interest, but excessive expansion may threaten the openness and free flow of information, increasing the likelihood of anti-competitive behavior. When copyright holders impose excessive protection on works, they may limit the public's access to and use of such works, thereby hindering the dissemination and sharing of information. The openness and free flow of information are crucial for maintaining the balance of the information ecosystem. However, the excessive expansion of copyright may disrupt this balance, leading to unequal distribution of information resources and excessive commercialization, thereby exacerbating information asymmetry and the digital divide. Additionally, the excessive expansion of copyright may hinder market competition. When copyright holders overly control the market, the entry and innovation of other competitors may be restricted, undermining the market competition mechanism. Ultimately, the excessive expansion of copyright may harm consumer interests. When copyright holders overly control the market, consumers may be unable to access better products and services, thereby increasing their consumption costs and risks (Wang, X. J., 2016, pp. 14-17, p. 26). Therefore, in the expansion of copyright, special attention should be paid to maintaining a balance between the interests of authors and other copyright holders and the public interest.

While the expansion of copyright protection has strengthened the protection of works, it has also intensified the conflict of interests between rights holders and users: rights holders seek to strengthen control through technology to curb infringement, while the public expects more convenient access to information. This contradiction may hinder the dissemination of information, disrupt market competition mechanisms, and harm consumer rights. Therefore, it is necessary to achieve a dynamic balance between copyright protection and the public interest by improving legal systems, clarifying

rights boundaries, strengthening regulatory enforcement, and promoting technological innovation.

2.2 Limited Scope of Application of Fair Use

With the rapid advancement of the internet and digital technology, the ways in which works are disseminated and utilized have undergone profound transformations. However, the high degree of openness and anonymity of the internet makes it challenging to regulate the use and dissemination of works. Users can easily access, copy, disseminate, and adapt works through various devices, and this convenience has, to some extent, undermined the traditional restrictions imposed by copyright law on the use of works. In response to the weakening of control over works, copyright holders have begun to adopt measures such as digital watermarking and encryption technology to prevent unauthorized copying and dissemination, thereby protecting their legitimate rights and interests. While these technical measures not only strengthen copyright holders' control over works but also generate additional economic returns for them, such technical protection methods may also overly restrict the scope of fair use by the public, thereby impacting the public's freedom to access information and knowledge (Lai, X. P., & Xu, Y., 2022, pp. 185-198).

Under Chinese current legal framework, the Copyright Law explicitly lists the circumstances under which fair use is permitted (Zhang, Y. T., 2010, pp. 107-109). Although these provisions are specific and clear, their limitations have become increasingly apparent in the rapidly evolving and complex environment of the internet. Relying solely on these explicit circumstances to determine whether online behavior constitutes fair use makes it difficult to adapt to new situations and issues that arise, thereby limiting the scope of fair use. In 2020, the Copyright Law underwent its third revision, introducing a catch-all provision for "other circumstances specified by laws and administrative regulations" to enhance flexibility. However, due to the limited specific provisions in laws and administrative regulations regarding such circumstances, this catch-all provision has not substantively expanded the scope of fair use.

2.3 The Boundary between Reasonable Use and Infringement Is More Ambiguous

In the digital age, the boundaries between fair use and infringement have become increasingly blurred due to technological advancements, leading to diverse and flexible judicial practices. While information technology has transformed the ways in which works are disseminated and utilized, posing challenges to the principle of fair use, courts may issue non-compensation rulings in infringement cases based on a balancing of interests, thereby safeguarding the rights of copyright holders while avoiding excessive punishment. This reflects the legal system's wisdom in balancing the protection of private rights with the promotion of public interest. The core value of copyright law lies not only in protecting the individual rights of creators to stimulate creativity but also in promoting social and cultural prosperity and progress. It must respect authors' rights while also considering the overall well-being of society, ensuring the reasonable flow of knowledge and information, and providing sustained momentum for cultural diversity and social innovation (Chen, J., 2019, pp. 50-64, p. 207).

In the Internet environment, fundamental changes in the ways works are obtained and used have blurred the line between fair use and infringement. The rapid dissemination of digital works has reduced the cost of obtaining them, making it easy for the public to access and use them. To strengthen control, copyright owners often use technical measures to restrict access and require payment for legal rights of use. In this context, the public may circumvent technical measures to use works for free. Such behavior may appear to be infringement on the surface, but in essence, it is no different from traditional fair use and does not cause additional harm to rights holders.

2.3.1 Blurred Boundaries of Private Copying

In the online environment, private copying has become extremely common and difficult to regulate. Users can easily search for and download the resources they need online, often accompanied by statements such as "for personal learning, research, and exchange purposes only." However, the boundaries of private copying are not clear-cut and may gradually evolve into large-scale unauthorized distribution, thereby harming the interests of copyright holders. Additionally, the distinction between private and commercial copying has become blurred. Some activities that were originally intended for private use may, in the online environment, be transformed into commercial activities through sharing or uploading, thereby generating economic benefits.

2.3.2 Temporary Duplication Causes Controversy

During web browsing or caching processes, computers automatically generate temporary copies of works, which are referred to as temporary reproductions. There is no consensus among academics and judicial practice regarding whether temporary reproductions constitute infringing acts. The complexity of this issue primarily stems from the nature, purpose, and impact of temporary reproductions on the rights of copyright holders. In academic circles, some scholars argue that temporary reproductions should not be considered infringing acts due to their technical neutrality and non-commercial nature. Temporary copies are often an unavoidable part of technical processes. When artificial intelligence uses works as training data, it does indeed generate copies of the works. However, not all of these copies are permanently stored, and thus do not constitute legally significant "copies" under copyright law (Hua, J., 2019, pp. 29-39). However, these copies often exist solely as intermediate products in the processing phase, with the purpose not being to preserve or disseminate the works long-term, but rather to enhance the model's performance. Once training is complete, these temporary copies may be discarded or overwritten and no longer retained in the system. This process does not involve the long-term preservation or dissemination of the works. Characterizing these technical, unintentional copying actions as infringement could hinder the normal development and application of technology. Furthermore, many temporary copying actions lack commercial intent and are instead performed by users for personal learning, research, or appreciation purposes. In such cases, classifying temporary copying as infringement may be overly stringent. However, some scholars hold opposing views, arguing that even temporary copying may pose a potential threat to the interests of copyright holders and should therefore be subject to copyright law regulations. This controversy further blurs the

boundaries between fair use and infringement.

2.3.3 Technological Advances Blur Boundaries

The development of internet technology has opened up new possibilities for the dissemination of works, but it has also blurred the lines between fair use and infringement. The application of technologies such as deep learning and artificial intelligence has made it easier to automatically create, adapt, and disseminate works. These technologies can generate new works based on large amounts of data and algorithms, but in the process of creation, they may draw heavily on the content or style of existing works. If such works are created without the permission of the original copyright holder, they may constitute infringement. The extent to which such automatic creation and adaptation constitutes fair use versus infringement has become an urgent issue requiring resolution. Additionally, certain technical tools such as VPNs and cloud storage have facilitated the unauthorized dissemination of works, further blurring the lines between fair use and infringement.

3. Review of Issues Related to the Existence of the Fair Use System

3.1 The Rational Use of Legislative Models Has Limitations

The fair use system plays a crucial role in copyright law. On the one hand, by reasonably defining the boundaries of use, this legislative model ensures the free flow of knowledge and information, providing the public with opportunities to access, learn from, and utilize existing works, thereby promoting the inheritance and development of culture. On the other hand, the fair use principle also provides creators with the necessary creative space and sources of inspiration, allowing them to legally quote, draw from, or comment on others' works while respecting the original author's rights, thereby stimulating creative enthusiasm and innovative vitality. However, the fair use legislative model currently faces a series of challenges, particularly the tension between the certainty and adaptability of legal rules, as well as issues related to the interaction between legislation and judicial practice (Liu, S. L., & Ding, Y. C., 2024, pp. 61-65). Article 24 of China's Copyright Law adopts an explicit enumeration legislative model, clearly specifying which behaviors constitute fair use. The advantage of this approach lies in its clarity and guidance, but its drawback is that it cannot cover all potential fair use scenarios. With the emergence of new technologies and new forms of works, and the continuous expansion of the subject matter and forms of copyright, existing legal provisions may no longer apply, leading to legal gaps in practice. In contrast, the open-ended legislative model, particularly the "fair use" principle, demonstrates high flexibility. This principle permits the use of copyrighted works without the copyright holder's permission under specific conditions, aiming to promote the widespread dissemination of knowledge and innovative development. This principle skillfully balances the protection of copyright holders' rights with the public's legitimate need for use. By establishing reasonable terms of use, it ensures that the public can fully utilize copyrighted works while respecting copyright, while also preserving necessary rights protection for copyright holders. However, due to the relative ambiguity of its standards, this may lead to unpredictable outcomes in judgments, increasing the complexity of

judicial rulings. Secondly, there is the ambiguity of the four criteria for consideration. The determination of fair use is typically based on four criteria: the purpose and nature of the use, the nature of the copyrighted work, the quantity and substantiality of the portion used, and the effect of the use on the potential market or value of the copyrighted work. However, these criteria themselves possess a certain degree of ambiguity. This ambiguity may result in unpredictable outcomes, increased complexity in judicial adjudication, and uncertainty in the application of the law. Under an enumerative legislative framework, while fair use scenarios are specifically defined, determining whether a particular act constitutes fair use still requires judges to exercise discretion based on the specific circumstances. Especially in the online environment, where the ways and contexts of work use are extremely diverse, this poses challenges for judges when exercising discretion (Wang, H. Y., 2013, pp. 187-189).

3.2 Imbalance of Interests between the General Public and Copyright Holders

With the rapid development of the internet, the role of information network dissemination rights in copyright law has become increasingly prominent, providing strong legal support for the protection of copyright holders' rights in cyberspace. This change has undoubtedly enhanced copyright holders' control over the online dissemination of their works, but it has also raised an issue that cannot be ignored: the public's reasonable use of works has been inadvertently restricted. While technical protection measures have significantly improved the effectiveness of copyright protection, they have also inevitably created obstacles for the public's reasonable access to and use of works. While the public enjoys the convenience of the internet, they find that their right to fair use has been weakened to some extent, exacerbating the imbalance in the balance of interests (Sun, S., 2016, pp. 62-65). More complexly, driven by commercial interests, some copyright holders tend to adopt stricter protective measures to maximize their economic interests. This trend toward excessive protection not only restricts the public's fair use rights but may also hinder the free flow of knowledge and cultural exchange, thereby adversely affecting societal innovation and development.

3.3 The Criteria for Determining "Reasonableness" Are Being Challenged

Chinese current legal system tends toward a rule-based legislative model, which is known for its clarity but also exhibits certain closed characteristics. In judicial practice, when faced with novel or complex situations not explicitly covered by legal provisions, judges' differing interpretations of the "fair use" principle often lead to inconsistent rulings in similar cases, which undoubtedly poses a challenge to the uniformity of the rule of law and the authority of the law. To address this challenge, judges may refer to internationally recognized standards such as the "four elements of fair use" and the "three-step test" as supplementary criteria during the adjudication process. However, since these standards have not been explicitly codified in China's legal system, such practices by judges may raise questions about "judicial lawmaking," thereby undermining the authority and stability of the law. Even if judges can make fair rulings based on these non-statutory standards and resolve disputes in specific cases, since China's legal system is a codified legal system rather than a common law system, these case rulings

can only serve as typical cases for reference and learning, but cannot directly serve as legal basis for subsequent similar cases (Wang, G. J., 2024, pp. 94-97).

4. Recommendations for Improving the Fair Use System for Copyright in the Network Environment

4.1 Improving the Legislative Model for the Reasonable Use of Copyright in the Network Environment
Chinese current copyright legal framework is primarily rooted in a rule-based model. However, with
the rapid rise of internet technology, the limitations of this legislative approach have become
increasingly apparent. Its inherent certainty and closed-framework structure struggle to keep pace with
the ever-changing online environment and the constant emergence of new copyright issues. Traditional
rule-based approaches struggle to swiftly capture and regulate the diverse and rapidly evolving forms
of copyright usage in the digital environment, leading to some innovative yet potentially controversial
usage practices temporarily operating outside legal oversight. More critically, this lag may
inadvertently provide space for malicious actors to evade legal regulations and operate in gray areas,
thereby harming the legitimate rights of copyright holders and disrupting fair market competition.

To overcome this dilemma and enhance the adaptability and flexibility of copyright law, it may be worthwhile to consider adopting a legislative model that combines factorism with rule-based approaches. This hybrid model retains the specificity and clarity of rule-based approaches, providing clear guidance for judicial practice, while incorporating the flexibility of factor-based approaches, granting judges the discretion to apply general principles when faced with new circumstances. In this way, the law can swiftly adapt to the challenges posed by technological advancements while maintaining a reasonable balance between protecting the rights of copyright holders and the public's need for access to information. While drawing on the advanced experiences of other countries, we must adhere to our domestic stance, closely aligning the fair use system with China's legal framework, deep cultural traditions, and current socio-economic development trends. This ensures that the system aligns with international trends while remaining deeply rooted in China's actual national conditions (Sun, S., 2020, pp. 21-29).

4.2 Adhering to the Value Concept of Balancing Interests

In the digital environment, the continuous emergence of new technologies and business models necessitates a re-examination and adjustment of the fair use system, while upholding the principle of balancing interests. This principle requires us to strike a balance in legislation and judicial practice: on one hand, we must fully respect and protect the legitimate rights and interests of copyright holders, stimulate their creative enthusiasm, and promote cultural prosperity; on the other hand, we must also take into account the reasonable needs of the general public for access to information and knowledge sharing, avoiding excessive restrictions on information flow caused by copyright protection that could hinder social progress. Improving the fair use system requires us to deeply understand the legislative purpose of copyright law, which is to seek a reasonable balance between individual rights and public

interests (Liu, N., & Zhao, W. P., 2016, pp. 11-15). In the online environment, the widespread adoption of internet technology has significantly expanded the speed and scope of work dissemination, providing the public with unprecedented convenience in accessing and using works. On the other hand, we must also be vigilant, as the increasing prevalence of infringement activities poses an unprecedented threat to the legitimate rights and interests of copyright holders.

Therefore, the key to improving the fair use system lies in balancing the public's reasonable needs for information access and knowledge sharing with providing adequate legal protection for copyright holders to prevent the illegal use of their works. It may be worthwhile to consider introducing more flexible and diverse fair use standards to accommodate the diversity and complexity of work usage in the online environment. At the same time, we can also strengthen the application of technical measures to protect the legitimate rights and interests of copyright holders through technical means.

4.3 Clearly Define the Criteria for Determining Fair Use in the Online Environment

China amended Article 24 of the Copyright Law in 2020, adding the following wording at the beginning of the first paragraph: "Such acts shall not impair the normal exploitation of the work or unreasonably prejudice the legitimate rights and interests of the copyright owner." This amendment aligns with the three-step test standard stipulated in international conventions such as the Berne Convention. However, regarding the specific application of the three-step test standard, there is no unified standard for its specific connotation and application logic, and practical experience remains insufficient. This situation undoubtedly poses numerous challenges for judicial practice (Wang, Y. H., 2021, pp. 119-121). To fill this legal gap and promote a new balance between copyright protection and public interest, we urgently need to establish a scientific and reasonable standard for assessing "reasonableness." This standard should comprehensively consider multiple factors, including not only the "four elements" but also whether it infringes upon the author's moral rights, etc. When evaluating the legitimacy of public use of works, we must approach it from both individual and societal dimensions. From an individual perspective, the use must be lawful and made in good faith; from a societal perspective, it should be assessed whether it contributes to stimulating creative vitality and promoting social progress. Although the fair use principle typically applies to published works, given the principle of automatic copyright protection, the use of unpublished works should not be categorically excluded but should be carefully evaluated, with strict definitions of the conditions, content, and purpose of such use.

When assessing the impact of usage behavior on the market value of a work, the consideration of objective losses is particularly important. This requires a comprehensive analysis of the work's market positioning, potential value depreciation, the actual benefits obtained by the user, and the competitive nature of the usage behavior in the market. Additionally, while fair use primarily focuses on copyright property rights, the protection of copyright moral rights should not be overlooked. In certain cases, even if the usage behavior formally meets the requirements of fair use, it may still constitute improper conduct due to infringement of the author's moral rights, such as privacy rights or reputation rights (Yu,

Y., 2007). Therefore, when establishing and improving the fair use system, we must ensure that the public's reasonable needs are met while also fully respecting and protecting the legitimate rights and interests of copyright holders, particularly in terms of moral rights. Only in this way can we establish a fair and efficient copyright legal environment that promotes cultural prosperity and innovation.

5. Conclusion

In the face of the digital and information technology revolution, the fair use doctrine stands as the legal cornerstone balancing the exclusive rights of copyright holders with the reasonable needs of the general public, and its importance has become increasingly evident. However, as the online environment continues to evolve at an unprecedented pace, the applicability and effectiveness of the traditional fair use doctrine are being severely tested. Whether it can effectively address new types of copyright disputes has become an urgent issue requiring further exploration. Against this backdrop, this paper explores the construction of the fair use system in the online environment, proposing the improvement of the legislative model for fair use of copyright in the online environment, adhering to the value concept of balancing interests, and clearly defining the criteria for determining fair use in the online environment. The aim is to reduce unnecessary copyright disputes, further stimulate the enthusiasm and creativity of creators, promote the vigorous development of cultural innovation and exchange, and drive the rapid prosperity of human civilization.

References

- Chen, J. (2019). An Analysis of the Dynamic Nature of Intellectual Property Rights: Based on Intellectual Property Usage Rules. *Journal of China University of Political Science and Law*, 2019(05), 50-64, 207.
- Gao, L. (2023). A Review and Reconstruction of the Fair Use System for Copyright in the Digital Age: A Theoretical Analysis Based on Technological Neutrality. *Journal of Soochow University (Law Edition)*, 10(03), 41-52.
- Hua, J. (2019). The Dilemma and Solutions of Applying the Fair Use System to Artificial Intelligence Creation. *Electronic Intellectual Property*, 2019(04), 29-39.
- Lai, X. P., & Xu, Y. (2022). Conflicts and Coordination Between Technical Measures and Fair Use: A Reexamination of Articles 49 and 50 of the Copyright Law. *Chinese Journal of Applied Law*, 2022(03), 185-198.
- Liu, N., & Zhao, W. P. (2016). On the Improvement of China's Fair Use System for Copyright in the Internet Environment. *Journal of Taiyuan University of Technology (Social Sciences Edition)*, 34(01), 11-15.
- Liu, S. L., & Ding, Y. C. (2024). Legislative Expansion and Judicial Contraction of Criminal Law Protection for Online Copyright: A Case Study of the Eleventh Amendment to the Criminal Law. *Journal of Harbin University*, 45(07), 61-65.

- Sun, S. (2016). On the Judicial Application of the Substantial Similarity Rule in Copyright Law: A Perspective from the Qiong Yao v. Yu Zheng Case. *China Copyright*, 2016(01), 62-65.
- Sun, S. (2020). The Local Pathway for the Transformation of Copyright Use. *Electronic Intellectual Property Rights*, 2020(02), 21-29.
- Wang, G. J. (2024). A Study on the Fair Use System of Copyright in the Context of the Internet. Journal of Hubei University of Economics (Humanities and Social Sciences Edition), 21(02), 94-97.
- Wang, H. Y. (2013). On the Reconstruction of the Legislative Model of the Fair Use System for Works: A Critique of the Two Draft Amendments to China's Copyright Law. *Theory and Reform*, 2013(04), 187-189.
- Wang, X. J. (2016). Conflicts and Improvements in the Fair Use System under Digital Copyright. *Journal of Datong University (Social Sciences Edition)*, 30(06), 14-17, 26.
- Wang, Y. H. (2021). Theoretical Research and Local Adaptation of the "Three-Step Test"—Against the Background of the Third Amendment to the Copyright Law. *Communication and Copyright*, 2021(09), 119-121.
- Wu, H. D. (1996). A Legal Value Analysis of the Fair Use System. Legal Science. *Journal of Northwest University of Political Science and Law*, 1996(03), 30-38.
- Yu, Y. (2007). Research on the System of Fair Use of Copyright. Shandong University.
- Zhang, Y. T. (2010). Reflections on the Fair Use System for Online Copyright. *Journal of Hefei University (Social Sciences Edition)*, 27(04), 107-109.