COPYRIGHT EXCEPTIONS FOR TEXT AND DATA MINING IN CHINA: INSPIRATION FROM TRANSFORMATIVE USE

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I. INTRODUCTION

Text and data mining ("TDM") refers to the creation of new, nonobvious information such as patterns, trends, or relationships from a collection of text-based documents including books, images, webpages, emails, and reports.¹ TDM helps to dig out the hidden gold from textual information and leaps from old-fashioned information retrieval to knowledge discovery.² Combined with artificial intelligence and deep learning technologies, TDM is widely applied to and thrives in linguistic applications, scientific research, legal research, financial analysis, health care, education, and biomedicines.³ With the global wave of open data, the strength of TDM is enhanced by the increasing availability of data, information, and ideas.⁴

China is experiencing a new wave of open data. Decision-making documents released by the Central Committee of the Communist Party of

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¹ Maarten Truyens & Patrick Van Eecke, *Legal Aspects of Text Mining*, 30 COM-PUT. L. & SEC. REV. 153, 153 (2014).

² Jochen Dorre et al., *Text Mining: Finding Nuggets in Mountains of Textual Data, in* PROCEEDINGS OF THE FIFTH ACM SIGKDD INTERNATIONAL CONFERENCE ON KNOWLEDGE DISCOVERY AND DATA MINING 398 (1999).

³ Weiguo Fan et al., *Tapping the Power of Text Mining*, 49 COMMC'NS ACM 77, 78 (2006); Truyens & Van Eecke, *supra* note 1, at 154.

⁴ The Hague Declaration on Knowledge Discovery in the Digital Age 1 (May 6, 2015), https://www.ouvrirlascience.fr/wp-content/uploads/2019/07/The-Hague-Declaration_2015.pdf.

China and the State Council have witness the determination of the Party and the government to vigorously promote data sharing among government departments and to steadily expand the opening of public data resources. China has clearly taken "accelerating digital development" as the national strategy, with a focus on "promoting the development and utilization of data resources, expanding the orderly opening of basic public information and data, and constructing a national data sharing platform."⁵ TDM plays an important role in policies for promoting data sharing and opening in China. Chinese companies that have massive data and the ability to process massive data are expected to launch TDM projects. These companies include web giants in China, such as Alibaba, Baidu, Tencent, NetEase, and JD.com.

TDM operates by copying substantial quantities of materials, extracting the data, and recombining them to identify patterns that are incorporated into the final outputs.⁶ TDM will thus generate copyright infringement problem if materials used for TDM are original works under copyright protection.

TDM generally involves three steps. The first step is to access content in both the paper and digital formats. The second step is to extract content, convert it to an appropriate digital format, and store it in a database. The third step is to mine, including analyze and process, the text and data, which often involves the temporary reproduction of the content.⁷ The process of TDM may infringe the right of reproduction under the Chinese Copyright Law, and the rights of reproduction, temporary reproduction, and extraction under the EU Information Society Directive and Database Directive.

As TDM will use a large quantity of copyright materials, it is unrealistic to seek permission from every single copyright owner before copying those materials. Even if mass permission can be obtained with the aid of copyright collective management organizations, the costs for conducting TDM will be very high, and such costs will hinder many non-commercial entities or small and medium enterprises from engaging in TDM and participating in the new wave of open data. Exceptions that allow the use of

⁵ Fourteenth Five-Year Plan for National Economic and Social Development and the Long-Term Goal for 2035 (promulgated by the Cent. Comm. Communist Party of China, Mar. 2020) (in Chinese).

⁶ Christophe Geiger et al., *The Exception for Text and Data Mining (TDM) in the Proposed Directive on Copyright in the Digital Single Market—Legal Aspects* 5 (2018), https://www.europarl.europa.eu/RegData/etudes/IDAN/2018/604941/IPOL_IDA(2018)604941_EN.pdf.

⁷ Ruan Kaixin, *Study on the Text and Data Mining Exception Under EU Copyright Law*, LIBR. TRIB., no. 12, 2019, at 104 (in Chinese).

copyright works without prior authorization from, and payment of remuneration to, copyright owners are key to resolving the issue.

This Article analyzes copyright exceptions for TDM based on the Third Amendment of the Copyright Law and judicial practice in China. Drawing on the discussion of the failure of the amendment to provide a TDM exception, the Article discusses the TDM exceptions in the European Union and the United States, two typical jurisdictions that use different models to introduce a TDM exception. This Article further analyzes copyright exceptions in legislation and judicial practice in China, especially the transformative use doctrine recently developed by Chinese practitioners. The Article concludes by suggesting recommendations for China to provide certainty and flexibility in copyright exceptions — in general and for TDM specifically.

II. LACK OF A TDM EXCEPTION IN CHINA

A. Amended Copyright Exceptions

Chinese copyright law follows the tradition in civil law jurisdictions in addressing exceptions. Copyright exceptions in China contain an exhaustive enumerated list of twelve sets of circumstances under which the use of copyright works does not need permission from copyright owners and payment of remuneration. According to the Third Amendment to the Copyright Law the National People's Congress promulgated on November 11, 2020, the twelve permitted circumstances cover private study, appropriate quotation, news reporting, reprinting of articles pertaining to current affairs, publication of speech delivered at a public assembly, classroom teaching and scientific research, fulfillment of official duties by state organs, preservation of museum collection, free-of-charge performance, copying of artistic works in public places, translation of Chinese works into minority languages, and conversion of works into accessible formats that can be perceived by the visually impaired and people with print disabilities.⁸

The three-step test is included in the amended Copyright Law as the preamble of the special provision for exceptions, which states that "users of copyright works under the below-mentioned circumstances do not need to obtain authorization from copyright owners and pay remuneration, but shall clarify the name of the author and the title of the work, as long as the use does not affect the normal use of the work and unreasonably prejudice

⁸ Copyright Law of the People's Republic of China (promulgated by the Standing Comm. Nat'l People's Cong., Sept. 7, 1990, amended Nov. 11, 2020, effective June 1, 2021), art. 24 [hereinafter 2020 Copyright Law].

the legitimate interests of the copyright owner."⁹ Incorporation of the three-step test into the Copyright Law does not change the current legislation and legal practice in China, as the three-step test is applied to the exhaustive list of exceptions and should not be regarded as an open-ended clause that gives Chinese courts discretionary power. Prior to the Third Amendment of the Copyright Law, the three-step test has already been included in the Regulations for the Implementation of the Copyright Law ("Implementing Regulations") as a cap to be applied to all exceptions listed exhaustively in the Copyright Law.

Building on the twelve extant exceptions, the amended Copyright Law adds one sub-paragraph as the thirteenth exception — namely, "other circumstances prescribed by laws and administrative regulations."¹⁰ Compared with the Draft Amendment of the Copyright Law released by the Legislative Affairs Office of the State Council in 2014, the finalized amendment did not adopt an open-ended clause that covers "other circumstances" at the end of the enumerated list, as proposed in the Draft Amendment. Hence, the Copyright Law maintains the closed-list approach to copyright exceptions, as only a few administrative regulations will include exceptions, which are often narrow in scope. These administrative regulations are the Implementing Regulations, the Regulations for the Protection of Computer Software, and the Regulations on the Protection of the Right to Network Dissemination of Information ("RNDI Regulations"). The limited scope of copyright exceptions cannot be expanded by frequently revising the three administrative regulations. Since their enactment, these three regulations have been amended only once in 2013.

The Third Amendment to the Copyright Law does not incorporate a clarified clause that directly addresses TDM, as the European Union has done in its Directive on Copyright and Related Rights in the Digital Single Market ("DSM Directive").¹¹ Nor does the amendment turn the closed list of exceptions into an open-ended model that grants Chinese courts more discretionary power to respond to circumstances brought about by digital technologies. The next Section will explain why the existing enumerated list of exceptions in the Copyright Law cannot cover TDM.

B. Obstacles for TDM in Amended Exceptions

Among the twelve enumerated exceptions, the most related ones that may apply to TDM are private study, appropriate quotation, and scientific

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⁹ *Id.* The language of the three-step test in the amended Copyright Law only reflects the last two steps. But since the test is applied to an exhaustive list of exceptions, commentators regard the law as compliant with the first step "confined . . . to certain special cases."

¹⁰ 2020 Copyright Law, *supra* note 8, art. 24(13).

¹¹ Directive 2019/790 arts. 3-4, 2019 O.J. (L 130) 92 (EU).

research. However, the applicability of these three exceptions is uncertain.

The private study exception allows the use of published works for the purpose of private study, research, or self-entertainment.¹² It may cover TDM conducted by individual researchers. However, its application to TDM faces several challenges since the private study exception should comply with the three-step test. First, the private study exception covers the use of copyright works solely for personal purposes, such as copying fragments of a book or a journal article in library by individual researchers.¹³ Commercial uses will not be covered, thereby excluding most of TDM research conducted by research organizations for commercial purposes. Second, TDM requires the reproduction of large quantity of copyright works, which can hardly fulfill the requirements embodied in the three-step test. Finally, TDM may not be private if the use is not for the individual researcher's own purpose—for example, if the results are used by a collective group of researchers or by his or her institution.¹⁴

The appropriate quotation exception requires the quotation to serve the purpose of introducing or commenting on a work, or demonstrating a point.¹⁵ TDM research may be conducted for the purpose of demonstrating a point, such as the use of TDM on thousands of news reports to illustrate stock trends. However, the quotation must be appropriate in both quality and quantity to satisfy the threshold for the exception. For example, a Chinese court found inappropriate a quotation of 200 words from a 5000-word published article to illustrate the planned layout and overall conceptual design of an advertisement for a real estate project.¹⁶ By contrast, another Chinese court found appropriate the use of the scaled-down version of six magazine covers alongside an article introducing the magazine's history and uncertain future.¹⁷ It can therefore be foreseen that the reproduction and extraction of information from a large quantity of copyright works can hardly be regarded as appropriate quotation.

¹² 2020 Copyright Law, *supra* note 8, art. 24(1).

¹³ Wang Qian, Copyright Law 326 (2015).

¹⁴ Geiger et al., *supra* note 6, at 11.

¹⁵ 2020 Copyright Law, supra note 8, art. 24 (2).

¹⁶ Xu Lianying yu Shenhua Fangdichan Youxian Zeren Gongsi Qinfan Zhuzuoquan Jiufen Shangsu An

⁽许联瑛与神华房地产有限责任公司侵犯著作权纠纷上诉案) [Xu Lianying v. Shenhua Real Estate Co., Ltd.], (2009) Er Zhong Min Zhong Zi No. 9040 ((2009)__中民终字第9040号) (Beijing Second Interm. People's Ct. Jun. 19, 2009) (in Chinese).

¹⁷ Zhou Yanming Su Huanqiushibao She Qinfan Zhuzuoquan Jiufen An (周雁鸣诉《环球时报》社侵犯著作权纠纷案) [Zhou Yanming v. Global Times], (2012) Chao Min Chu Zi No. 26333 ((2012)朝民初宁第26333号) (Beijing Chaoyang Dist. People's Ct. Sep. 5, 2012) (in Chinese).

The scientific research exception as restricted by the three-step test should also be for non-commercial purposes. The results of translation, adaptation, compilation, broadcasting, or reproduction in a small quantity of copies by scientific researchers for scientific research should not be published or distributed.¹⁸ The exception also excludes the sharing of TDM results among various research institutes. More importantly, the exception excludes TDM projects that are not for scientific research and are of direct or indirect commercial nature.

Apart from the three exceptions mentioned above, one may notice that temporary reproduction is not covered by the right of reproduction and is not regarded as copyright infringement in China, because temporary copies generated by the running of computer programs will not be permanently stored in computer memory. Temporary copies represent an objective technical phenomenon and do not have independent economic value.¹⁹ Although TDM may generate transient or incidental copies in a technological progress, most TDM activities will result in permanently stored reproductions of copyright works that have independent economic significance.

Due to the uncertainty over the application of the three enumerated exceptions mentioned above, the copyright exceptions in the amended Copyright Law fail to resolve the obstacles faced by the use of TDM to foster scientific research and economic development. A possible solution relies on the thirteenth exception added by the Third Amendment — namely, "other circumstances prescribed by administrative regulations." Since the Implementing Regulations and the RNDI Regulations will be soon amended in accordance with the new Copyright Law, the State Council, which is responsible for revising administrative regulations in China, should grab the chance to incorporate the TDM exception in these two administrative regulations. As to the detailed approach concerning the incorporation of the TDM exception, relevant legislation and judicial practice from the European Union and the United States shall be taken into consideration.

¹⁸ 2020 Copyright Law, *supra* note 8, art. 24(6).

¹⁹ WANG, *supra* note 13, at 174-75.

III. CERTAINTY OR FLEXIBILITY: INSPIRATION FROM THE EU AND U.S. LEGISLATIVE AND JUDICIAL PRACTICE

A. Mandatory TDM Exceptions in the DSM Directive

The new DSM Directive was adopted in the European Union on May 17, 2019, marking the end of a four-year legislative process.²⁰ To adapt the copyright exceptions to the digital and cross-border environment, the Directive sets forth two mandatory exceptions for TDM that member states must include in their national copyright laws.

Article 3 provides the TDM exception for the purpose of scientific research conducted by research organizations and cultural heritage institutions on the premise that they have lawful access to the copyright works and other subject matters.²¹ Researchers shall guarantee that works are stored with an appropriate level of security and retained to achieve scientific research objectives.²² Article 4 offers an exception for the reproduction and extraction of lawfully accessible works and other subject matters for TDM purposes.²³ This exception is subject to reservation by the right holders of copyright works or other subject matters in an appropriate manner, through machine-readable means in the case of content made publicly available online,²⁴ such as metadata and terms and conditions of a website or service.²⁵

Despite the clearly defined words used by the two TDM exceptions, researchers have criticized the new exceptions during the legislative process for their narrow scope. First, the beneficiaries of the TDM exceptions should not be limited to research organizations and cultural heritage institutions. Since research organizations and cultural heritage institutions are defined as organizations that conduct activities for a specific purpose on a not-for-profit basis,²⁶ the exceptions will not cover TDM activities conducted by commercial entities, or research institutions and cultural heritage institutions controlled by commercial undertakings.²⁷ Unaffiliated researchers such as independent scientists cannot rely on these exceptions.²⁸ Second, in many cases, the boundary between commercial and

²⁰ João Pedro Quintais, *The New Copyright in the Digital Single Market Directive:* A Critical Look, 42 EUR. INTELL. PROP. REV. 28, 28 (2020).

²¹ Directive 2019/790 art. 3, 2019 O.J. (L 130) 92 (EU).

²² Id. art. 3(2).

²³ *Id.* art. 4(1).

 $^{^{24}}$ Id. art. 4(3).

²⁵ *Id.* recital 18.

 $^{^{26}}$ Id. art. 2(1), (3).

²⁷ Geiger et al., *supra* note 6, at 20-21.

²⁸ Pamela Samuelson, The EU's Controversial Digital Single Market Directive— Part II: Why the Proposed Mandatory Text- and Data-Mining Exception Is Too

non-commercial research is not always easy to trace.²⁹ Third, although Article 3 cannot be overridden by contractual provisions,³⁰ copyright owners can use contracts or technical means to prevent the use of the Article 4 exception. Fourth, even if contracts cannot be used to limit the Article 3 exception, private ordering may come back through the adoption of technological protection measures, since both Articles 3 and 4 do not address clearly whether researchers can legally circumvent the technological measures used to protect copyright works for TDM purposes.³¹ Finally, the narrow scope of TDM exceptions cannot fill the gap with the copyright laws in those jurisdictions that have adopted an open-ended clause or fair use to cover potential TDM activities, such as the United States.³²

B. Transformative Use in the United States

The United States adopts a flexible model for exceptions in the 1976 Copyright Act. The fair use provision under § 107 includes a general preamble and a list of four guiding factors — namely, "the purpose and character of the use," "the nature of the copyrighted work," "the amount and substantiality of the portion used in relation to the copyrighted work as a whole," and "the effect of the use upon the potential market for or value of the copyrighted work."³³ Transformative use is one of the sub-factors in the first factor covering the "purpose and character of the use." Judge Pierre Leval advanced the transformative use doctrine in his article in the *Harvard Law Review*, which advocated for prioritizing the first factor in the fair use analysis and emphasizing "whether, and to what extent, the challenged use is transformative."³⁴

The United States Supreme Court formally adopted the transformative use doctrine in *Campbell v. Acuff-Rose Music, Inc.* In deciding whether 2 Live Crew's use of the repeated hook and the first line of the plaintiff's song qualified as fair use, the court examined "whether the new work merely supersedes the objects of the original creation or instead adds something new, with a further purpose or different character, altering the

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Restrictive, KLUWER COPYRIGHT BLOG (July 12, 2018), http://copyrightblog.kluweriplaw.com/2018/07/12/eus-controversial-digital-single-market-directivepart-ii-proposed-mandatory-text-data-mining-exception-restrictive/.

²⁹ Rossana Ducato & Alain Strowel, *Limitations to Text and Data Mining and Consumer Empowerment: Making the Case for a Right to "Machine Legibility,"* 50 INT'L REV. INTELL. PROP. & COMPETITION L. 649, 666 (2019).

³⁰ Directive 2019/790 art. 7(1), 2019 O.J. (L 130) 92 (EU).

³¹ Ducato & Strowel, *supra* note 29.

³² Geiger et al., *supra* note 6, at 22.

³³ 17 U.S.C. § 107.

³⁴ Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1005, 1111 (1990).

first with new expression, meaning, or message; it asks, in other words, whether and to what extent the new work is transformative."³⁵

Subsequent cases that followed *Campbell* in using the transformative use doctrine to determine fair use extended this doctrine further, creating two major categories that this Article will refer to as "purpose transformativeness" and "content transformativeness." Purpose transformativeness involves the use of elements of the original for a new purpose, while content transformativeness means modifying the content of the original.³⁶ The two lines of cases that typically illustrate these two genres are those involving search engines and appropriation art.³⁷

In the search engine cases, defendants reproduced images or mass digitized library-stored books to make it convenient for the public to search for information and locate its source. The courts regarded the purpose of aiding internet search and location of information different from that of the creation of the original work, as the latter aims to attract audience to enjoy the original expressions. The mass digitization of copyright works for the creation of search engines or databases converts existing expressions into non-expressive, factual reference tools. This is called non-expressive fair use.³⁸

Transformative use of this genre could cover the reproduction of, and extraction from, copyright works for TDM purposes, regardless of whether the purposes are commercial or not-for-profit by nature. Different cases have demonstrated and supported the purpose transformativeness of TDM projects, including *Kelly v. Arriba Soft Corp.*,³⁹ *Perfect 10, Inc. v. Amazon.com, Inc.*,⁴⁰ *A.V. v. iParadigms, LLC*,⁴¹ *Fox News Network, LLC v. TVEyes, Inc.*,⁴² *White v. West Publishing Corp.*,⁴³ *Authors Guild, Inc. v. HathiTrust*,⁴⁴ and *Authors Guild, Inc. v. Google, Inc.*,⁴⁵ In these cases, a large number of copyright works were reproduced with text and data extraction to create search engines or databases useful for locating or retrieving information, checking against plagiarism, searching portions of television and radio broadcasts, and enhancing legal research.

³⁵ Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569 (1994).

³⁶ Brian Sites, *Fair Use and the New Transformative*, 39 COLUM. J.L. & ARTS 513, 519 (2016).

³⁷ Id. at 522.

³⁸ Benjamin Sobel, Artificial Intelligence's Fair Use Crisis, 41 COLUM. J.L. & ARTS 45, 57 (2017).

³⁹ 336 F.3d 811 (9th Cir. 2003).

^{40 508} F.3d 1146 (9th Cir. 2007).

⁴¹ 562 F.3d 630 (4th Cir. 2009).

⁴² 43 F. Supp. 3d 379 (S.D.N.Y. 2014).

⁴³ No. 12 Civ. 1340(JSR) (S.D.N.Y. July 11, 2014).

⁴⁴ 755 F.3d 87 (2d Cir. 2014).

⁴⁵ 804 F.3d 202 (2d Cir. 2015).

With TDM technologies adopted by the defendants, text and data extracted from the copyright works are recombined to identify patterns for the enhancement of information-gathering — a new purpose totally different from the creation of the original work.

Appropriation art cases — such as *Blanch v. Koons*,⁴⁶ *Mattel, Inc. v. Walking Mountain Productions*,⁴⁷ *Cariou v. Prince*,⁴⁸ *Seltzer v. Green Day, Inc.*,⁴⁹ and *Kienitz v. Sconnie Nation,* LLC^{50} — cover the use of entire or partial expressions in the original artistic works and the incorporation of these elements into new visual works. The new works changed the color, size, and artistic style of the originals and targeted quite different consumers. Since content transformativeness uses detailed expressions of the appropriated objects as source materials, this genre is called expressive fair use, as opposed to non-expressive fair use, for purpose transformativeness.

Transformative use creates uncertainty in fair use decisions and generates the following controversies. First, in appropriation art cases, the courts often mentioned that the objectives of the defendants to create new works are different from those of the plaintiffs. For instance, in Blanch, the court mentioned the objective of Koons' use of Blanch's image as fodder to comment on social and aesthetic consequences of the mass media.⁵¹ Koon's objective was to employ Blanch's image in the creation of new information, new aesthetics, new insights, and new understandings.52 However, the court never clarified the meaning of the word "objective" used in the judgment and the word "purpose" used in the first factor of the four-factor balancing test, nor did it clearly distinguish the two words. Second, the development of the transformative use doctrine increasingly blurs the line between derivative and transformative use.⁵³ A derivative work is a work based upon one or more preexisting works in which a work may be recast, transformed, or adapted.⁵⁴ The derivative work right is an exclusive right enjoyed by the copyright owner. If a new work is found transformative based on the original work, the copyright owner's derivative work right may be infringed. Thus, the transformative use may conflict with the derivative work right. Third, according to a few empirical studies

- 49 725 F.3d 1170 (9th Cir. 2013).
- 50 766 F.3d 756 (7th Cir. 2014).
- 51 467 F.3d at 253.
- ⁵² Id.

⁵³ Liz Brown, *Remixing Transformative Use: A Three-Part Proposal for Reform*, 4 NYU J. INTELL. PROP. & ENT. L. 139, 159 (2014).

54 17 U.S.C. § 101.

⁴⁶ 467 F.3d 244 (2d Cir. 2006).

^{47 353} F.3d 792 (9th Cir. 2003).

^{48 714} F.3d 694 (2d Cir. 2013).

conducted by scholars,⁵⁵ nearly ninety percent of the fair use opinions applied the transformative use doctrine.⁵⁶ Transformative use becomes the determinative subfactor that dictates the courts' analysis of the remaining factors and the overall outcome of the fair use analysis.⁵⁷

C. Summary

Copyright exceptions in both the European Union and the United States are able to cover TDM. The European Union adopts a definite model that has a narrow and limited scope and that cannot apply to all potential TDM projects, especially those of a commercial nature or under the control of commercial undertakings. By contrast, the U.S. model for the TDM exception provides more flexibility and applicability. However, the trend of primarily relying on transformative use to decide fair use brings about uncertainty and unpredictability both to the courts and the stakeholders involved. When seeking the enlightenment of the TDM exceptions in these two jurisdictions, it would work better for China to develop its TDM exception based on its current legislative and judicial practice concerning copyright exceptions while mitigating the risks found in the TDM exceptions under the DSM Directive and the transformative use doctrine.

IV. BREAKTHROUGH OF EXISTING EXCEPTIONS AND TRANSFORMATIVE USE IN CHINA

A. Persistent Calls for Flexibility

For a long time, legal practitioners and scholars in China have criticized the closed list of copyright exceptions for its lack of flexibility and inclusiveness. The Draft Amendment of the Copyright Law in 2014 attempted to address the flexibility issue by including "other circumstances" that comply with the three-step test as a "catch-all" exception, but the formal amendment of the Copyright Law did not adopt such an openended model. Since no legislative interpretations concerning the amended provisions can be found, it is impossible to know why the National People's Congress still maintains the closed model of copyright exceptions.

On the one hand, a number of Chinese scholars have long proposed a flexible model for copyright exceptions. Wang Qian argued that Chinese courts should be given more discretion to interpret the exceptions and,

⁵⁵ See, e.g., Clark D. Asay et al., Is Transformative Use Eating the World?, 61 B.C. L. REV. 905 (2020); Jiarui Liu, An Empirical Study of Transformative Use in Copyright Law, 22 STAN. TECH. L. REV. 163 (2019); Matthew Sag, Predicting Fair Use, 73 OHIO ST. L.J. 47 (2012).

⁵⁶ Asay, *supra* note 55, at 931.

⁵⁷ Id. at 929-30.

when necessary, be allowed to determine that a certain unauthorized act does not constitute copyright infringement according to various relevant factors.⁵⁸ Li Yang suggested that the three-step test should not be used as a preamble applying to all enumerated exceptions, but only to the "catchall" clause for "other circumstances" as proposed by the Draft Amendment. He further called for adding the four-factor balancing test as a positive condition to gauge whether a certain unauthorized act fulfills the requirement of the three-step test.⁵⁹ Jiang Ge stated that both the "entrance" and "exit" of copyright liability should be kept flexible, which means interpreting the subject matters and exclusive rights more flexibly than they currently are and introducing a general exceptions clause into the Chinese Copyright Law.⁶⁰ He Tianxiang pointed out that the Chinese Copyright Law "needs copyright exceptions designed to be flexible enough to keep pace with any technological changes in the future."⁶¹ This Author also proposed importing legal flexibility and certainty into Chinese copyright exceptions by incorporating the four-factor balancing test with a focus on the first and fourth factors as abstract guidance and a non-exhaustive list of detailed exceptions as minute prescriptions.⁶²

On the other hand, Chinese courts have already broken the ceiling of copyright exceptions in the past ten years, although such breakthrough lacks legal standing. In 2011, the Supreme People's Court issued a judicial opinion entitled the Opinion on Several Issues Concerning the Giving of Full Play to the Judicial Function of Intellectual Property Rights, Promoting the Great Development and Prosperity of Socialist Culture and Promoting the Independent and Coordinated Development of Economy Judicial opinion.⁶³ Article 8 of the opinion provides: "in properly using copyright exceptions and limitations and correctly determining whether there is infringement, we can consider the nature and purpose of the use of the work, the nature of the work, the quantity and quality of the parts

⁵⁸ Wang Qian, *Revision of Copyright Law: Interpretation and Analysis of Key Clauses (I)*, INTELL. PROP., no. 1, 2021, at 35 (in Chinese).

⁵⁹ Li Yang, *System Structure and Judicial Interaction of Copyright Exceptions*, L. REV., no. 4, 2020, at 96 (in Chinese).

⁶⁰ Jiang Ge, On the "Flexible Entrance and Exit" Structure of Copyright Law, 33 PEKING U. L.J. 327, 327–45 (2021) (in Chinese).

⁶¹ Tianxiang He, Transplanting Fair Use in China? History, Impediments and the Future, 2020 U. ILL. J.L. TECH. & POL'Y 359, 402.

⁶² JERRY JIE HUA, TOWARD A MORE BALANCED APPROACH: RETHINKING AND READJUSTING COPYRIGHT SYSTEMS IN THE DIGITAL NETWORK ERA 208 (2014).

⁶³ Opinion of the Supreme People's Court on Several Issues Concerning the Giving of Full Play to the Judicial Function of Intellectual Property Rights, Promoting the Great Development and Prosperity of Socialist Culture and Promoting the Independent and Coordinated Development of Economy, Fafa [2011] No. 18 (promulgated by the Judicial Comm. Sup. People's Ct., Dec. 16, 2011, effective Dec. 16, 2011).

used, and the impact of the use on the potential market or value of the work." This opinion explicitly incorporates the four factors in U.S. fair use doctrine to decide whether a certain use is fair. Such a judicial breakthrough leads to the continuous borrowing of the fair use and transformative use doctrines by both lawyers and judges in China.

B. Transformative Use in China

In Chinese judgments, transformative use can be categorized into three types: reproduction of literary works, reproduction of images, and live game streaming. The first two types cover TDM activities. Live game streaming prospers during recent years under the platform economy, but since it has no relation with TDM, it will be only briefly discussed.

1. Reproduction of Literary Works

The transformative use argument was raised for the first time in the Google Books case in China. In *Wang Shen v. Beijing Guxiang Information Technology Co., Ltd., et al.*, Google digitized the entire essay collection written by Wang Shen and sent to its branch in China, Guxiang, for providing snippets to the Chinese public. Wang Shen sued both companies for copyright infringement on the rights of reproduction and network dissemination of information, as neither company obtained her permission before conducting the acts. Both defendants offered the defense provided by copyright exceptions.

According to the first instance court, the Beijing First Intermediate People's Court, Guxiang conducted the act of providing snippets of Wang Shen's book online in China while Google conducted the act of digital scanning of the entire book in the United States. When analyzing whether Guxiang's network dissemination of information fell within copyright exceptions, the court emphasized the transformative nature of the act. According to the court, "Guxiang's act of dissemination of snippets online constitutes transformative use, taking into consideration the way that fragments of the book are provided which has the function and purpose of offering a convenient library information retrieval service, so that the plaintiff."⁶⁴ However, the court held a different view on Google's digital scanning and the disconnected relationship between the acts of online dissemination and digital scanning.

⁶⁴ Wang Shen Su Beijing Guxiang Xinxi Jishu Youxian Gongsi Deng Qinfan Zhuzuoquan Jiufen An (王莘诉北京谷翔信息技术有限公司等侵犯著作权纠纷案) [Wang Shen v. Beijing Guxiang Info. Tech. Co., Ltd.], (2011) Yi Zhong Min Chu No. 1321 ((2011) 中民初字第1321号) (Beijing First Interm. People's Ct. Dec. 20, 2012) (in Chinese).

The second instance court, the Beijing High People's Court, affirmed the decision but mentioned the close relationship between scanning and the subsequent online dissemination of snippets. If reproduction is needed for subsequent acts covered by copyright exceptions, reproduction of others' copyright works without permission shall be regarded as part of those exceptions.⁶⁵ If the network dissemination of snippets of the book falls within the scope of the copyright exceptions, reproduction for the dissemination may also fall within those exceptions.⁶⁶ Google's defense nonetheless failed because it did not provide enough evidence to prove that the digital scanning is for the subsequent online dissemination of the snippets.

In Shanghai Xuanting Co., et al. v. Wuxi Tianxia Jiujiu Co., et al., the defendants in their online games used portions of the novel series *The* Adventures of Three Tomb Raiders created by Zhang who assigned the copyright to the plaintiff to guide the game players. When the defendants were sued for copyright infringement, they argued that their use of the content in the novels was transformative. The appellate court, the Shanghai Intellectual Property Court, did not analyze the transformative use argument and dismissed the fair use defense, as copying the content in the novels to design online games for commercial purposes infringed the plaintiff's rights of reproduction and network dissemination of information.⁶⁷

The results of the two cases concerning the reproduction of literary works are different, because the reproduction of works to create a database convenient for location of source and information retrieval is deemed the non-expressive use of the original work. By contrast, the reproduction of portions of copyright works in online games which directly display the detailed expressions in the original should be regarded as ex-

⁶⁵ Wang Shen Su Beijing Guxiang Xinxi Jishu Youxian Gongsi, Guge Gongsi Qinhai Zhuzuoquan Jiufen An

⁽王莘诉北京谷翔信息技术有限公司、谷歌公司侵害著作权纠纷案) [Wang Shen v. Beijing Guxiang Info. Tech., Co., Ltd., Google, Inc.], (2013) Gao Min Zhong No. 1221 ((2013)高民终字第1221号) (Beijing High People's Ct. Dec. 19, 2013) (in Chinese).

⁶⁶ Id.

⁶⁷ Shanghai Xuanting Yule Xinxi Keji Youxian Gongsi, Beijing Lechu Wuxian Ruanjian Jishu Youxian Gongsi Deng yu Wuxi Tianxiajiujiu Wenhua Fazhan Youxian Gongsi, Zhang Muye Zhuzuoquan Quanshu, Qinquan Jiufen Ershen Minshi Panjue Shu

⁽上海玄霆娱乐信息科技有限公司、北京乐触无限软件技术有限公司等与无锡天下 九九文化发展有限公司、张牧野著作权权属、侵权纠纷二市民事判决节) [Shanghai Xuanting Entm't Info. Tech. Co., Ltd., Beijing Lechu Infinite Software Tech. Co., Ltd., et al. v. Wuxi Tianxiajiujiu Cultural Dev. Co., Ltd., Zhang Muye], (2017) Hu 73 Min Zhong No. 324 ((2017)沪73民终324号) (Shanghai Intell. Prop. Ct. Nov. 12, 2019) (in Chinese).

pressive use. So far, Chinese courts have granted support for non-expressive fair use but not expressive use. Because non-expressive transformative use can cover TDM projects, Chinese courts may consider TDM as falling within the scope of the copyright exceptions, even though the legislation does not touch upon the TDM exception.

2. Reproduction of Images

A couple of cases concerning the reproduction of images confirmed the transformative purpose of scaled-down or thumbnail images created by the defendants based on the plaintiff's artistic or photographic works for the purpose of reinforcing the background descriptions or improving the search engine function. In Shanghai Animation Film Studio v. Zhejiang Xinying Era Co., et al., the Shanghai Intellectual Property Court held that the use of the scaled-down version of two typical cartoon characters designed in 1980s on a movie poster to illustrate the story's background does not simply show the aesthetic feeling of the artistic work. The value and function of the copyright works have also been transformed to a high degree.⁶⁸ In Chen Hongying v. Beijing Qihoo, the creation of thumbnail images for web search was transformative, but Qihoo's linking the images to specific product or service advertisements did not constitute transformative use, as such linking did not serve the search engine function and has, to a certain degree, affected the plaintiff's use of the images.⁶⁹ The transformative purpose of thumbnail images mentioned by the Shanghai Intellectual Property Court in this case is reflected by the search engine providers' use of the thumbnails as links to original images and to offer search results to users.⁷⁰

In Li Xianghui v. Guangzhou Huaduo Co., Ltd. and Ma Jianming v. Guangzhou NetEase Co., Ltd., the court rejected the defendants' transformative use of the plaintiffs' photographs. In Li Xianghui, the defen-

⁶⁸ Shanghai Meishu Dianying Zhipianchang yu Zhejiang Xinying Niandai Wenhua Chuanbo Youxian Gongsi, Huayi Xiongdi Shanghai Yingyuan Guanli Youxian Gongsi Zhuzuoquan Quanshu, Qinquan Jiufen Ershen Minshi Panjue Shu

⁽上海关术电影制片厂与浙江新影年代文化传播有限公司、华谊兄弟上海影院管理 有限公司著作权权属、侵权纠纷二审尺事判决书) [Shanghai Animation Film Studio v. Zhejiang Xinying Era Cultural Comme'n Co., Ltd., Huayi Bros. Shanghai Cinema Mgmt. Co., Ltd.], (2015) Hu Zhi Min Zhong No. 730 ((2015)沪知民终字第730号) (Shanghai Intell. Prop. Ct. Apr. 25, 2016) (in Chinese). ⁶⁹ Chen Hongying yu Beijing Qihu Keji Youxian Gongsi Qinhai Zuopin Xinxi Wangluo Chuanbo Quan Jiufen Ershen Minshi Panjue Shu

⁽陈红英与北京奇虎科技有限公司侵害作品信息网络传播权纠纷二审民事判决节) [Chen Hongying v. Beijing Qihoo Tech. Co., Ltd.], (2020) Hu 73 Min Zhong No. 30 ((2020)沪73民终30号) (Shanghai Intell. Prop. Ct. Jun. 29, 2020) (in Chinese). ⁷⁰ Id.

dant developed an online game in the context of the Three Kingdoms and published online an article introducing the game's development process, which embodied a reduced-sized version of the plaintiff's photo of the City of Three Kingdoms used for shooting films in Wuxi City. The first instance court, the Guangzhou Nansha District People's Court, confirmed the defendant's transformative use defense, ruling that the photo was associated with the history of the Three Kingdoms era through well-known historical figures and was also related to the game heroes in the Three Kingdoms stories. Thus, the artistic sense and function of the original photographic work has been transformed.⁷¹ However, the second instance court, the Guangzhou Intellectual Property Court, rejected such reasoning, ruling that apart from the broad theme of the Three Kingdoms era, there is no correlation between the game, the article, and the photographic work.⁷² The photo at issue was directly used in the text of the webpage for the commercial purpose of promoting the online game, not in the thumbnail version.⁷³ In *Ma Jianming*, the defendant used a photo of a famous Chinese musician shot by the plaintiff in an article reporting the musician's death. The Shanghai Intellectual Property Court did not touch upon the transformative use mentioned in the defense, but instead focused on one of enumerated exceptions in the Chinese Copyright Law namely, the "use of works for news reporting purposes." As the use of the photo was not inevitable when reporting the musician's death, the court ruled against the argument for a copyright exception and transformative use.74

Undoubtedly, Chinese courts support the transformative nature of thumbnail images, but their opinions remain diversified over on the transformative nature of small-scaled images that are not in thumbnail version. The courts are reluctant to adopt transformative use prematurely when

⁷¹ Li Xianghui Su Guangzhou Huaduo Wangluo Keji Youxian Gongsi Zhuzuoquan Qinquan Jiufen An (今向晖诉广州华多网络科技有限公司著作权侵权纠纷案) [Li Xianghui v. Guangzhou Huaduo Network Tech. Co., Ltd.], (2016) Yue 0115 Min Chu No. 3626 ((2016)粤0115民初3626号) (Guangzhou Nansha Dist. People's Ct. Oct. 12, 2016) (in Chinese).

 $^{^{72}}$ Li Xianghui yu Guang
zhou Huaduo Wangluo Keji Youxian Gongsi Zhuzuoquan Qinquan Jiufen Shangsu An

⁽李向晖与广州华多网络科技有限公司著作权侵权纠纷上诉案) [Li Xianghui v. Guangzhou Huaduo Network Tech. Co., Ltd.], (2017) Yue 73 Min Zhong No. 85 ((2017)粤73民终85号) (Guangzhou Intell. Prop. Ct. Jul. 21, 2017) (in Chinese). 73 Id.

⁷⁴ Guangzhou Wangyi Jisuanji Xitong Youxian Gongsi yu Ma Jianming Qinhai Zuopin Xinxi Wangluo Chuanbo Quan Jiufen Ershen Minshi Panjue Shu (广州网易计算机系统有限公司与马建明侵害作品信息网络传播权纠纷二审民事判 決书) [Ma Jianming v. Guangzhou NetEase Computer Sys. Co., Ltd.], (2017) Hu 73 Min Zhong No. 181 ((2017)沪73民终181号) (Shanghai Intell. Prop. Ct. Aug. 15, 2017) (in Chinese).

the appropriated images and the content published by the defendants are not closely related. The Shanghai Intellectual Property Court ruled in favor of transformative use only when the judges found a high correlation between the scaled-down version of the images and the context. Hence, Chinese courts may decide as transformative use the reproduction of images in low resolution and thumbnails for TDM.

3. Live Game Streaming

A number of cases denied the transformative nature of live game streaming based on the four-factor balancing test, including *NetEase v*. *Huaduo*,⁷⁵ *Tencent v*. *Sun Media, et al.*,⁷⁶ and *Tencent v*. *Sun Media, et al.*,⁷⁷ Although the infringing live streaming platforms emphasized the transformative nature of the streaming based on the fact that the whole game screen used in the process of streaming shows game players' skills and comments on the game content, the courts focused on the third and fourth factors under which the whole screen was displayed and the game developers' potential market would be materially damaged. This Author also

⁷⁵ Guangzhou Wangyi Jisuanji Xitong Youxian Gongsi yu Guangzhou Huaduo Wangluo Keji Youxian Gongsi Qinhai Zhuzuoquan Ji Buzhengdang Jingzheng Jiufen An

⁽广州网易计算机系统有限公司与广州华多网络科技有限公司侵害著作权及不正当 竞争纠纷案) [Guangzhou NetEase Computer Sys. Co., Ltd. v. Guangzhou Huaduo Network Tech. Co., Ltd.], (2018) Yue Min Zhong No. 137 ((2018)粤民终137号) (Guangdong High People's Ct. Dec. 10, 2019) (in Chinese).

⁷⁶ Shenzhen Shi Tengxun Jisuanji Xitong Youxian Gongsi yu Yuncheng Shi Yangguang Wenhua Chuanmei Youxian Gongsi, Jingri Toutiao Youxian Gongsi, Beijing Zijie Tiaodong Keji Youxian Gongsi, Guangzhou Youshi Wangluo Keji Youxian Gongsi Qinhai Jisuanji Ruanjian Zhuzuoquan Ji Buzhengdang Jingzheng Jiufen Yishen Minshi Caiding Shu

⁽深圳市腾讯计算机系统有限公司与运城市阳光文化传媒有限公司、今日头条有限 公司、北京字节跳动科技有限公司、广州优视网络科技有限公司侵害计算机软件

著作权及不正当竞争纠纷一审民事裁定书) [Shenzhen Tencent Computer Sys. Co., Ltd. v. Yuncheng Sun Cultural Media Co., Ltd., Toutiao Co. Ltd., Beijing ByteDance Tech. Co., Ltd., Guangzhou UC Network Tech. Co., Ltd.], (2019) Yue 73 Zhi Min Chu No. 252 pt. I ((2019)粤73知民初252号之一) (Guangzhou Intell. Prop. Ct. Jul. 8, 2019) (in Chinese).

⁷⁷ Shenzhen Shi Tengxun Jisuanji Xitong Youxian Gongsi yu Yuncheng Shi Yangguang Wenhua Chuanmei Youxian Gongsi, Beijing Zijie Tiaodong Keji Youxian Gongsi Qinhai Zuopin Xinxi Wangluo Chuanbo Quan Jiufen Yishen Minshi Panjue Shu

⁽深圳市腾讯计算机系统有限公司与运城市阳光文化传媒有限公司、北京字节跳动 科技有限公司侵害作品信息网络传播权纠纷一审民事判决书) [Shenzhen Tencent Computer Sys. Co., Ltd. v. Yuncheng Sun Cultural Media Co., Ltd., Beijing ByteDance Tech. Co., Ltd.], (2019) Yue 0912 Min Chu No. 1756 ((2019)粤0912民初1756号) (Guangzhou Internet Ct. Sep. 21, 2020) (in Chinese).

noted the potential market issue in her previous research.⁷⁸ Facing a huge commercial market brought about by live game streaming, game developers and operators cannot wait to expand the expected market of game development to the field of live game streaming. The purpose and expected market of game development is no longer only for players' entertainment, but also for attracting more audience to watch live game streaming and getting a share of the profits from the streaming through the display of the game's exquisite design and convenient operation.⁷⁹

V. RECOMMENDATIONS AND CONCLUSION

A. Recommendations: A Two-Step Approach for the TDM Exception

Based on the amended exceptions and the judicial practice concerning transformative use in China, this Article suggests a two-step approach to increase both certainty and flexibility for the TDM exception in the next round of revision of laws and administrative regulations. The first step is to incorporate a mandatory TDM exception in the Implementing Regulations or the RNDI Regulations to guarantee that a TDM exception is available in the copyright system. The second step is to convert the current closed model of copyright exceptions to a hybrid model with an open-ended clause that includes four factors to provide guidance on the future development of copyright law. Transformative use is not a great scourge. As long as existing controversies are avoided, transformative use can be considered a subfactor of the first factor in the four-factor balancing test.

1. First Step: Include a Mandatory TDM Exception in the Administrative Regulations

Since the Implementing Regulations and the RNDI Regulations will be soon amended in accordance with the amended Copyright Law, it is important to include a mandatory TDM exception to supplement the closed list of exceptions with the following language:

"Text and data mining" means automated analysis of text and data in digital form in order to generate information that can identify patterns, trends, correlations, etc. Text and data analysis includes extraction, comparison, classification, or other statistical analysis of the constituent language, sounds, images, or other elemental data from a large number of works or a large volume of other such data. Use of a published work for the purpose of text and data mining shall be permitted without the authorization from, and without payment of remuneration to, the copyright

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 ⁷⁸ (Jerry) Jie Hua, *Copyright Issues in Online Game and Live Game Streaming*, EDITORIAL FRIEND, no. 6, 2018, at 88-89 (in Chinese).
⁷⁹ Id.

owner, provided that the normal use of the work and the legitimate interests of the copyright owner shall not be affected.⁸⁰

The three-step test will be applied to restrict the TDM exception rather than limiting the TDM exception to a scientific research purpose, in case the exception excludes certain TDM projects conducted by private entities or individual researchers for commercial results.

2. Second Step: Incorporate Flexibility and Modify Transformative Use

As the administrative regulations cannot be revised to change the basic closed model of copyright exceptions, we need to wait for the next round of amendment of the Copyright Law to convert the exceptions into a hybrid model. As Peter K. Yu pointed out, a hybrid model for copyright exceptions adopted by a number of jurisdictions — such as Israel, Liberia, Malaysia, the Philippines, Singapore, South Korea, Sri Lanka, and Taiwan - reflects the desires of policymakers and legislators' to better adapt the transplant of U.S. fair use model to local conditions, which is more likely to take root and become effective.⁸¹ Legislators and judicial practitioners in China have tried to introduce more flexibility into the copyright system based on the existing exhaustive list by issuing the 2011 Judicial Opinion that contains U.S.-style four-factor balancing test and by adding an openended clause with the "other circumstances" language in the 2014 Draft Amendment. Taking China's status quo into consideration, if the model of copyright exceptions has to be changed to facilitate the development of digital technologies and to respond to public demands, policymakers and legislators in China may be more inclined to adopt a hybrid model that would maintain the current list of exceptions while adding open-endedness, as opposed to introducing an open-ended factor-driven test to judge fair use. Therefore, the four-factor test may be incorporated into the Copvright Law along with the three-step test to judge whether a certain use of copyright works outside the enumerated exceptions shall be permissible. Such a hybrid model of copyright exceptions generally brings more flexibility to TDM activities.

Transformative use that has been frequently mentioned and borrowed by Chinese legal practitioners in copyright infringement litigation during the past ten years has also shed light on the hybrid model as part of the four-factor test provided that the following issues have been resolved. First, the difference between "objective" and "purpose" as analyzed by

⁸⁰ The explanation for text and data analysis is borrowed from Chosakukenhô [Copyright Law], Law No. 70 of 2018, art. 30–4(ii) (Japan), https://www.cric.or.jp/english/clj/cl2.html.

⁸¹ Peter K. Yu, *Fair Use and Its Global Paradigm Evolution*, 2019 U. ILL. L. REV. 111, 147.

American courts in the transformative use cases shall be clarified. By comparing purpose and content transformativeness, we find that the purposes in purpose transformative cases, such as making thumbnail search convenient and providing key information for public retrieval and data analysis, are relatively objective and can be clearly figured out by the public. On the contrary, "objective" mentioned in the content transformative use cases is more subjective and depends on the creator's claims. In these cases, the purpose of creating the original art and that of creating the appropriation art should be deemed the same — that is, letting the public enjoy the artistic expressions of the artworks. What the appropriation art transforms is not the purpose of creation, but the content, artistic style, and intended meaning of the original works. Thus, transformative use in China should focus on purpose transformativeness and non-expressive fair use in which the purpose of the use should be judged on a more general level from the perspective of ordinary reasonable persons.

Second, the line between transformative use and the derivative work right should be distinguished. The derivative work right is called the right of adaptation in the Chinese Copyright Law, which is developed originally from the right of reproduction. The right of reproduction enables the copvright owner to control only the market that the original work enters after its first distribution, while the right of adaptation gives the copyright owner an opportunity to obtain profits from all relevant markets for the work. The scope of the right of adaptation should take the original author's creative expectation into consideration based on multiple factors, including the author's intent to create, his or her consistent style of creation and expression, the market that the copyright works may enter from the perspective of ordinary reasonable persons, and the market that the same type of works can enter at the same time. Two scenarios can be further clarified. In the first scenario, if the creation of transformative use falls within the scope of the original author's expected market, such creation shall be deemed infringement against the right of adaptation, rather than fair use. The right of adaption overrides the transformative use defense. In the second scenario, if certain uses transform the original author's creative style, which is unlikely to interfere with the market that the original author expects to enter, such transformation does not fall within the scope of the right of adaptation and shall be regarded as the reproduction of the original as source material to create a new work. Transformative use shall be deemed as exception for the right of reproduction rather than the right of adaptation.

Third, transformative use shall be used as a subfactor of the first factor in the four-factor test without dominating the three remaining factors. It would be better to consider transformative use alongside the fourth factor on market substitution. For example, Chinese courts may consider whether the price increase in the original works will lead to the change of demand for subsequent creations. If no change happens, there is no market substitution between the original and the later creation. The use of the originals to make new creations is transformative regardless of the types of creations (databases, search engines, or appropriation art). If market substitution exists, the new creations are likely to damage the market value of the originals. The use of the originals shall therefore not be regarded as transformative.

B. Conclusion

In light of the importance of TDM in the promotion of data sharing and utilization in China, copyright exceptions should work to buttress TDM activities. The failure of the Third Amendment of the Copyright Law to introduce a TDM exception will bring risks to TDM activities and hinder the thriving of TDM projects in China. By observing the advantages and shortcomings of TDM exceptions in the EU DSM Directive and the U.S. judicial practice concerning transformative use, this Article considers China's status quo and advances a two-step recommendation to solve the recent omission of a TDM exception in the Third Amendment and to introduce flexibility into copyright exceptions. China may borrow transformative use in fair use judgments, as certain Chinese courts have already done, but controversies in U.S. cases shall be well avoided.