

Jerry Jie Hua

Toward A More Balanced Approach: Rethinking and Readjusting Copyright Systems in the Digital Network Era

Toward A More Balanced Approach:
Rethinking and Readjusting Copyright Systems
in the Digital Network Era

Jerry Jie Hua

Toward A More Balanced
Approach: Rethinking
and Readjusting Copyright
Systems in the Digital
Network Era

 Springer

Jerry Jie Hua
Deacons (Hong Kong)
Hong Kong, China

ISBN 978-3-662-43516-8 ISBN 978-3-662-43517-5 (eBook)
DOI 10.1007/978-3-662-43517-5
Springer Heidelberg New York Dordrecht London

Library of Congress Control Number: 2014942649

© Springer-Verlag Berlin Heidelberg 2014

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed. Exempted from this legal reservation are brief excerpts in connection with reviews or scholarly analysis or material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work. Duplication of this publication or parts thereof is permitted only under the provisions of the Copyright Law of the Publisher's location, in its current version, and permission for use must always be obtained from Springer. Permissions for use may be obtained through RightsLink at the Copyright Clearance Center. Violations are liable to prosecution under the respective Copyright Law.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

While the advice and information in this book are believed to be true and accurate at the date of publication, neither the authors nor the editors nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Preface

The establishment of copyright protection systems aims to achieve two important purposes: to stimulate the incentive for creation by granting authors a series of exclusive rights on the one hand and promote the progress of culture and public welfare by establishing a series of limitations on these exclusive rights so that the flow of information and dissemination of knowledge will not be hindered on the other hand.

There is always a close relationship between technology development and copyright law. The emergence of personal computers and the Internet has brought about a distinct wave of technological innovation that has reshaped copyright laws by empowering anyone with a connection to flawless, inexpensive, and instantaneous reproduction and distribution of works of authorship. Such technological advancement changes the interests of copyright owners and public users. Users are exposed to more opportunities brought about by digital network technology to obtain access and exploit copyrightable works. If copyright laws do not expand their protected subject matters and categories of exclusive rights, authors cannot be adequately compensated under the digital network environment. Copyright laws can no longer function as an incentive for creation if there is a lack of revision and appropriate expansion. Hence, copyright laws need to extend protection to new subject matters, such as computer programs and databases; grant right holders new kinds of rights, such as right of rental and right to network dissemination of information; establish indirect infringing liability for Internet service providers; and expand protection to technological measures.

However, copyright expansion should not be unlimited and should cease when appropriate access to various works and future creations is at risk. Expansion of copyright protection is only justified when the access and use of works by the public threaten the incentive of authors to create and reap economic rewards. Overexpansion of copyright protection would again disrupt the balance if access to works is narrowly restricted. Overprotection of copyrights will not only obstruct access to original works but will also inhibit future creations based on the original works.

Based on comparative research on international and regional conventions as well as laws, regulations, policies, and cases among different jurisdictions, this book intends to suggest proposals to recover the balance of interests among copyright holders, technological intermediaries, and public users in terms of accessing, distributing, and exploiting copyright works. Four specific issues are discussed in the book: the anti-circumvention rules for protection of technological measures, indirect infringing liability for Internet service providers and safe harbor regulations, copyright limitations and exceptions especially under the digital network environment, and digital commons projects which promote distribution and adaptation of copyright works placed under voluntary licensing schemes. The analysis of these issues and corresponding proposals for reform are not only to reverse the worldwide copyright expansion trend so as to make copyright laws appropriately respond to digital network challenges and the emerging remix culture in general but also to induce China to rethink and amend her copyright system so as to restore a robust public domain where existing information and data can be used to produce future intellectual assets.

Hong Kong, China

Jerry Jie Hua

Acknowledgments

This book is based on the doctoral thesis submitted to the University of Hong Kong for partial fulfillment of the PhD degree. The successful completion of PhD research is not an easy task. My journey in the pursuit of academic improvement was met with much confusion, exploration, distress, and joy. Many individuals were kind enough to lend me a hand, provide inspiration, and arouse courage in me on this journey. They are the recipients of my true appreciation and gratefulness.

First, I would like to express my gratitude to the University of Hong Kong, the institution that gave me the opportunity to start my academic research with a generous studentship and conference grant. My doctoral research is principally based on the collections housed in the university libraries and electronic databases.

My appreciation and gratitude belongs to Professor Li Yahong, my PhD supervisor, who dedicated her time and energy to reading my thesis, giving suggestions and correcting the errors in my expressions. She supported every opportunity to improve my legal study and academic research, regardless whether this was conducting visiting research abroad or taking part in an essay competition. She recommended my internship at the Hong Kong Intellectual Property Department and helped to secure my involvement with the Hong Kong Creative Commons as a student researcher. These experiences broadened my horizons, allowing me to become more familiar with Hong Kong copyright laws and the copyright community. I am also grateful to my thesis examiners, Professors Alice Lee and Zhao Yun of the University of Hong Kong as well as Professor Peter Yu of Drake University (USA), who raised thought-provoking questions and suggestions which helped me to more deeply ponder legal issues and better revise my work.

My gratitude is also extended to the Duke University School of Law (USA), Max Planck Institute for Intellectual Property and Competition Law (Germany), and Centre for Commercial Law Studies of Queen Mary University of London (UK). These institutions provided opportunities so that I was able to conduct visiting research by using their resources and facilities. The Max Planck Institute even provided a generous scholarship to aid my research and daily expenses in Munich, Germany. I would like to thank Professor Ulrich Loewenheim of the Frankfurt

University (Germany), Professor Silke von Lewinski of the Max Planck Institute for Intellectual Property and Competition Law, and Professor Jerome Reichman of the Duke University who inspired me and provided helpful comments toward my legal research. The academic discussions with them were always enlightening and pleasant.

I am also grateful to the organizers of the academic conferences and seminars that offered me the opportunity to present my research, as well as a couple of scholars and researchers who commented on my research and updated my knowledge-building in the research field by visiting research, journal editing, conferences, and seminars. Their insights from different angles and warm friendship added much joy to my journey toward the PhD degree.

Finally, true gratefulness goes to my family, especially my respected and beloved parents. Their unremitting support, encouragement, and love accompanied me during the entire journey in pursuit of my PhD degree. Without their love, I would not have successfully accomplished this difficult task. This book is dedicated to them.

Contents

1 Copyright Law Changes and Developments in Digital Network Era	1
1.1 Introduction.....	1
1.2 Interrelationship Between Technology Development and Copyright Laws	3
1.3 Amendment and Expansion of Copyright Protection Under Digital Network Environment.....	5
1.3.1 Amendment and Development of International Copyright Conventions	5
1.3.2 Changes and Amendments of Copyright Protection Systems in Developed Regions.....	9
1.3.3 New Stages of Copyright Reforms	13
1.3.4 Conclusion: Expansion of Copyright Protection Under Digital Network Environment.....	17
1.4 Should China Imitate or Innovate?	20
1.4.1 Development and Amendment of Copyright Protection System in China.....	21
1.4.2 Should China Imitate or Innovate?	31
1.5 Conclusion	35
References.....	36
2 Balance of Interest in Copyright Systems and Imbalances Under Digital Network Environments	39
2.1 Introduction.....	39
2.2 Balance of Interest in Copyright Systems.....	41
2.2.1 Philosophical Analysis of Intellectual Property Systems.....	41
2.2.2 Economical Analysis of Intellectual Property Systems	45
2.2.3 Origin and Development of Copyright Laws.....	48
2.2.4 Dual Goals of Copyright Systems.....	53

2.3	Current Imbalance of Interest in Copyright Systems.....	55
2.3.1	Borderline of Balance of Interests: Accessibility of Copyright Works.....	55
2.3.2	Justification of Expanding Copyrights.....	56
2.3.3	Current Imbalance of Interests in Copyright Systems.....	57
2.4	Conclusion.....	66
	References.....	67
3	Toward a More Balanced Model: Revision of Anti-circumvention Rules.....	69
3.1	Introduction.....	69
3.2	Basic Understanding of Protection of Digital Rights Management and Technological Protection Measures.....	71
3.2.1	Conventional Protection of Technological Measures and Rights Management Information.....	72
3.2.2	Key Terms in the Protection of Technological Protection Measures.....	73
3.3	Balanced or Unbalanced: Anti-circumvention Rules of Digital Millennium Copyright Act.....	75
3.3.1	Contents of DMCA Anti-circumvention Rule.....	76
3.3.2	Balanced Designs: Exceptions Under the Anti-circumvention Rule.....	77
3.3.3	Unbalanced Designs: Existing Problems in the Anti-circumvention Rule.....	80
3.3.4	Conclusion: Balanced Designs Weighing Unbalanced Designs.....	87
3.4	Introduction of a More Balanced Model of Anti-circumvention Rule.....	88
3.4.1	Technological Design: Guaranteeing Minimum Use.....	90
3.4.2	Legislative Design: Inserting General Condition and Exception.....	91
3.4.3	Judicial Design: Reaching Decision Case by Case Based on Prerequisite and General Exception.....	94
3.4.4	Scheme Outside Intellectual Property Law: Importation of Anti-circumvention Rule into Competition Law.....	95
3.4.5	Suggestions for the New Round of Reform Regarding Anti-circumvention Rules in China.....	96
3.5	Conclusion.....	98
	References.....	99
4	Establishing Certainty About Liability for Internet Service Providers and Safe Harbor Regulations.....	101
4.1	Introduction.....	101
4.2	Introduction on Internet Service Providers.....	103
4.2.1	Definition of Internet Service Providers.....	103
4.2.2	Importance of Establishing Certainty About Liability and Limitations for Internet Service Providers.....	106

- 4.3 Internet Service Provider Liability and Safe Harbor Rules Established by Common Law Cases 107
 - 4.3.1 Sony Safe Harbor Rule 107
 - 4.3.2 Contributory and Vicarious Liability Rules 108
 - 4.3.3 Authorization or Joint Tortfeasor Liability of Commonwealth Jurisdictions 114
- 4.4 Internet Service Provider Liability and Safe Harbor Rules Established by Statutes 116
 - 4.4.1 Notice and Takedown Regime 117
 - 4.4.2 Counter Notification Regime 118
 - 4.4.3 Subpoena Procedure or Norwich Pharmacal Order 120
- 4.5 New Development in Internet Service Provider Liability 122
 - 4.5.1 New Conditions for Safe Harbors on Internet Service Provider Liability: The Graduated Response 122
 - 4.5.2 Internet Service Provider Injunctions Ruled in European Courts 130
- 4.6 Conclusion: Recommendations for Establishing Certainty of Internet Service Provider Liability 136
- References 139
- 5 Reconstruction of Copyright Limitations and Exceptions in Digital Network Age: Importation of Legal Flexibility and Certainty** 141
 - 5.1 Introduction 141
 - 5.2 Theories of Copyright Limitations and Exceptions 144
 - 5.2.1 Academic Arguments That Support Copyright Limitations and Exceptions 144
 - 5.2.2 International Treaty Obligations 146
 - 5.3 Reconstruction of Copyright Limitations and Exceptions 147
 - 5.3.1 Importing Flexibility and Certainty into Copyright Limitations and Exceptions 149
 - 5.3.2 Importing Four-Factor Balancing Test as Abstract Guidance 150
 - 5.3.3 Importing Nonexclusive List of Exceptions as Minute Prescriptions 161
 - 5.4 Supplementary Schemes 166
 - 5.4.1 Compulsory Licensing Scheme 166
 - 5.4.2 Copyright No Action Policy 171
 - 5.4.3 Community Guidelines 172
 - 5.5 Conclusion 172
 - References 173
- 6 Construction of Digital Commons and Exploration of Public Domain** 175
 - 6.1 Introduction 175
 - 6.2 Alternative Schemes: Digital Commons 177

- 6.3 Construction and Promotion of Creative Commons 179
 - 6.3.1 Creative Commons Licenses..... 179
 - 6.3.2 Creative Commons in Greater China 182
 - 6.3.3 Creative Commons China Mainland Licensing 183
 - 6.3.4 Positive and Negative Impacts of Promoting Creative Commons in Mainland China 186
- 6.4 Impact of Digital Commons on Public Domain 190
 - 6.4.1 Necessity of Public Domain..... 191
 - 6.4.2 Shrinking Public Domain in Digital Age: Threats from Second Enclosure 193
 - 6.4.3 Constructing Public Domain in Digital Age: Influence of Digital Commons..... 196
- 6.5 Conclusion 199
- References 199

- Conclusion** 201
 - Main Findings 201
 - Contributions of the Study 204
 - Revision of Anti-circumvention Rule 205
 - Amending Internet Service Provider Liability and Safe Harbors..... 206
 - Importing Legal Flexibility and Certainty into Copyright Limitations and Exceptions..... 208
 - Promoting Digital Commons Projects 209
 - Concluding Remarks..... 210
 - Reference 210

- List of Legislations** 211

- List of Cases**..... 213

- Bibliography** 215

Introduction

Background

The establishment of copyright protection systems aims to achieve two important purposes: to stimulate the incentive for creation by granting authors a series of exclusive rights on the one hand and promote the progress of culture and public welfare by establishing a series of limitations on these exclusive rights so that the flow of information and dissemination of knowledge will not be hindered on the other hand.

There is always a close relationship between technology development and copyright law. The emergence of personal computers and the Internet has brought about a distinct wave of technological innovation that has reshaped copyright laws by empowering anyone with a connection to flawless, inexpensive, and instantaneous reproduction and distribution of works of authorship. Such technological advancement changes the interests of copyright owners and public users. Users are exposed to more opportunities brought about by digital network technology to obtain access and exploit copyrightable works. If copyright laws do not expand their protected subject matters and categories of exclusive rights, authors cannot be adequately compensated under the digital network environment. Copyright laws can no longer function as an incentive for creation if there is a lack of revision and appropriate expansion. Hence, the development of digital network technologies spurs the continuous expansion of copyright protection systems under which protected subject matters are increased, the categories of exclusive rights of copyright owners are widened, terms of protection are extended, indirect liability is imposed upon technological intermediaries such as Internet service providers (ISPs), protection is granted to digital locks such as technological measures, and copyright limitations and exceptions are restricted.

Developed countries and regions, such as the United States and the European Union, have pioneered to internally reform their copyright legislations in response to digital challenges and externally pressured international organizations to adopt higher standards as international conventional norms. These international conventional principles in turn

came back to contracting parties in both developed and developing statuses as obligations which should be domestically fulfilled. In following the endeavors of their developed counterparts, developing countries, such as China, have quickened the process of updating their copyright system in the digital network age due to external pressures imposed by the obligation to implement international conventions on the one hand and the internal need to transform their legal system through legal transplant to match the developments in the information society and knowledge economy on the other hand.

However, copyright expansion should not be unlimited and should cease when appropriate access to works and future creations is at risk. Expansion of copyright protection is only justified when the access and use of works from the public threaten the incentive of authors to create and reap economic rewards. Overexpansion of copyright protection would again disrupt the balance if access to works is narrowly restricted. Overprotection of copyrights will not only obstruct access to original work but will also inhibit future creations based on the original works.

Whether a system shall be adjusted to more protect the interests of copyright owners or reflect that there is increased consideration given to consumer groups and future creators depends on the social values and perspectives of the policymakers. Policymakers should bear the idea that the purpose of establishing a copyright system is not to merely focus on stimulating creation by granting authors with exclusive proprietary rights but also concentrate on serving social welfare and advocating for progress by promoting access and dissemination of copyright works and encouraging future creations based on previous material. The design of a copyright system requires the attainment of social justice, not merely maximizing the protection of commoditization interests.

Social justice includes “not only access to, but also inclusion in, the social, cultural, and economic life of the country. Indeed, it extends beyond inclusion in social, cultural, and economic life to full participation in and ability to affect the direction of civil society in all its manifestations” [1, p. 83]. Social justice should be a part of the goals of intellectual property laws. In the spectrum of copyrights, social justice is realized when people not only have the ability to equally access and enjoy the works created by others but also have equal opportunity to participate in exploitation and creation based on previous works. The subsequent creations which have benefited from preexisting works and information form a benign chain which perpetuates the production of intellectual outputs, advances cultivation of cultural atmospheres, and finally, promotes social progress.

The emergence and rapid development of digital network technology have quickened the recreation chain, as the advancement of technology has simplified the reproduction and dissemination of works, provided mediocrity with the capability to modify and adapt works, enhanced the compactness of works in digital form, and strengthened ability to link and search for information through the Internet. These special features unprecedentedly enable the involvement of ordinary users in creations that are not only based on their own original ideas but also by making derivations and remixing of preexisting copyright material. Continuous recreations may further promote the formation of creative groups, such as fan fiction producers, and spur the spring-up of creative industries. The realization of such continuous recreations

relies on a reasonable copyright legal system which grants appropriate copyright protection to the authors and guarantees adequate copyright limitations so that the users can continuously access and exploit copyright works.

The overprotection of proprietary rights in the digital network age will intensify the relationship among copyright holders, information disseminators, and end users, thus satisfying requests for strong copyright protection from powerful copyright industries by sacrificing the interests of technology developers and consumers.

In the face of potential copyright infringement liability, technology intermediaries may hesitate to develop new technologies that facilitate information dissemination and adaptation, while consumers may no longer attempt to make full use of copyright works in the absence of clear authorization from the right holders. There is thus an imbalance of interests among the different stakeholders. Furthermore, overprotection will increase the digital divide which already exists between the developed and the developing countries, as well as between economically developed and rural areas. While residents in the more developed areas enjoy greater access to an abundance of information, locals in less developed regions do not have such benefits due to the lack of access to digital technology and the skills to effectively use the technology [1]. To address the conflicts in interest among the different stakeholders and the growing digital divide, copyright systems in the digital network age should be designed to better reflect social utility and social justice. Copyright laws not only cultivate incentives for creation but, more importantly, promote social advancement.

Literature Review

In response to digital network challenges and the difficulties in achieving a balance of interests, various jurisdictions around the world have taken unremitting measures to initiate legal reforms and promulgate new laws.

The United States enacted the Digital Millennium Copyright Act (DMCA) in 1998, with the objective to closely follow new technological developments and address copyright protection issues under the digital network environment. The key parts of the DMCA, namely, the anti-circumvention rules for the protection of technological measures and safe harbors for ISPs, had been incorporated as important sections in the Copyright Act of 1976. Much harsher measures against online piracy were proposed by the US Congress in recent amendment bills, the Protect IP Act (PIPA) and the Stop Online Piracy Act (SOPA). The European Union has issued a series of directives to protect digital copyright works and exclusive rights related to the digital network environment, including the Directive on the Legal Protection of Computer Programs, Directive on the Legal Protection of Databases, Directive on Certain Legal Aspects of Information Society Service in particular Electronic Commerce in the Internal Market, and Directive on the Harmonization of Certain Aspects of Copyright and Related Rights in the Information Society (thereafter, Information Society Directive). Guided by these directives, member countries in the

European Union have continuously updated their regulations and policies. Germany last revised its copyright law in 2008; France initiated a graduated response policy against rampant online piracy in 2009; and the United Kingdom issued the Digital Economy Act in 2010.

Jurisdictions outside North America or Europe have also taken steps to deal with digital copyright issues, especially in the areas of granting protection to exclusive rights related to information dissemination on the network, establishing liability for ISPs and prohibiting unauthorized circumvention of technological measures. Australia promulgated the Copyright (Digital Agenda) Amendment Act in 2000 so as to update its copyright law to fully adapt to the digital network environment. China enacted the Regulation on the Protection of the Right to Network Dissemination of Information in 2006, thus making digital copyright protection comply with national situations while assimilating certain approaches from the DMCA. The Hong Kong government launched public consultations to seek opinions from various sectors on how copyright protection should be strengthened in the digital age. They released the Preliminary Proposals for Strengthening Copyright Protection in the Digital Environment in 2008, the Proposals for Strengthening Copyright Protection in the Digital Environment in 2009, and Copyright (Amendment) Bill 2011. At the multinational level, the Anti-Counterfeiting Trade Agreement (ACTA) was reached and signed by various countries to strengthen protection on intellectual property rights in general and strike at infringement under the digital network environment in particular.

Although new laws, regulations, and treaties have been made to address digital network challenges, focus on these updated promulgations is mainly placed on the concerns and protection of the interests of copyright holders, since some of the provisions are released under pressure from media conglomerates through their lobbying activities. Although a few provisions have taken the concerns and interests of technological intermediaries and public users into consideration, they cannot adequately function well enough to balance the interests of public users against those of right holders.

Research Questions

In contrast to the predigital era when proprietary protection for creative expression was necessary to recover the cost of producing and disseminating information as well as compensate authors and intermediaries, in the participatory web age, strong proprietary protection on creative expression is no longer appropriate in the spirit of the Internet and participatory culture. Production expenses and distribution of information have significantly declined in the advancement of digital network technology. Internet surfers are more willing to engage in recreational activities online or other instrumental purposes rather than simply take in the existing information. Creation in the digital network era is more based on a model that has noncommercialized, nonmarketed, shared, and amateur-generated contents. To adapt to this

new environment where recipients of creative products incorporate such into their own future creations, policymakers of copyright laws in the digital network age should further consider and address the following issues: (1) the extent that a copyright owner should restrict access, dissemination, and use of copyright works; (2) the extent that a technological intermediary is allowed to transmit copyright works; (3) the extent that a user is permitted to exploit copyright works and make new creations; and (4) the extent that massive participation in the mash-up and remix culture is tolerated or even encouraged by copyright laws. It is important to well resolve the abovementioned issues so as to alleviate the increasing tension between strong proprietary protection and permissible exploitation of copyright works.

Therefore, three concerns with regard to permissible activities by users should be appropriately addressed through the reform of copyright laws, namely, “user access permission,” “user sharing permission,” and “user creation permission.” User access permission involves the variety of ways for users to obtain access to copyright works without being heavily restricted by technological measures established by copyright owners. In the absence of access to information, users cannot enjoy the lawful consumption of creative products, not to say any further exploitation and potential creation based on the original products. User sharing permission involves the extent of freedom of users to share information with certain social circles, such as family, friends, or peers. Not only are the creators of user-generated contents eager to share their works, but some mainstream content providers are also willing to do so or, at least to a certain degree, share their audiovisual or photographic works. Technology and network platforms should thus be available so as to cultivate a sharing-friendly environment. The use of stringent measures to address alleged copyright infringement of intermediaries and users in their online sharing of creative works will suffocate the desire and channels for information sharing. User creation permission involves the extent that users are allowed to exploit copyright works and copyright laws tolerate or even encourage the remix culture. Copyright limitations and exceptions are established to guarantee reasonable non-infringing use and exploitation of copyright works. The allowance of a broader scope of fair or non-infringing uses of copyright works will provide more opportunities for users to make derivative works. The acknowledgment of the transformative nature of subsequent works and parody is beneficial to further promote the user-generated culture and endorse the value of free speech, criticism, parody, and reporting through copyright laws with respect to cultural traditions [2]. In addition, alternative approaches based on contract law and voluntary licensing act as another approach to advance the dissemination and utilization of copyright works. These alternative approaches, such as the Creative Commons on the one hand, enrich the public domain and are freely exploited by users; yet on the other hand, they ensure that creators have some control over their works, such as reserving the right of attribution and noncommercial use.

Hence, copyright systems should be reformed toward a more balanced and relatively open model so that creative expression can be widely accessed, distributed, exploited, and recreated. It is necessary to reconsider and amend current legal designs with regard to anti-circumvention rules for the protection of technological

measures, ISP liability and safe harbors, as well as copyright limitations and exceptions. Alternative approaches that are helpful for reserving the rights of intellectual commons deserve to be supported and promoted. Although there are concerns in many developing countries, such as China, on resolving rampant piracy and resisting pressure imposed by international criticism, a new model of creation based on nonmarket factors, user-generated contents, and a participatory culture has already been presented to the public and mass media, and policymakers should pay attention to this model. When the network age moves toward the development of a participatory culture and era, it is time for developing countries to think about reshaping their copyright regime to reflect cultural features and facilitate creation.

In terms of the future of copyright regimes, according to WIPO Director General Francis Gurry, “the central question facing the evolution of copyright policy is how to maintain a balance between availability of cultural works at affordable prices while assuring a dignified economic existence of creators and performers. There is no ‘single magical answer’ to the development of a successful policy response to the copyright challenges in the digital age, but a combination of ‘law, infrastructure, cultural change, institutional collaboration and better business model.’”¹ Three main principles should guide the development of copyright policy responses. They are “neutrality to technology and to the business models developed in response to technology; comprehensiveness and coherence in the policy response; and the need of more simplicity in copyright.”² Under Mr. Gurry’s analysis, the purpose of copyrighting is to work with technologies to promote cultural exchanges and dynamism, not to preserve vested business interests. A comprehensive and global infrastructure needs to be established to legally permit the licensing of copyright works on the Internet. Attention should be given to the threat to “the financial viability of culture in the 21st century” if there lacks an effective and properly balanced copyright policy.³

Research Methodologies and Expected Value

My legal research primarily includes doctrinal, interdisciplinary, and comparative research methodologies.

The doctrinal research will be based on library sources, thus relying on existing information such as monographs, journal articles, case reports, legislations, treaties, and historical records. Collections from the university and institute libraries have provided this book with both common and civil law materials from a diversified range of jurisdictions, such as the United States, the United Kingdom, Hong Kong, Australia, Canada, India, Germany, France, Japan, Taiwan, and Mainland China,

¹“WIPO Director General Addresses the Future of Copyright,” available at http://www.wipo.int/pressroom/en/articles/2011/article_0005.html (visited May 15, 2012).

²Ibid.

³See n 1 above.

and digital and online databases, such as Westlaw, LexisNexis, HeinOnline, ChinaLawInfo, and the China National Knowledge Infrastructure (CNKI).

An interdisciplinary approach will be used to study the philosophical and economic theories with regard to the balance of interest doctrine in the spectrum of intangible property. In addition, since my research is intensively related to digital technology and the Internet, second-hand quantitative data will be used to demonstrate the development of the information network and its influence on the changes in copyright policymaking, advancement of copyright-related industries, and socio-economic lives.

Another type of methodology covered in my research is the use of comparative study due to the growing importance of international intellectual property treaties and the increasing influence of Western countries on developing countries because the former has more advanced experiences. Due to the widespread importation of the DMCA legislative model with regard to the anti-circumvention rules for the protection of technological measures and ISP liability and safe harbors, my comparative research will focus on the United States, the first nation that exported its legislative approach, and several other jurisdictions, which have assimilated the American model, including Mainland China and Australia. When examining the particular regulations and policies, laws and practices in various other jurisdictions are also studied and analyzed. These jurisdictions include the United Kingdom, France, Germany, Canada, India, Japan, Hong Kong, and Taiwan. Although these countries or regions belong to different jurisdictions, which means that they have different copyright origins and systems, digital and cyberspace copyright issues have now become transnational. In a sense, the United States had pressured some of the countries to oblige to their international or regional convention commitments in terms of their digital and network copyright legislations. Laws and regulations on digital copyright issues in some countries are drawn on the experiences of the United States and the European Union through legal transplant. Therefore, a forefront discussion of copyright reflection and reconstruction in different jurisdictions could shed light on copyright reforms under the digital network environment.

Although many scholars, especially those from Western countries, have discussed digital copyright problems for a decade, copyright reforms that deal with digital network challenges are still new and necessary in developing countries, such as China. Due to the continuous expansion of copyright protection which imposes a threat to the access and dissemination of information as well as the advancement of knowledge and learning, it is time to rethink the current trends of development in copyright systems and amend copyright laws so that they are more balanced. These reflections have been continuously proposed and discussed by Western scholars, since Western countries are the pioneers in developing new technologies which often bring about new problems to information dissemination and copyright protection. However, discussions among Western scholars often focus on the laws, policies, and practices of domestic situations in developed societies with few comparative studies that have an international perspective and little attention on the law reforms and national situations in developing countries. This book intends to examine the digital network-related copyright issues under the balance of interest theory by

including China as one of the important rising economies and comparatively analyzing the legal measures and policies among different jurisdictions. The proposals for the new rounds of copyright reforms after concluding on laws in various jurisdictions will be more multidimensional and take more into consideration the interests of developing countries.

As one of the rising economies, China increasingly endeavors to establish herself as an innovative state. In 2008, the Chinese government promulgated the *Outline of the National Intellectual Property Strategy*, with the goal to develop indigenous or self-driven intellectual property [3] and develop national copyright industries. The achievement of such a goal is based on a law reform that well reflects the interests of creators, industries, and consumers as well as the domestic needs both at the present and in the future. The development of communication technology and encouragement of public participation are important for advancing national and indigenous creations. Moreover, the emerging knowledge economy highly promotes the growth of information industries in general and digital libraries and related nonprofit institutes in particular, which meets the need for advancement of knowledge and learning in developing societies, such as China. Good development of information industries and digital educational institutions also requires open access to information and its effective dissemination. Thus, the establishment of a balanced copyright system by including exceptions into the anti-circumvention rules, setting up safe harbors for technology developers, expanding copyright limitations and exceptions, and adopting open-access initiatives may help to achieve the national strategic goal and the social function of copyright law and policies.

Book Structure

This book comprises an introduction, six principal chapters, and a conclusion. The introduction provides the research background and research questions in that a balance of interest among right holders, technological intermediaries, and public users should be recovered due to the continuous expansion of copyright protection. Guarantee of appropriate access, dissemination, and reuse of copyright works are necessary for encouraging future creations and promoting progress in literary, scientific, and art works. This part also explains the research methodologies, research value, and book structure.

Chapter 1 elaborates on the interrelationship of the changes in copyright laws with technology development and illustrates the continuous expansion of copyright protection in the digital network era. Since advancement in digital technologies simplifies and accelerates the reproduction and dissemination of information, authors thus demand more protection granted by copyright laws to safeguard their creations against pirating and their commercial interests from infringement. This chapter introduces the development and adaptation of international copyright conventions under the digital network environment by focusing on the World Intellectual Property Organization (WIPO) Internet Treaties and takes the DMCA

of the United States and the Information Society Directive of the European Union as examples to discuss the changes and amendments in the copyright protection systems of the developed regions. The expansion of copyright protection has excessively focused on the interests of right holders and neglected the overall cultural construction and social progress based on free flow of information. By introducing updates in the copyright protection system in China based on legislative, administrative, judicial, and alternative perspectives, this chapter further points out the potential leadership role of the developing countries especially China in the new round of copyright reforms to recover a balance of interest between copyright holders and public users and to address public interests and social justice which are important purposes and functions of a copyright system.

Chapter 2 will discuss the public interest function of intellectual property and copyright systems and the current problem of the imbalance of interest in copyright systems under a digital network environment. This chapter will provide a discussion on the balance of interest that is embodied in intellectual property and copyright systems based on philosophical and economic theories, the origin and development of copyright laws, and the purposes for establishing copyright protection systems. This chapter will then carefully examine the imbalance of interest in current copyright systems from the angles of extended duration of protection, expansive scope of protection, constrained copyright limitations, increased protection for technological measures, aggravated liability of ISPs, and strengthened industry and media concentration. Further analysis and recommendation of proposals based on these issues will be given in the subsequent chapters.

Chapter 3 will analyze the protection of digital rights management (DRM) information and the anti-circumvention rules which prohibit unauthorized circumvention of technological measures. This chapter will first provide a basic understanding on the protection of DRM and technological measures by explaining the key terms that have been incorporated into the anti-circumvention provisions. This chapter will then examine the balanced and unbalanced aspects under the anti-circumvention rules provided by the DMCA of the United States. The balanced aspect is supported by general and specific exceptions as well as an ongoing administrative rulemaking proceeding with regard to the immunization of liability from circumvention acts. However, the problem of imbalance still exists, mainly due to prohibition against the circumvention of access-control measures and trafficking of circumvention-facilitated devices, which outweighs the balanced aspects. The chapter will finally recommend a more balanced model for anti-circumvention rules by including a technological component for minimalist use, a legislative component for general exceptions, a judicial component for case decisions, and an alternative scheme design for protecting technological measures under competition law.

Chapter 4 will analyze the infringement liability for ISPs and safe harbor regulations. This chapter will first provide a definition of ISPs and the significance of setting up the legal certainty of their liability and exemptions. This chapter will also analyze indirect liability and safe harbor rules for ISPs established by common law cases. The influential safe harbor rule developed by the *Sony* case, contributory and vicarious liability developed from American landmark cases, and authorization and

joint tortfeasor liabilities developed from Commonwealth landmark cases will be discussed. This chapter will then proceed to analyze a couple of liability and immunization rules enacted by statutes, including the notice and takedown regime, counter notification regime, and the subpoena procedure or Norwich Pharmacal order. This chapter will then elaborate on the recent developments in the conditions for ISP safe harbors and the remedies against ISP indirect infringement, taking the graduated response policy from the French government and injunction orders against ISPs in European courts as example. In this part, the approach of the graduated response policy, the influence of such a policy on copyright owners, ISPs and public users, and China's response to such a policy will be further discussed. Typical cases in which ISP injunctions were granted will be analyzed to indicate the proportionality that courts should take into consideration when deciding whether to approve such remedies. This chapter will finally suggest recommendations to establish certainty for ISP liability and safe harbors in general and for China's digital copyright reform on ISP issues in particular. Recommendations include the establishing of certain standards for important factors in the indirect liability of ISPs, reforming notice and takedown regimes by incorporating a grace period and exceptions, adopting a Norwich Pharmacal procedure to guarantee the privacy of subscribers, and taking a multitude of approaches to better provide certainty for ISP liability.

Chapter 5 will analyze the copyright limitations and exceptions under the digital network environment and suggest the addition of legal flexibility and certainty. This chapter will first discuss academic theoretical analyses and international conventional obligations on copyright limitations and exceptions so as to explain the important function of limitations on exclusive rights that guarantee access to preexisting material and future creations based on borrowing. In light of the increasing convenience of exploitation of copyright works made possible by digital network technology, this chapter will then propose to reconstruct copyright limitations and exceptions by importing a four-factor balancing test based on the US copyright system with focus on the first and fourth factors, namely, the purpose and nature of the use and the influence of the original work on the market as a form of abstract guidance to guarantee legal flexibility and a list of a number of nonexclusive exceptions as minute prescriptions to guarantee legal certainty. The analysis is important because it gauges the transformative nature of user-generated contents and remix creations in the general guidance as well as typical situations in a specified list through comparative research on fair use/fair dealing legislations among different jurisdictions. This chapter will finally suggest several alternative schemes such as statutory licensing, no action notice, and community guidelines to supplement the fair use/fair dealing. Among them, statutory licensing is the most important scheme which can well balance the interests between different shareholders by guaranteeing fair compensation to copyright owners on the one hand and avoiding unfair prejudice to public users on the other hand.

Chapter 6 will analyze the emergence of digital commons based on voluntary licensing schemes and their influence on restoring the shrinking public domain. This chapter will first provide an introduction on anti-copyright tendencies and the

birth of open-access projects which comprise digital commons. This chapter will then examine a well-known example of digital commons, namely, the Creative Commons, which provides authors with the opportunity to release their works under certain licenses. By publishing works under these licenses, authors give up a part of their copyright to allow free access and dissemination of their works. The Creative Commons has been launched and localized in many jurisdictions, including China, with the purpose of promoting information flow and encouraging amateur creations. Finally, the influence of digital commons represented by projects like the Creative Commons on the public domain which is shrinking due to the continuous expansion of copyright protection will be analyzed.

The conclusion will conclude on the main findings of the study and contributions by summarizing the problems and suggested proposals for digital copyright issues, including the anti-circumvention rules, ISP liability and safe harbors, copyright limitations and exceptions under the digital network environment, and advancement of digital commons and their influence in maintaining the public domain. In sum, the digital copyright system will be reviewed and amended by placing more emphasis on public interest and social justice with an appropriate response to the participatory culture and advancement of technology rather than overprotecting proprietary right holders.

References

1. Mtima, L., & Jamar, S. D. (2010/2011). Fulfilling the copyright social justice promise: Digitizing textual information. *New York Law School Law Review*, 55, 77–108.
2. Ricketson, S. (1999). *The law of intellectual property: Copyright, designs and confidential information*. Sydney: LBC Information Services.
3. State Council of People's Republic of China. *Outline of the national intellectual property strategy*. Available at http://english.sipo.gov.cn/laws/developing/200906/t20090616_465239.html. Visited 21 Jun 2008.

Chapter 1

Copyright Law Changes and Developments in Digital Network Era

1.1 Introduction

Copyright laws originate and develop with the advancement of technology. Technology updates dramatically change the ways in which works are accessible and disseminated. Thus, copyright systems are continuously revised to respond to new approaches of reproducing and distributing works brought about by technology and new requirements put forth by copyright owners to enforce their exclusive rights.

Developed countries and regions that experience rapid technological development, such as the United States and the European Union, bore the brunt of amending and reforming their original copyright systems in the face of new challenges. However, their domestic legal reforms cannot entirely solve the problems brought on by digital technologies anymore, since the Internet easily facilitates the transmitting of information and works beyond national borders and without permission from the copyright owners. A strong domestic copyright cannot guarantee the same level of protection against infringement by other countries. Thus, the pioneer jurisdictions called for the establishment of basic norms in international conventions and incorporation of new provisions to deal with digital challenges. The results of the international conventions and treaties were then taken back to these jurisdictions as obligations for compliance. The obligatory implementation of international conventions by various jurisdictions thus led to the enactment of a series of domestic and regional digital copyright laws, such as the DMCA in the United States and the Information Society Directive in the European Union.

As one of the leading developing countries, China is among the many jurisdictions that are amending and reforming their copyright protection mechanisms mainly through the domestic implementation of international obligations and legal transplant. In 1980, China joined the WIPO, an international agency that is dedicated to developing a balanced and accessible international intellectual property system [1]. Subsequently, China acceded to a couple of international conventions and agreements which are under the management and administration of the