Re-thinking Intellectual Property

The political economy of copyright protection in the digital era

Dr YiJun Tian

Re-thinking Intellectual Property

The political economy of copyright protection in the digital era

Dr YiJun Tian

Lecturer, Faculty of Law University of Technology Sydney



First published 2009 by Routledge-Cavendish

2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada by Routledge-Cavendish 270 Madison Avenue, New York, NY 10016

Routledge-Cavendish is an imprint of the Taylor & Francis Group, an informa business

© 2009 YiJun Tian

Typeset in Sabon by Florence Production Ltd, Stoodleigh, Devon Printed and bound in Great Britain by Biddles Digital Ltd, King's Lynn

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British
Library

Library of Congress Cataloging in Publication Data Tian, Yijun, jin shi 1568.

Re-thinking intellectual property: the political economy of copyright protection in the digital era/YiJun Tian.
p. cm. – (Routledge-Cavendish research in intellectual property)

Copyright.
 Intellectual property.
 Copyright –
 Economic aspects.
 Intellectual property – Economic aspects.
 Title.

K1420.5.T53 2008 346.04'8 - dc22

2008015469

ISBN 10: 0-415-46534-6 (hbk) ISBN 10: 0-203-88979-7 (ebk)

ISBN 13: 978-0-415-46534-2 (hbk) ISBN 13: 978-0-203-88979-4 (ebk)

Re-thinking Intellectual Property

Copyright laws and Intellectual Property Rights (IPRs) now play an increasingly important role in the creation of business fortunes, the access to and dissemination of knowledge, and human development in general. As a global issue in the digital age, ensuring that copyright laws and IPRs strike a sound balance is an important challenge for policy- and law-makers to address.

This book critically examines the current copyright and IPR regime in the context of digitalisation, knowledge economy and globalisation. Referring to international IP consensus, recent developments in regional IP forums and the successful experiences of various countries, Tian provides specific theoretical, policy and legislative suggestions for addressing current copyright challenges. This book contends that each nation should strengthen the co-ordination of its IP protection and development strategies, adopting a more systematic and heterogeneous approach, in order to make sure that IP theory, policy, specific legal mechanisms, marketing forces and all other available measures work collectively to deal with digital challenges and in a way that contributes to the establishment of a knowledge equilibrium international society.

The adoption of a theoretical and practical approach means that this book will appeal to a wide range of readers with diverse interests. It will be of interest to lecturers, students, scholars and professionals of international law, particularly in the area of digital legislation, intellectual property rights, international trade and public policy.

Dr YiJun Tian is a lecturer in Law at the University of Technology Sydney, Australia.

Routledge-Cavendish Research in Intellectual Property

Forthcoming books:

The Development of Intellectual Property Regimes in the Middle East David Price

Intellectual Property, Community Rights and Human Rights The biological and genetic resources of developing countries Marcelin Tonye Mahop

Acknowledgments

First and foremost I am grateful to my supervisor Professor Jill McKeough for her guidance and intellectual supervision through the theme formulation, research direction, methodology, structure, drafting and revision of each Chapter as well as her support of my academic career and life in Australia.

I also wish to express my gratitude to Professor Jane Winn (University of Washington Law School, Seattle), Professors John Palfrey and William Fisher (Harvard Law School) and Professor David Dixon (University of New South Wales Law School), for their support in making my visiting fellowships to the US possible – i.e. my time as Visiting Scholar of the Washington Law School, and as Summer Research Associate at the Berkman Center of the Harvard Law School. I would also like to thank the United Nations Economic Social Commission for Asia and Pacific (UNESCAP) for providing me with the opportunity to attend the Internship Programme in its Trade and Investment Division.

The visiting fellowship and internship in the US and the United Nations provided me with opportunities to broaden the experience in the field of trade, e-commerce and intellectual property protection at the international and regional levels, and enhance the practicality and feasibility of policy recommendations of this book.

I also wish to express my thanks to Professor Zheng Chengsi (Chinese Academy of Social Sciences) for his encouragement and advice on the early research outline of this book, Professor Jane K. Winn for her comments with earlier research proposal drafts of Chapters 3–4, and providing the foreword for this book, Professor Graham Greenleaf (University of New South Wales Law School) for his comments and help with earlier drafts of Chapter 7, Professor Ruth Okediji (University of Minnesota Law School) for providing useful material for the writing of this book, Professor Peter Yu (Drake University Law School) for giving me considerable specific advice as to how to strengthen the integrity of this book, and Professors Ross Buckley, Martin Krygier and Kathy Bowrey (University of New South Wales Law School) for giving me much useful advice on book publication.

In addition, I would like to express my gratitude to all those peer reviewers and editors of a number of book chapters and law journals, who

xiv Acknowledgments

have provided very useful comments and feedback on my early drafts of different chapters. I am grateful to IGI Publisher for permission to use material from my chapter, 'Digital Convergence vs. Intellectual Property Divergence', in Prof. Sangin Park (Ed.), STRATEGIES AND POLICIES IN DIGITAL CONVERGENCE, Idea Group, Inc. US (Jan 2007). I wish to thank the Bond Law Review for permission to use part of my article, 'WIPO Treaties, Free Trade Agreement and Implications for ISP Safe Harbour Provisions – The Role of ISP in Australian Copyright Law' in BOND LAW REVIEW, Volume 16, No. 1, at 186–217, Gold Coast, Australia (2004); and thank the Fordham University Law School for permission to use part of my article, 'Problems of Anti-Circumvention Rules in the DMCA and More Heterogeneous Solutions' in FORDHAM INTELLECTUAL PROPERTY, MEDIA AND ENTERTAINMENT LAW JOURNAL, Volume XV, Number 3, at 749–788, New York, U.S.A., Spring 2005. I also wish to express my gratitude to Ms Toni Paramore for her assistance in proofreading.

Finally, I would like to dedicate this book to my father Tian Langqi and mother Ma Yunxiang. This book would not have been possible without the support of my parents.

Acronyms

ACP African, Caribbean and Pacific Group of States

AGLC Australian Guide to Legal Citation
APEC Asia-Pacific Economic Cooperation
ASEAN Association of South East Asian Nations

AUSFTA Australian-United States Free Trade Agreement

BSA Business Software Alliance BTA Bilateral Trade Agreement

CAFTA Central American Free Trade Agreement

CAN Andean Community or Comunidad Andina de Naciones

CIA Central Intelligence Agency

CGKD Centre for Governance of Knowledge and Development

CSS Content Scramble System
CTEA Copyright Term Extension Act

DAA Digital Agenda Act

DBMS Database Management System
DMCA Digital Millennium Copyright Act

DVD Digital Video Disc

EFF Electronic Frontier Foundation

EU European Union

EUCD European Union's Copyright Directive

FoD Friends of Development FTA Free Trade Agreement

FTAA Free Trade Area of the Americas

GATT General Agreement on Tariffs and Trade

GCC Gulf Cooperation Council
GDP Gross Domestic Product
GPS Global Positioning System

IACC International Anti-counterfeiting Coalition ICT Information Communication Technology

ICTSD International Centre for Trade and Sustainable

Development

IDC International Data Corporation

IFPI International Federation of the Phonographic Industry

IIM Inter-sessional Intergovernmental Meetings

xvi Acronyms

Intellectual Property IP

Intellectual Property Right **IPR**

Information System IS Internet Service Provider ISP Japan Copyright Office JCO

Joint Commission on Commerce and Trade **JCCT**

Knowledge Equilibrium KE

Korea Culture and Content Agency **KOCCA**

Least Developed Countries **LDCs** Most Favored Nation MFN

Music Industry Piracy Investigations MIPI Massachusetts Institute of Technology MIT

Multinational Company MNC

North American Free Trade Agreement NAFTA

Non-Government Organization NGO National Information Infrastructure NII

National Treatment NT

Recording Industry Association of America **RIAA**

Supreme People's Court SPC

Organisation for Economic Co-operation and Development **OECD** Online Copyright Infringement Liability Limitation Act **OCILLA**

Patent Cooperation Treaty **PCT Purchasing Power Parity** PPP Preferential Trade Agreement **PTA** Rights Management Information **RMI** Regional Trade Agreement **RTA** Small and Medium Enterprise SME Southern African Customs Union SACU

Agreement on Trade-Related Aspects of Intellectual TRIPS

Property Rights

United Nations UN

United Nations Conference on Trade and Development UNCTAD

United Nations Development Programme UNDP

United Nations Economic and Social Commission for Asia UNESCAP

and the Pacific

United Nations Educational, Scientific and Cultural UNESCO

Organization

United Nations Industrial Development Organization UNIDO

United States-Singapore Free Trade Agreement **USSFTA**

United States Trade Representative **USTR**

WIPO Copyright Treaty **WCT**

World Intellectual Property Organization WIPO WIPO Performances and Phonograms Treaty WPPT World Summit on the Information Society WSIS

World Trade Organization **WTO**

Preface

Advances in technology, particularly digital technology, not only fundamentally change the rules of information distribution and dissemination and bring about great challenges for traditional copyright laws, but also generate profound effects on international IP trade, knowledge economy, civil society, globalisation and the changing international socio-economic and legislative environment in general. With the widened application of technology in recent years, copyright law's sphere of influence now extends to almost all disciplines and all corners of the world. Copyright laws, along with other Intellectual Property Rights (IPRs), constitute the legal foundation for the 'global knowledge-based economy' and copyright law now plays an increasingly important role in the creation of business fortunes, the access to and dissemination of knowledge, and human development in general. In response to technology-driven challenges, a number of international IP treaties and IP related bilateral/regional trade agreements have been established to harmonise and strengthen the protection of copyright and other IPRs. Particularly, in recent years, the rise of bilateralism/regionalism is fundamentally changing the landscape and context of IP/knowledge

Overly strong IPR requirements in Bilateral Trade Agreements (BTAs)/ Regional Trade Agreement (RTAs) not only intensify the inherent imbalance in a copyright regime and benefit conflicts between developing and developed nations, but also intensify the 'knowledge divide/digital divide' worldwide. Thus, the question of how to establish proper copyright policy and law in order to facilitate the resolution of potential international intellectual property (IP) trade conflicts and contribute to harmony between copyright protection and social development has become an important issue that all countries have to face up to in the digital age.

This book examines major problems in the current IPR regime, particularly the copyright regime, in the context of digitisation, knowledge economy and globalisation. This book contends that the final goals of IP law and policy-making are to enhance the progress of science and economic development, and the use and even-distribution of intellectual resources at the global level. By referring to major international IP consensus, recent developments in

xviii Preface

regional IP forums and the successful experiences of various countries, the author of this book is able to provide specific theoretical, policy and legislative suggestions for addressing current copyright challenges. This book contends that each nation should strengthen the co-ordination of its IP protection and development strategies, adopt a more systematic and heterogeneous approach, and make IP theory, policy, specific legal mechanisms, marketing forces and all other available measures work collectively to deal with digital challenges and in a way that contributes to the establishment of a knowledge equilibrium in international society. When an immediate international consensus on international IPR reform is not easily achievable, regional and domestic solutions (regional digital development agenda and copyright templates/law models) may serve as appropriate stepping stones for future multilateral solutions.

YiJun Tian, Sydney 2008

Foreword by Professor Jane Winn

Intellectual property law and information technology have both undergone radical changes in recent years, expanding their impact on societies around the world. Developed countries generally, and the United States in particular, have leveraged their unequal bargaining power in trade negotiations with developing countries to extract major concessions in the form of very high levels of protection of intellectual property rights. These laws have no precedent in the history of international trade and economic development: the richest and most powerful nations in the world today achieved high levels of economic development in the absence of strong international intellectual property laws. As traditional sectors of the US economy such as manufacturing continue to decline, and the US becomes ever more dependent on 'knowledge economy' exports to try to offset its growing trade imbalances, US government demands for such concessions have intensified. As soon as participation by developing countries increased in multilateral arenas such as the Doha Round of negotiations in the World Trade Organisation (WTO), the US shifted its attention away from multilateral arenas towards bilateral and regional for where its influence is greater. Advocates for developing countries have strongly opposed efforts to strengthen intellectual property laws beyond the increases mandated by the WTO Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) because they seem likely to exacerbate rather than ameliorate the 'Digital Divide'.

Yijun Tian provides an excellent overview of these developments, analysing their economic and political impact on developed and developing countries from the perspectives of legal theory, government policy and legislative strategies. He offers a balanced analysis of the growing conflict between developed and developing countries over the proper scope of intellectual property laws, explaining the significance of the issues without becoming a partisan in highly polarised debates.

While a great deal has been said about the impact of stronger patent rights on the delivery of health care services in developing countries, less has been said about the impact of strong copyright law on the ability of developing countries to participate in the emerging global knowledge economy. This book focuses on several important recent developments addressing the impact of digital technology on copyright law: safe harbours

for Internet Service Providers (ISPs); prohibitions on the circumvention of technologies designed to prevent unauthorised copying of copyright material in digital form; and intellectual property rights in databases. These examples clearly illustrate how the expansion of digital technology has proved to be a double-edged sword for copyright owners: it has both expanded the scope of material protected by copyright, and increased the difficulty of enforcing copyright.

Tian focuses on the relationship between copyright law, communications technologies and social institutions, and argues that pursuit of a 'knowledge equilibrium' would benefit both developed and developing countries more than the current system. Such a knowledge equilibrium would require expanding access to knowledge resources in less developed nations; developing the capacity for indigenous innovation and scientific progress in less developed nations; developing the capacity for commercialisation of scientific and artistic advances; and assuring representation of developing countries in negotiating trade agreements related to intellectual property and in standard setting activities that have an impact on the global knowledge economy. Tian notes that the regional approach taken by the US to 'divide and conquer' its opponents in more broadly representative multilateral for acould turn from a sword to be used against developing countries into a shield. If less developed countries adopt their own regional approach to harmonisation of copyright law, they would be better able to preserve the benefits of greater integration into global markets while avoiding the costs of implementing legislation tailored to the needs of developed countries rather than their own.

Americans have a saying: where you stand depends on where you sit. Perceptions of how an equitable balance among the competing interests represented in copyright law vary widely depending on the vantage point from which the issues are viewed. Tian's interpretation is clearly informed by his personal background as a citizen of the People's Republic of China, but is not limited by it. He draws on legislation from the US, the EU, Canada and Australia to isolate models suited to current conditions in less developed countries generally. Tian integrates accurate descriptions of recent developments in international copyright law with a conviction that a just resolution of current controversies is possible. He argues persuasively that a framework for such a just resolution should be heterogeneous in order to accommodate the wide disparities in economic development, and should be informed by authoritative sources of international law. Tian shows that information technology can be harnessed to serve the needs of less developed countries, and that international harmonisation of copyright law need not impede that process.

> Jane K. Winn, Professor of Law, Director of the Shidler Center for Law, Commerce & Technology, School of Law, University of Washington, Seattle.

Contents

	Ack	nowledgments	XIII
	List	of acronyms	xv
	Pref	ace	xvii
	Fore	word	xix
PA	RT I		
Ba	ickgro	ound: law and digital challenges	1
1	Intro	oduction	3
2	Development of communication technology and international copyright laws in the context of globalisation		11
	2.1 2.2	Introduction 11 An overview of the development of communication technology and its impacts 13	
		 2.2.1 Development of communication technology and its impacts (the 1442s to the 1970s) 13 2.2.2 Development of digital technology and its impacts (post 1970s) 15 	
	2.3	An overview of the development of international copyright legislation 22	
		2.3.1 Berne Convention 222.3.2 TRIPS 272.3.3 WIPO Internet treaties 35	
	2.4	New development and opinions of international forums 41	
	2.4.	1 WIPO Digital Agenda 1999 41	

		2.4.2 UNDP Report 2003 - Call on TRIPS alternatives 42
		2.4.3 Development Agenda for WIPO 2004 44 2.4.4 Summary 47
	2.5	Rise of regionalism: IP-related bilateral and regional trade agreements 48
		 2.5.1 IP-related RTAs in which the US is a party: IP and trade agreement 48 2.5.2 Other IP-related RTAs 55 2.5.3 Summary 56
	2.6	Conclusion and remarks on Chapter 2 56
Kn		dge equilibrium paradigm: IP theories and ht policies
3	Kno	wledge divide vs. knowledge equilibrium
	3.1	Introduction 61
	3.2	IP theories and causes of knowledge divide 64
		3.2.1 Knowledge, knowledge economy and IP theories 65
		3.2.2 Intellectual products, IPR and knowledge divide 70
	3.3	IP divergence and essential causes for copyright imbalances 77
		3.3.1 IP divergence: three common approaches 77
		3.3.2 Yin-Yang philosophy: power imbalance vs. copyright imbalance 82
		3.3.3 Inequalities of power vs. democratic balancing regime 83
		3.3.4 IP standard setting process vs. democracy: forum-shifting strategy in TRIPS and DMCA 85
		3.3.5 Summary: two balancing mechanisms 90
	3.4	A knowledge equilibrium framework (a political economy of intellectual property in the digital era) 92
		3.4.1 Perspective/notion of knowledge equilibrium: equilibrium between copyright, knowledge and power 92

	theoretical framework/paradigm 93 3.4.3 A framework/paradigm of knowledge equilibrium society (implication and goals for capacity building) 95	
3.5	Obstacles and possibilities of establishing a KE society 111	
	3.5.1 Obstacles to establishing a KE society 1123.5.2 Advantages and possibilities of establishing a KE society 113	
3.6	Some principles/strategies for implementing the KE framework/paradigm 117	
	3.6.1 Regionalism as second-best approach 117 3.6.2 Domestic solutions and developmental independence 120	
	3.6.3 Feasibility and flexibility 121 3.6.4 An open KE framework 123	
3.7	01 2 422	
IP to	rade conflicts and proper digital copyright policies	125
4.1 4.2	Introduction 125 Technology, copyright protection and potential IP trade wars 127	
	 4.2.1 Digital technology vs. widespread piracy 127 4.2.2 Responses for digital challenges and potential trade wars/sanctions 129 	
4.3	Historical review: bilateral (China-US) IP conflicts and changes of copyright policies 131	
	4.3.1 US copyright history: protectionist copyright policies and underlying business incentives 131	
	4.3.2 China copyright history: development of copyright laws and external/internal pressures 139	
	4.3.3 Reasons for successfully avoiding IP trade wars and China's positive post-WTO copyright policy 146	
4.4	Establishment of proper copyright policy: copyright and development 155	

	~	
v	Content.	c

	 4.4.1 Classifying and prioritising problems 156 4.4.2 Sustainable copyright protection: copyright policy and development/trade policy 158 4.4.3 Failed myth of development: copyright policy vs. technology policy 161 4.4.4 More systematic and collaborative copyright policies 163
4.	Some strategies for the policy implementation 165
	4.5.1 Variety and flexibility: implementation of policy framework 165
	4.5.2 Domestic approach plus regionalism approach 166
4.	6 Conclusion and remarks on Chapter 4 168
and fo	cation of theory and policy: knowledge equilibrium uture digital legislative reform (templates/law models) 171
	emplates/law models for ISP liability and their aplementation 175
	 Introduction 175 Overview of international ISP safe harbour legislation 176 Vertical approach: US ISP legislative model 177
	 5.3.1 Scope of protections 177 5.3.2 Conditions for eligibility and their applications 180 5.3.3 Other relevant implementation provisions 185 5.3.4 Summary and comments on the US model 187
5.	4 Horizontal approach: the EU and the Japanese ISP legislative models 190
	 5.4.1 EU's horizontal ISP legislative approach 191 5.4.2 More balanced ISP legislative model in Japan 192 5.4.3 Summary and comments on the Japanese ISP model 194
5.	5 Free Trade Agreement and ISP safe harbour legislative reform: Australia as an example 195