

THE WIPO JOURNAL:

ANALYSIS OF INTELLECTUAL PROPERTY ISSUES

GENERAL EDITOR: PROFESSOR PETER K. YU

CONTENTS

2013 VOLUME 5 ISSUE 1

Articles

Building the Ladder: Three Decades of Development of the Chinese Patent System $\,$

Peter K. Yu

A Page of History: Patents, Prizes and Technological Innovation B. Zorina Khan

Collective Invention and Patent Law Individualism: Origins and Functions of the Inventor's Right of Attribution Graham Dutfield

The History of Copyright History (Revisited) Martin Kretschmer, Lionel Bently and Ronan Deazley

Copyright History as History of Technology Oren Bracha

The Ecological Origins of Copyright Scepticism

Criticism in the Courtroom: *Nichols v Universal* (1930) and the Determination of Infringement

Mark Rose

What History Teaches Us about US Copyright Law and Statutory Damages H. Tomás Gómez-Arostegui

Making Intellectual Property Law in the Shadow of Law: *International News Service v Associated Press Steven Wilf*

The Principles of International Intellectual Property Protection: From Paris to Marrakesh

Catherine Seville

Historical Developments of Industrial Property Laws in Africa *Tshimanga Kongolo*

Copyright Pioneers Michael Birnhack

The Story of Singapore's Intellectual Property Journey: 1965–2013 Na-Loy Wee Loon





EDITORIAL BOARD

General Editor: Professor Peter K. Yu

Kern Family Chair in Intellectual Property Law & Director, Intellectual Property Law Center, Drake University Law School, United States

Editorial Board:

ARGENTINA

Professor Guillermo Cabanellas

Cabanellas, Etchebarne, Kelly & Dell'oro Maini, Buenos Aires

GERMANY

Professor Joseph Straus

Professor of Intellectual Property and Patent Law, Universities of Munich and Ljubljana, Marshall B. Coyne Visiting Professor of International and Comparative Law, George Washington University Law School, Washington, D.C.

INDIA

Pravin Anand

Managing Partner, Anand and Anand, Mumbai

JAPAN

John A. Tessensohn

Shusaku Yamamoto, Osaka

SOUTH AFRICA

Brian Wafawarowa

Founder and Managing Director, New Africa Books; Chairman, African Publishers' Network

SWEDEN

Professor Jan Rosén

Professor in Private Law and Vice Dean, Stockholm University

SWITZERLAND

Professor Thomas Cottier

Managing Director of the World Trade Institute and Professor of European and International Economic Law, University of Bern

UNITED KINGDOM

Professor David Llewelyn

Professor of Intellectual Property Law, School of Law, King's College London; Partner White & Case, London

UNITED STATES

Professor Keith Maskus

Professor of Economics, University of Colorado, Boulder

Published in association with Thomson CompuMark, West and Scientific.



Guidelines for authors: The WIPO Journal is a peer reviewed journal.

We welcome the submission of articles, comments and opinions. In general the most acceptable length for articles is between 7,000 – 10,000 words, comments approx. 3,000 words and opinions approx. 1,500 words.

All contributions must be in English. Please submit your contribution electronically as a Word document, paginated, double spaced (including footnotes). A summary in no more than 150 words should be included. Papers to be considered for submission should be sent to: thewipojournal@thomsonreuters.com. The paper will be considered by the General Editor and if appropriate sent for peer review to members of the Editorial Board.

Submission of a paper will be held to imply that it contains original unpublished work and is not being considered for publication elsewhere.

Editorial changes may be made to reflect Sweet & Maxwell house style.

Copyright in all contributions remains with the contributors. The publishers acquire all publication rights.

The views expressed in the WIPO Journal are of the authors and should not be considered or interpreted as those of the World Intellectual Property Organization (WIPO).

The armorial bearings, flag, other emblems, abbreviation and name of the World Intellectual Property Organization, WIPO, are protected under article 6ter of the Paris Convention for the Protection of Industrial Property and may not be used, copied or reproduced without the written authorization of WIPO.

Annual subscription: £52 (2 issues)

The WIPO Journal

Volume 5 Issue 1 2013

Table of Contents

Articles	
Building the Ladder: Three Decades of Development of the Chinese Patent System <i>Peter K. Yu</i>	1
A Page of History: Patents, Prizes and Technological Innovation B. Zorina Khan	17
Collective Invention and Patent Law Individualism: Origins and Functions of the Inventor's Right of Attribution Graham Dutfield	25
The History of Copyright History (Revisited) Martin Kretschmer, Lionel Bently and Ronan Deazley	35
Copyright History as History of Technology Oren Bracha	45
The Ecological Origins of Copyright Scepticism Adrian Johns	54
Criticism in the Courtroom: <i>Nichols v Universal</i> (1930) and the Determination of Infringement <i>Mark Rose</i>	65
What History Teaches Us about US Copyright Law and Statutory Damages H. Tomás Gómez-Arostegui	76
Making Intellectual Property Law in the Shadow of Law: <i>International News Service v</i> Associated Press Steven Wilf	87
The Principles of International Intellectual Property Protection: From Paris to Marrakesh Catherine Seville	95
Historical Developments of Industrial Property Laws in Africa Tshimanga Kongolo	105
Copyright Pioneers Michael Birnhack	118
The Story of Singapore's Intellectual Property Journey: 1965–2013 Ng-Lov Wee Loon	127

ISSN: 2041-2029

This journal may be cited as (2013) 5 W.I.P.O.J. 00

The WIPO Journal is published by Sweet & Maxwell, 100 Avenue Road, London NW3 3PF part of Thomson Reuters (Professional) UK Limited (Registered in England & Wales, Company No 1679046. Registered Office and address for service: Aldgate, 33 Aldgate High Street, London, EC3N 1DL).

For further information on our products and services, visit www.sweetandmaxwell.co.uk

Computerset by Sweet & Maxwell. Printed and bound in Great Britain by Hobbs the Printers Ltd, Totton, Hampshire.

No natural forests were destroyed to make this product; only farmed timber was used and re-planted.

Each article and case commentary in this volume has been allocated keywords from the Legal Taxonomy utilised by Sweet & Maxwell to provide a standardised way of describing legal concepts. These keywords are identical to those used in Westlaw UK and have been used for many years in other publications such as Legal Journals Index. The keywords provide a means of identifying similar concepts in other Sweet & Maxwell publications and online services to which keywords from the Legal Taxonomy have been applied. Keywords follow the taxonomy logo at the beginning of each item. The index has also been prepared using Sweet & Maxwell's Legal Taxonomy. Main index entries conform to keywords provided by the Legal Taxonomy except where references to specific documents or non-standard terms (denoted by quotation marks) have been included. Readers may find some minor differences between terms used in the text and those which appear in the index. Please send any suggestions to sweetandmaxwell.taxonomy@thomson.com.

Copies of articles from W.I.P.O.J. and other articles, cases and related materials can be obtained from DocDel at Sweet & Maxwell's Yorkshire office.

Current rates are: £7.50 + copyright charge + VAT per item for orders by post and DX.

Fax delivery is guaranteed within 15 minutes of request and is charged at an additional £1.25 per page (£2.35 per page outside the UK).

For full details and to order contact DocDel on:

- Tel 01422 888 019
- Fax 01422 888 001
- Email sweetandmaxwell.docdel@thomson.com
- Go to http://www.sweetandmaxwell.co.uk/our-businesses

Please note that all other enquiries should be directed to Sweet & Maxwell, 100 Avenue Road, London, NW3 3PF; Tel 020 7449 1111; Fax 020 7449 1144.

Crown copyright material is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland.

The armorial bearings, flag, other emblems, abbreviation and name of the World Intellectual Property Organization, WIPO, are protected under article 6ter of the Paris Convention for the Protection of Industrial Property and may not be used, copied or reproduced without the written authorization of WIPO.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, or stored in any retrieval system of any nature without prior written permission, except for permitted fair dealing under the Copyright, Designs and Patents Act 1988, or in accordance with the terms of a licence issued by the Copyright Licensing Agency in respect of photocopying and/or reprographic reproduction. Application for permission for other use of copyright material including permission to reproduce extracts in other published works shall be made to the publishers. Full acknowledgement of author, publisher and source must be given.

Thomson Reuters and the Thomson Reuters Logo are trademarks of Thomson Reuters. Sweet & Maxwell ® is a registered trademark of Thomson Reuters (Professional) UK Limited.

© 2013 The World Intellectual Property Organization and contributors. Published in association with Sweet & Maxwell.

Building the Ladder: Three Decades of Development of the Chinese Patent System

Peter K. Yu*

Kern Family Chair in Intellectual Property Law and Director, Intellectual Property Law Center, Drake University Law School

China; Developing countries; Legal history; Patents; TRIPs

Introduction

When *The WIPO Journal* was launched in summer 2009, the World Intellectual Property Organization (WIPO) had only just adopted the Development Agenda and its 45 recommendations for action less than two years ago. Based on these recommendations, the organisation introduced a wide array of pro-development activities, ranging from technical assistance and capacity building to norm setting and public policy, and from technology transfer to assessment, evaluation and impact studies.¹

Shortly after the establishment of the WIPO Development Agenda, however, policy makers, government leaders and academic commentators began expressing concern about the developed countries' aggressive push for non-multilateral norm-setting activities and its potential damage to the multilateral intellectual property system. The negotiation of the Anti-Counterfeiting Trade Agreement (ACTA) was formally announced only two weeks after the adoption of this Agenda. As WIPO Director General Francis Gurry lamented at that time, countries negotiating this highly controversial agreement had "tak[en] matters into their own hands to seek solutions outside of the multilateral system to the detriment of inclusiveness of the present system".²

Interestingly, just as this *Journal* is about to celebrate its fifth anniversary, WIPO has successfully negotiated two substantive international intellectual property treaties. On June 26, 2012, more than 100 WIPO members signed the final act of the Beijing Treaty on Audiovisual Performances (Beijing Treaty), which offers protection to audiovisual performers under the existing international copyright system. A little more than a year later, WIPO adopted the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired, or Otherwise Print Disabled (Marrakesh Treaty). Upon ratification, this landmark agreement will provide easy or ready access to copyrighted publications to hundreds of millions of individuals with print disabilities.

Although WIPO already administers more than two dozens international agreements, the completion of the Beijing and Marrakesh Treaties in a short span of 369 days is still a remarkable accomplishment. Since the adoption of the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty in December 1996, no new substantive international intellectual property agreement has ever been established. It took yet another decade to complete the Beijing Treaty. Meanwhile, the Marrakesh Treaty was negotiated amidst the unprecedented challenges posed by the proliferation of bilateral, plurilateral and regional trade, investment and intellectual property agreements. As Director General Gurry rightly

1

^{*}Copyright © 2013 Peter K. Yu. The Author is grateful to Erin Cassidy, Kyle Mendenhall, Srikant Mikkilineni and Lindsey Purdy for excellent research and editorial assistance.

¹ WIPO, "The 45 Adopted Recommendations under the WIPO Development Agenda", available at http://www.wipo.int/ip-development/en/agenda/recommendations.html [Accessed October 16, 2013].

² Catherine Saez, "ACTA a Sign of Weakness in Multilateral System, WIPO Head Says" Intellectual Property Watch, June 30, 2010.

reminded us, "This treaty is a victory for the blind, visually impaired and print disabled, but also for the multilateral system."

Taken together, the developing countries' recent pro-development initiatives and the developed countries' non-multilateral activities have suggested that the international intellectual property regime goes through a series of ups and downs—or, as I put it in the past, "currents and crosscurrents": "While the currents of multilateralism push for uniformity and increased harmonization, the crosscurrents of resistance ... protect national autonomy and international diversity". If we are to develop a better and deeper understanding of this regime, studying its history will be highly instructive.

Since its inception, this Journal has devoted the first issue of each volume to a special topic. This approach aims to demonstrate that intellectual property issues are both interdisciplinary and multidisciplinary. The inaugural issue contained 14 essays on intellectual property laws and policies. The second issue focused on economics, the third on politics and the fourth on culture. To celebrate the journal's fifth anniversary, it is *a propos* to devote this entire special issue to intellectual property history.

To open this special anniversary issue, this article examines the patent system in China, a country that has accomplished what no other country has ever achieved in such a short period of time—be it Germany, Japan or the United States. While it took the now-developed countries centuries to establish their patent systems, the same feat took China only three decades. Today, China has slowly emerged as a leader in the patent field. In 2012, the number of applications through the Patent Cooperation Treaty (PCT) increased by 13.6 per cent to 18,627, earning China the fourth spot, behind only the United States, Japan and Germany.⁵ Among all the applicants, China-based ZTE Corp (formerly Zhongxing Telecommunication Equipment Corp) and Huawei Technologies had the largest and fourth largest number of PCT applications, respectively. With significant backing from the Chinese government and the anticipated involvement of the world's largest public sector, China will likely catch up with the existing intellectual property powers more quickly than many have anticipated.

Instead of looking forward to what the future will hold for the Chinese patent system, this article looks backwards and traces its three decades of development. It begins with a historical overview of the protection China offered to inventions during the dynastic and Republican eras. The article then identifies five different stages of development of the modern Chinese patent system. Going from stage to stage, this article demonstrates how a developing country could strategically build a patent system that is tailored to its own social, economic and technological conditions. The article concludes with five key lessons China's patent reform can provide to other developing countries.

The damn ladder

In Joseph Conrad's *Heart of Darkness*, a young sea captain, Charles Marlow, is charged with a colonial assignment into the Belgian Congo. When his iron riverboat—a then-modern invention—breaks down, he desperately looks for tools and spare parts to repair the boat so that he can continue his upriver voyage. Thinking about his needs, he muses to himself, in Conrad's usual narrative prose, "What I really wanted was rivets, by heavens! Rivets. To get on with the work—to stop the hole. Rivets I wanted."

Like Marlow, developing countries have been actively engaging in an upstream journey—a journey in not only the intellectual property world but also the international economic system. Their obsession was not Conrad's famed "rivets", but another now-famous metaphor: the ladder. This ladder allows developing

³ WIPO, "Historic Treaty Adopted, Boosts Access to Books for Visually Impaired Persons Worldwide", available at http://www.wipo.int/pressroom/en/articles/2013/article_0017.html [Accessed October 16, 2013] (emphasis added).

⁴ Peter K. Yu, "Currents and Crosscurrents in the International Intellectual Property Regime" (2004) 38 Loyola L.A. L. Rev. 323, 328.

⁵ WIPO, "Strong Growth in Demand for Intellectual Property Rights in 2012", available at http://www.wipo.int/pressroom/en/articles/2013/article_0006.html [Accessed October 16, 2013].

⁶ Joseph Conrad, Heart of Darkness (London: Penguin Books, 1902), p.58.

countries to catch up with their more developed counterparts and to become economically prosperous and technologically proficient.

For example, noted development economist Ha-joon Chang criticised the existing international trading system for enabling developed countries to "kick away the ladder' by which they have climbed to the top". In doing so, these countries prevented their less developed counterparts from adopting policies and institutions they themselves had used in their formative periods of development. Kevin Gallagher, an international relations scholar, also lamented how developed countries, like the United States and members of the European Union, had deployed bilateral, plurilateral and regional trade and investment agreements to induce developing countries to "trade away" their ladder.8

Having an obsession with the ladder is nothing new. In fact, Chang's widely cited book draws on the work of nineteenth-century political economist, Friedrich List. Dubbed by Chang and others as "the father of infant industry argument", List coined the phrase "kicking away the ladder". As he wrote metaphorically in The National System of Political Economy:

"It is a very common clever device that when anyone has attained the summit of greatness, he kicks away the ladder by which he has climbed up, in order to deprive others of the means of climbing up after him."10

Like other developing countries, China has been obsessed with this ladder since it re-opened its market to foreign trade in the late 1970s. Unlike these countries, however, China thus far has not traded away the ladder. Nor has it allowed other countries to kick away this ladder. Instead, the country slowly built a carefully-made ladder that enabled it to climb to economic, and now intellectual property, greatness. Although China did not establish a modern patent system until 1984, it now has more domestic patent applications than any other country in the world, including the United States.¹¹

Stage 0: Location of prototypes

For a country with more than 4,000 years of history and a large number of inventions, including the compass, gunpowder, papermaking and woodblock printing, 12 it is always challenging to locate the origin of a system that incents inventions. If the British patent system owes its origin to the Statute of Monopolies, one can trace the development of Chinese patent rights to "over 2,000 years ago when the emperors granted individual merchants the right to smelt iron, distill salt, and mint coin". 3 Since then, other emperors or territorial rulers experimented with the introduction of patents on Chinese soil in various historical periods. For example, commentators recounted the push for the patent system during the Taiping Rebellion (1850–1864). As one observer wrote:

"During the period of the Taiping Rebellion, the leader Hong Renxuan put forward his concept of a patent system, noting that 'if someone can design a kind of train as we see in foreign countries which can run 8,000 kilometers in a day and a night, he should be granted a patent and be given the power to allow others to imitate.' He also maintained that 'people [should be] encouraged to improve

⁷ Ha-Joon Chang, Kicking away the Ladder: Development Strategy in Historical Perspective (London: Anthem Press, 2002), p.10.

⁸ Kevin P. Gallagher, "Trading away the Ladder? Trade Politics and Economic Development in the Americas" (2008) 13 New Pol. Econ. 37.

⁹ Chang, Kicking away the Ladder (2002), p.3.

¹⁰ Friedrich List, *The National System of Political Economy*, translated by Sampson S. Lloyd (New York: Longmans, Green & Co, 1909), p.295.

¹¹ State Intellectual Property Office, "Table 4 Distribution of Grants for Inventions Received from Home and Abroad", available at http://english .sipo.gov.cn/statistics/2011/12/201201/t20120116 641766.html [Accessed October 16, 2013]; US Patent and Trademark Office, "U.S. Patent Statistics Chart: Calendar Years 1963–2012", available at http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us stat.htm [Accessed October 16, 2013].

¹² On Chinese scientific developments, see Benjamin A. Elman, On Their Own Terms: Science in China, 1550–1900 (Cambridge, Mass.: Harvard University Press, 2005); Joseph Needham, Science and Civilisation in China (Cambridge: Cambridge University Press, 1956–2004), Vols 1–7; Robert Temple, The Genius of China: 3,000 Years of Science, Discovery, and Invention (New York: Simon and Schuster, 2007).

¹³ Flora Wang, "An Overview of the Development of the Chinese Patent System" in Mark A. Cohen, A. Elizabeth Bang and Stephanie J. Mitchell (eds), Chinese Intellectual Property Law and Practice (The Hague: Kluwer Law International, 1999), p.3.

craftsmanship and sell their technical inventions or innovation ... [and] ... those who counterfeit will be punished."14

A few decades later, in 1898, a late Qing emperor also attempted to introduce the Regulations to Promote Industrial Technology during the famous "Hundred Days Reform" toward the end of imperial dynastic rule. ¹⁵ As its name suggests, this ill-fated reform movement failed in only a few short months, causing its leaders to either be executed or retreat in exile.

At the turn of the 1900s, China finally introduced its first patent law, after much pressure from colonial powers and its foreign trading partners. In 1903, the United States used its military and economic power to induce China to sign the Treaty between the United States and China for the Extension of the Commercial Relations between Them. Building upon the newly-adopted Paris Convention for the Protection of Industrial Property (Paris Convention), to which the United States acceded less than two decades earlier, this treaty granted copyright, trademark and patent protection to Americans in return for reciprocal protection to the Chinese. Although China also signed similar commercial treaties with Britain and Japan at around the same time, the 1903 US-China treaty remained the only agreement offering patent protection.

Pursuant to this turn-of-the-century commercial treaty, China introduced a substantive patent law in 1912, the year after the fall of the last imperial dynasty in China. Titled the Provisional Regulations on Awards for Devices (Creations), the law offered foreign patent owners very limited protection despite what it stated on paper. The law also came into existence under unique circumstances when China remained a semi-colony. As Peter Feng observed, substantive intellectual property protection arrived "with such inventions and novel ideas as the gunboat, opium, 'most favoured nation' trading status and extraterritoriality'. 19

During the Republican era, which immediately followed the fall of the Qing dynasty, intellectual property rights managed to receive some legislative attention. Shortly after the Nationalist Party (*Guomindang*) took power in 1928, China introduced the Measures to Encourage Industrial Arts, which afforded protection to indigenous inventions. Despite this effort, "the decades of incessant wars, famines and revolutions scarcely lent [intellectual property rights] a chance to take root in China". Although a new patent law was finally introduced in 1944, shortly before the end of the Second World War, the patent system never took off in mainland China following Guomindang's retreat to Taiwan. That system eventually became the Taiwanese patent system.

In 1949, the Chinese Communist Party established the People's Republic of China. A year later, China introduced the Provisional Regulations Governing Invention and Patent Rights, which covered both inventors' certificates (*faming zhengshu*) and patents.²³ Included in the regulations were provisions that allowed the State to take over patent rights in exchange for compensation. The adoption of these regulations led to the filing of the first Chinese patent, which was issued for a soda-making process.²⁴

¹⁴ Wang, "An Overview of the Development of the Chinese Patent System" in Cohen, Bang and Mitchell (eds), *Chinese Intellectual Property Law and Practice* (1999), p.3.

¹⁵ Zheng Chengsi with Michael D. Pendleton, Chinese Intellectual Property and Technology Transfer Law (London: Sweet & Maxwell, 1987), p.52.
¹⁶ William P. Alford, To Steal a Book Is an Elegant Offense: Intellectual Property Law in Chinese Civilization (Stanford: Stanford University Press, 1995), pp.37–38.

¹⁷ Alford, To Steal a Book Is an Elegant Offense (1995), p.37.

¹⁸ Zheng with Pendleton, *Chinese Intellectual Property and Technology Transfer Law* (1987), p.52.

¹⁹ Peter Feng, *Intellectual Property in China*, 2nd edn (Hong Kong: Sweet & Maxwell Asia, 2003), p.3.

²⁰ Zheng with Pendleton, *Chinese Intellectual Property and Technology Transfer Law* (1987), p.52.

²¹ Feng, Intellectual Property in China (2003), p.3.

²² Peter Ganea and Thomas Pattloch, *Intellectual Property Law in China* (The Hague: Kluwer Law International, 2005), p.2; Zheng with Pendleton, *Chinese Intellectual Property and Technology Transfer Law* (1987), p.52.

²³ On these regulations and other patent prototypes, see Barden N. Gale, "The Concept of Intellectual Property in the People's Republic of China: Inventors and Inventions" (1978) 74 China Q. 334; Hsia Tao-tai and Kathryn A. Haun, "Laws of the People's Republic of China on Industrial and Intellectual Property" (1973) 38 Law & Contemp. Probs. 274, 275–284.

²⁴ Zheng with Pendleton, *Chinese Intellectual Property and Technology Transfer Law* (1987), p.52. The patent was filed on October 20, 1950 and granted on April 1, 1953.

These regulations were quickly modified in 1954 with the enactment of the Provisional Regulations Concerning Awards for Inventions with Regard to Products, Technical Improvements and Rationalisation Proposals.²⁵ Between 1950 and 1963, "only four patents and six inventor certificates were granted".²⁶ In December 1963, the regulations were once again replaced by the Regulations Concerning Awards for Inventions and the Regulations Concerning Awards for Technical Improvement Proposals.²⁷ Many of these regulations were direct transplants from the Soviet Union.

With the launch of the Cultural Revolution in the mid-1960s, formal law and administrative bureaucracy were denounced, and scientists, engineers and members of the intelligentsia were discredited, demoted or dismissed from their positions. In such a politico-juridical environment, there was understandably neither protection nor respect for any form of intellectual property right. As a comrade in China would question at that time:

"Is it necessary for a steel worker to put his name on a steel ingot that he produces in the course of his duty? If not, why should a member of the intelligentsia enjoy the privilege of putting his name on what he produces?"28

Given the sentiments at that time, it is therefore no surprise that the modern Chinese patent system was not established until after the Cultural Revolution. Nevertheless, it is worth noting that Chinese leaders began exploring the need for such a system even before the end of the Cultural Revolution. As Andrew Mertha recalled:

"As early as November 1973, after the Chinese delegation to the World Intellectual Property Organization ... returned to Beijing, delegation leader Ren Jiaxin, who would later become Chief Justice of China's Supreme Court, proposed the establishment of a patent system in China. According to the *People's Daily*, ²⁹

This was the first time that New China has sent representatives to an international conference related to intellectual property rights. At that time, many people in China found the term 'Intellectual Property' rather unfamiliar. The [China Council for the Promotion of International Trade (CCPIT)] had rendered it, for the first time, into the Chinese equivalent, zhishi chanquan."

Stage 1: Creation

The establishment of the modern Chinese patent system began after China re-opened its market to foreign trade in the late 1970s. Putting science and technology in command, as opposed to Mao Zedong's "politics in command", Chinese leaders, led by Deng Xiaoping, vigorously pushed for the Four Modernisations to develop China's world-class strengths in agriculture, industry, science and technology, and national defence. The establishment of a modern patent system was considered an essential policy tool to help China play economic and technological catch-up. Professor Mertha recounted the development of events in chronological order:

"In 1978, on the eve of reform, the State Council charged the State Science and Technology Commission (SSTC) with developing a patent system for China. In March 1979, the drafting group of the Chinese Patent Law was established. [In June 1979, the Chinese Patent Office, or State Patent Bureau, was established, assuming the responsibilities of the drafting group.] On October 17 of the same year, the formal request for the establishment of a patent system in China was submitted to the

²⁵ Ganea and Pattloch, Intellectual Property Law in China (2005), p.3.

²⁶ Ganea and Pattloch, *Intellectual Property Law in China* (2005), p.3.

²⁷ Ganea and Pattloch, *Intellectual Property Law in China* (2005), p.3.

²⁸ Alford, *To Steal a Book Is an Elegant Offense* (1995), p.65.

²⁹ Andrew C. Mertha, *The Politics of Piracy: Intellectual Property in Contemporary China* (Ithaca: Cornell University Press, 2005), p.78.

State Council by the SSTC. On January 14, 1980, the State Council approved the request, and on March 3, China became a member of the World Intellectual Property Organization."³⁰

In July 1979, China and the United States signed the Agreement on Trade Relations between the United States of America and the People's Republic of China. Among other things, the agreement called for reciprocal protection of copyrights, patents and trademarks owned by the nationals of the other party. Although China quickly began the drafting process,³¹ both to promote economic development and to bring in foreign investment, the debate over a new patent law was rather intense and controversial.

To begin with, the concept of patents did not sit well with the socialist conditions on the ground in the early days of China's re-opening. Translated literally as either "exclusive benefit" or "exclusive profit", 32 the term "patent" (zhuanli) does not come with connotations of "openness" as found in "letters patent" (litterae patentes) in the West. 33 Indeed, the late Dr Arpad Bogsch, the long-time WIPO Director General, "suggested that some other Chinese terminology should have been employed to replace the two [existing] Chinese characters in order to avoid misunderstanding". 34

Even more complicated, other than a few regulations mentioned above and the system of inventors' certificates based on the Soviet model, China did not have much of a modern patent system in place before its re-opening to foreign trade. As a result, the drafters of the new patent law had to start from scratch, and delegations were sent to foreign countries to observe, learn and borrow models.³⁵ A few agencies, such as the Ministry of Chemical Industry and the Ministry of Electronics Industry, were also "opposed to a shift away from the Soviet model with its inventors' certificates". 36

In the end, two camps emerged. In one camp were those who believed that the development of the patent system would help China slowly catch up with developed countries. As Guo He put it:

"The prevailing opinions ... were that the patent system was a technical system with legal overtones which could be utilized by a socialist state, and that establishing a patent system in China would benefit the country."³⁷

These opinions made good sense because the country's ill-advised import substitution policies had made the country technologically backward and the Cultural Revolution had caused the country to lose a decade of productivity, training and technological development.

In another camp were those who strongly opposed the development of patent law—at least, a modern patent law based on a Western model. Among their objections were the concern about establishing new private property interests in a socialist economic system, the belief that strong intellectual property protection was inappropriate for a developing country like China, the inexperience with Western forms of intellectual property protection, and potential security risks posed by a lack of access to key patented products and technologies.³⁸

On March 12, 1984, the Chinese legislature eventually adopted the new patent law, after preparing 24 drafts.³⁹ Comprising 8 chapters and 69 articles and covering 3 different types of patents (invention patents,

³⁰ Mertha, The Politics of Piracy (2005), pp.81–82.

The Working Group was established on March 13, 1979. Ganea and Pattloch, *Intellectual Property Law in China* (2005), p.3.

³² Feng, Intellectual Property in China (2003), p.167, Ganea and Pattloch, Intellectual Property Law in China (2005), p.2. The late Zheng Chengsi traced this term back to "a very ancient historical record, 'Guo-Yu,' which was written some 3,000 years ago in the late Zhou Dynasty". Zheng with Pendleton, Chinese Intellectual Property and Technology Transfer Law (1987), p.51.

³³ Oren Bracha, "The Commodification of Patents 1600–1836: How Patents Became Rights and Why We Should Care" (2004) 38 Loy. L.A. L. Rev. 177, 184–185; Zheng with Pendleton, Chinese Intellectual Property and Technology Transfer Law (1987), p.51.
 ³⁴ Zheng with Pendleton, Chinese Intellectual Property and Technology Transfer Law (1987), p.51.

³⁵ Maria C.H. Lin, "The Patent Law of the People's Republic of China" (1985) 13 AIPLA Q.J. 107, 108. These countries included Australia, Brazil, France, Japan, Romania, Switzerland, the United States, West Germany and Yugoslavia.

⁶ Mertha, The Politics of Piracy (2005), p.86.

³⁷ Guo He, "Patents" in Rohan Kariyawasam (ed.), Chinese Intellectual Property and Technology Laws (Cheltenham: Edward Elgar Publishing,

Alford, To Steal a Book Is an Elegant Offense (1995), pp.66, 70; Mertha, The Politics of Piracy (2005), pp.84–86.

³⁹ Feng, *Intellectual Property in China* (2003), p.168.

design patents and utility model patents), the law entered into effect on April 1, 1985. On this first day, the newly established Chinese Patent Office received 3,455 applications, a number that set the world record.⁴⁰ In that same year, China also joined the PCT, which streamlined the early stages of the patent application process while allowing Chinese nationals to file applications simultaneously in multiple jurisdictions.

Notwithstanding these exciting developments, the effectiveness of the 1984 Patent Law was greatly limited by a lack of experience with patent protection, the uneasiness about introducing private rights in a socialist environment and a myriad of compromises struck in the drafting process. As William Alford observed, the law was primarily designed to promote "socialist legality with Chinese characteristics". 41 For example, art.25 excluded "foodstuffs, medicines, chemicals, and substances relating to nuclear fission". similar to the exclusions found in the patent laws of India and other developing countries.⁴² To respond to the concern that state enterprises could not own rights that belong to the people, the law also distinguished between those who "hold" (chiyou) rights and those who "own" (yongyou) rights. 43 While individual inventors could own rights, state enterprises could only hold rights. 44 That distinction slowly evolved away in Stages 2 and 3, both of which will be discussed further below.

Moreover, despite granting rights to individual inventors, the law imposed severe limits that rendered the original grants largely insignificant. Although art.6 granted patent protection to "job-related invention-creation", it limited ownership to the work unit (danwei), the enterprise or the joint venture. The implementing regulations further defined the term "job-related invention-creations" broadly to encompass virtually anything made on or in relation to one's job while using materials or data from one's unit, or within a year of leaving that unit. 45 Given the importance of a work unit in a socialist economy (which provided workers with housing, welfare benefits, social context and employment) and the difficulty in securing sophisticated equipment or sizable capital in the early 1980s, the provision had effectively frustrated individuals from holding job-related patents in their own names.

It is therefore no surprise that the protection of job-related patents has remained controversial since the drafting of the 1984 Patent Law. As the late Zheng Chengsi recounted:

"Between 1990 and 1995, the Chinese Patent Office held a series of expert meetings for the purpose of drafting a document called 'Regulations concerning Job-Related Inventions'. This document has never been finalised because there has been too much debate among experts from different interest groups."46

In sum, the 1984 Patent Law provided an important first step toward the development of the modern Chinese patent system. This first step also provided us with important insight into how Chinese intellectual property laws would have been developed without the influence of its trading partners. As Andrew Mertha observed:

"the first ten years in the development of China's patent regime provide a window into the natural evolution of IPR [intellectual property rights] in China, at least until the early 1990s". 47

Nevertheless, foreign patent owners received very limited protection under the law. In fact, the rights delineated in the law were so restrictive that Chinese scholars began discussing a revision "[a]lmost as

```
    <sup>40</sup> Feng, Intellectual Property in China (2003), p.168.
    <sup>41</sup> Alford, To Steal a Book Is an Elegant Offense (1995), p.70.

   <sup>42</sup> Mertha, The Politics of Piracy (2005), p.82.
   <sup>43</sup> Feng, Intellectual Property in China (2003), pp.191–193.
   <sup>44</sup> Feng, Intellectual Property in China (2003), p.169; Ganea and Pattloch, Intellectual Property Law in China (2005), pp.6–7.
   <sup>45</sup> Alford, To Steal a Book Is an Elegant Offense (1995), p.71.
   <sup>46</sup> Zheng Chengsi, Intellectual Property Enforcement in China: Leading Cases and Commentary (Hong Kong: Sweet & Maxwell Asia, 1997),
pp.89–90.

47 Mertha, The Politics of Piracy (2005), p.77.
```

soon as the [law] came into force". 48 The opportunity for revision, however, did not arise until a few years later when China was under heavy external pressure to revamp its intellectual property system.

Stage 2: Imitation and transplantation

Shortly after the enactment of the 1984 Patent Law, the United States and other foreign countries began to exert greater pressure on China to undertake further reform of its intellectual property system. While American firms showed patience shortly after China's re-opening, their patience soon dissipated. As Warren Maruyama, the former general counsel of the US Trade Representative (USTR), recounted:

"At a 1985 meeting to the U.S.-China Joint Committee on Commerce and Trade (JCCT), the U.S. for the first time expressed concerns about weak Chinese IPR standards. In 1987, the U.S. put IPR protection on the agenda for U.S.-China market access talks."

At that time, the United States' main intellectual property concern was copyrights, not patents. Although China introduced its first trademark and patent laws in 1982 and 1984, respectively, it has yet to introduce a new copyright law. Part of the delay was caused by the need for censorship and control of information flows in China. The lack of copyright protection was particularly problematic, as a lack of both copyright protection and market access had made it difficult for the politically powerful US movie, music and software industries to protect their content.

Since the mid-1980s, the entertainment industries had actively lobbied the USTR to put more pressure on China to reform its intellectual property system. In the late 1980s and the early 1990s, the US Government repeatedly threatened China with a series of economic sanctions, trade wars, non-renewal of most-favoured-nation status and opposition to China's entry into the WTO.⁵⁰ Such threats eventually led to the signing of two memoranda of understanding in 1989 and 1992. The 1989 memorandum was seldom mentioned because it was negotiated amidst student protests in Tiananmen Square.⁵¹ Although that memorandum reassured the United States that China would strengthen protection for computer software, the 1992 memorandum was the "first full bilateral IPR agreement" between China and the United States.⁵² In retrospect, the latter memorandum has been rather effective in revamping the Chinese intellectual property system.

Much of the 1992 memorandum concerned efforts in the copyright area. These efforts included accession to the Berne Convention for the Protection of Literary and Artistic Works, ratification of the Geneva Convention for the Protection of Producers of Phonograms against Unauthorized Duplication of Their Phonograms, and the introduction of software regulations. Notwithstanding this primary focus, the memorandum also included provisions in the patent area. For example, both arts 1 and 2 of the memorandum provided detailed provisions on patent reforms demanded by the United States.

In 1993, China adopted the First Amendment to the Patent Law. This amendment expanded the scope of protection to cover foodstuffs, beverages, condiments and medicines.⁵³ It further extended protection from only processes to both processes and products, an issue of high importance to the US pharmaceutical industry.⁵⁴ In addition, the amendment extended the term of protection for invention patents from 15 to

⁴⁸ Feng, Intellectual Property in China (2003), p.171.

⁴⁹ Warren H. Maruyama, "U.S.-China IPR Negotiations: Trade, Intellectual Property, and the Rule of Law in a Global Economy" in Cohen, Bang and Mitchell (eds), *Chinese Intellectual Property Law and Practice* (1999), p.186.

⁵⁰ Peter K. Yu, "From Pirates to Partners: Protecting Intellectual Property in China in the Twenty-first Century" (2000) 50 Am. U. L. Rev. 131, 140–151.

⁵¹ This memorandum was reprinted in "PRC Agrees to Push for Copyright Law that Will Protect Computer Software" World Intellectual Property Report, July 1989, p.151.

⁵² Joseph A. Massey, "The Emperor Is Far Away: China's Enforcement of Intellectual Property Rights Protection, 1986–2006" (2006) 7 Chi. J. Int'l L. 231, 235.

⁵³ Chinese Patent Law 1993 art.25.

⁵⁴ Chinese Patent Law 1993 art.11.

20 years. 55 It also added provisions for the right to import 56 while converting a three-month pre-grant opposition procedure to a six-month post-grant invalidation procedure.

Because the amended Patent Law was drafted in response to external pressure from the United States, it offered foreign patent holders much stronger protection than the 1984 Patent Law. Nevertheless, the protection under the Chinese patent system remained insufficient, and it took at least another round of reform before the law became largely compliant with the standards of the World Trade Organization (WTO) and its Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement).

Stage 3: Standardisation and customisation

In 2000, China again amended its patent law. A major motivation behind this amendment was China's accession to the WTO. China had been petitioning for membership since the founding of this international trading body. After exhaustive negotiations for more than 15 years, China was finally admitted to the WTO on December 11, 2001. Among all the three major branches of intellectual property law, the patent law was the first to be revised.

Shortly before the adoption of the Second Amendment in August 2000, the Chinese Patent Office was renamed the State Intellectual Property Office (SIPO), with Dr Gao Lulin serving as its founding director. Although such reorganisation did not enable the office to expand its mandate to cover copyright and trademark matters, or earn the coveted title of "General Administration" (zongshu), the renaming indicates the growing importance of patents in China's economic plan. By elevating SIPO to a vice-ministerial level agency that directly reports to the State Council, ⁵⁷SIPO also avoids the challenging experience of bouncing back and forth among the State Council, the State Economic Commission (SEC) and SSTC. As Andrew Mertha recalled:

"[T]he Patent Bureau was constantly being transferred from one administrative 'host' unit to another during its relatively brief lifetime—from the SSTC to the SSTC to the SSTC to the State Council, all in the space of thirteen years". 58

On July 1, 2001, the Second Amendment entered into effect. Pursuant to this new amendment, the law prohibited the "offers for sale" of products that infringe upon invention patents and utility models, consistent with art.28.1 of the TRIPS Agreement.⁵⁹ The amended law also tightened the standards for obtaining a compulsory license as permissible under art.31 of the Agreement.⁶⁰ In addition, it allowed for the judicial review of patent invalidations pursuant to art.41.4 of the TRIPS Agreement. 61 The law further simplified the application procedures while eliminating the unnecessary duplication of the patent invalidation and revocation processes.62

Moreover, the amended law clarified protection of an employee's invention by stating that the right to apply for a patent in such an invention belonged to the employer unless a contrary agreement existed —an ongoing issue predating even the 1984 Patent Law. To strengthen protection for both local and foreign rights holders, the law further required innocent infringers to prove the legitimate source of the patented

⁵⁵ Chinese Patent Law 1993 art.45.

⁵⁶ Chinese Patent Law 1993 art.11.

⁵⁷ Martin K. Dimitrov, *Piracy and the State: The Politics of Intellectual Property Rights in China* (Cambridge: Cambridge University Press, 2009), p.254.

See Mertha, *The Politics of Piracy* (2005), p.90.

⁵⁹ Chinese Patent Law 2000 art.11.

⁶⁰ Chinese Patent Law 2000 arts 48–50.

⁶¹ Chinese Patent Law 2000 art.46.

⁶² Chen Jiwen, "Better Patent Law for International Commitment—The Amendment of Chinese Patent Law" (2001) 2 Rich. J. Global L. & Bus. 61, 67-70; Sun Haitao, "Post-Grant Patent Invalidation in China and in the United States, Europe, and Japan: A Comparative Study" (2004) 15 Fordham Intell. Prop. Media & Ent. L.J. 273, 286.

⁶³ Chinese Patent Law 2000 art.6.

product.⁶⁴ Where damages could not be determined, the amended law allowed for the calculation of damages based on appropriate royalties.⁶⁵

For most observers, the Second Amendment was adopted to conform the Chinese patent system to WTO standards. The need for such conformity was understandable considering China's willingness to make significant sacrifices to join the WTO. As Samuel Kim put it, China was eager "to gain WTO entry at almost any price". 6 Indeed, many Chinese leaders and members of the public considered the WTO membership as not only an economic issue, but also an issue affecting national pride. In their view, the accession to the WTO concerns China's rightful place in the world after experiencing "a century of humiliation", during which foreign imperial powers literally carved the country up into a semi-colony.

Notwithstanding the importance of conforming to WTO standards, many provisions in the Second Amendment were introduced primarily to respond to the country's rapidly-changing local conditions (*guoqing*).⁶⁷ The Amendment indeed was as much about customisation as it was about standardisation. It also highlighted the impact of local conditions on the Chinese patent system, reflecting the Chinese leaders' changing attitude toward the rule of law, the emergence of private property rights and local stakeholders, the increasing concerns about ambiguities over relationships in state-owned enterprises and the government's active push for modernisation.⁶⁸

For instance, the Second Amendment focused on simplifying the application procedures and eliminating the duplication of the patent invalidation and revocation processes, even though the TRIPS Agreement does not have similar requirements. The clarification over the protection for employee's inventions also clearly reflected the changing nature of China's economic conditions, in which a large number of employees of state-owned enterprises had entered the private sector—or, in Chinese parlance, "plunged into the sea" (*xiahai*). Those conditions were very different from the 1980s and early 1990s, when state-owned enterprises dominated the Chinese economy.

In sum, the Second Amendment provided a timely update to the Chinese patent system. Internationally, it addressed the concern of the WTO and many of its members, in particular the United States, over inconsistent standards of intellectual property protection and enforcement. Domestically, the amendment enabled the country to make legislative and policy adjustments that directly responded to the rapidly-changing economy while providing a platform for enhancing technological and innovative capabilities.

Stage 4: Indigenisation

While China was debating over which provision was to be included in the Third Amendment to the Patent Law, it also began actively pursuing an intellectual property agenda. In June 2008, the State Council introduced a pioneering National Intellectual Property Strategy. This strategy provided a comprehensive plan to improve the protection and management of intellectual property rights while emphasising the need for active development of independent or self-controlled intellectual property (*zizhu zhishi chanquan*). ⁶⁹

A few months later, China adopted the Third Amendment, completely revamping its patent system for the third time. Like the early 2000s, the patent law was the first to be revised. Such revision reflected the country's growing emphasis on using patents to help develop a knowledge-based economy. Unlike the previous two amendments, however, compliance with WTO or other multilateral norms played a rather

⁶⁴ Chinese Patent Law 2000 art.63.

⁶⁵ Chinese Patent Law 2000 art.60.

⁶⁶ Samuel S. Kim, "China in World Politics" in Barry Buzan and Rosemary Foot (eds), *Does China Matter? A Reassessment: Essays in Memory of Gerald Segal* (London: Routledge, 2004), p.49.

⁶⁷ Peter K. Yu, "From Pirates to Partners (Episode II): Protecting Intellectual Property in Post-WTO China" (2006) 55 Am. U. L. Rev. 901, 914–923.

⁶⁸ Yu, "From Pirates to Partners (Episode II)" (2006) 55 Am. U. L. Rev. 901, 908.

⁶⁹ State Council, Compendium of China National Intellectual Property Strategy (Beijing, 2008), para.7.

insignificant role. For the first time, China adjusted its patent system based on its own needs, rather than constraints imposed by the international community. As Professor Guo observed:

"The impetus for the early amendments came from outside, whilst the need for the third amendment originated from within China, that is to say, the majority of the third amendment was to meet the needs of the development of the domestic economy and technology originating in China".

Pursuant to the Third Amendment, the Patent Law adopts the absolute novelty standard and introduces provisions concerning the protection of genetic resources. In response to the protocol to amend the TRIPS Agreement by adding art.31bis, to which China acceded on November 28, 2007, the law provides new grounds for granting compulsory licenses.⁷¹ The law also clarifies double patenting concerns over the filing of both an invention patent and a utility model patent. Under the amended law, an inventor can hold a single patent, but not both an invention patent and a utility model patent.⁷²

Moreover, the amended law increased the amount of damages and fines, including statutory damages, within the Chinese patent system.⁷³ It also allows for parallel importation and introduces the Chinese equivalent of a Bolar exception, which enables generic pharmaceutical producers to import, manufacture or test a patented product prior to the expiry of the patent "for the purpose of providing information required for administrative examination and approval". Finally, the law abolished the provisions concerning foreign patent agencies, 75 which foreign inventors were required to use.

Notwithstanding this latest amendment, the levels of protection and enforcement of intellectual property rights in China have yet to completely satisfy foreign rights holders and their supportive governments. Virtually every year, the USTR puts China on its Watch List or Priority Watch List. ⁷⁶ Such designation is alarming, but not as alarming as the priority foreign country status China used to get in the early 1990s. The piracy and counterfeiting problems in China remain the target of new international intellectual property enforcement initiatives, which range from ACTA and the Trans-Pacific Partnership Agreement to domestic legislation such as the Stop Online Piracy Act (SOPA) and the PROTECT IP Act (PIPA). In a recent report, the International Trade Commission estimated that

"firms in the U.S. [intellectual property]-intensive economy that conducted business in China in 2009 reported losses of approximately \$48.2 billion in sales, royalties, or license fees due to IPR infringement in China".77

Although the level of intellectual property protection in China has yet to satisfy the United States, the protection and enforcement of intellectual property rights has dramatically improved in the past decade. In fact, the biggest challenge for intellectual property rights holders in China today is no longer about the low standards of protection, but the limited effectiveness in enforcement.⁷⁸ Such enforcement problems are well illustrated by the complaint the United States filed before the WTO Dispute Settlement Body in April 2007. Although the complaint did not focus on China's obligations in the patent area, it implicated customs and criminal provisions that are relevant to patent protection.⁷⁹

⁷⁰ Guo, "Patents" in Kariyawasam (ed.), Chinese Intellectual Property and Technology Laws (2011), p.28.

⁷¹ Chinese Patent Law 2008 art.48.

⁷² Chinese Patent Law 2008 art.9.

⁷³ Chinese Patent Law 2008 art.65.

⁷⁴ Chinese Patent Law 2008 art.69.

⁷⁵ Chinese Patent Law 2008 art.19.

⁷⁶ The notable exception is during the honeymoon period following China's accession to the WTO in December 2001. In April 2005, the USTR elevated China back to the Priority Watch List.

⁷⁷US International Trade Commission, China: Effects of Intellectual Property Infringement and Indigenous Innovation Policies on the U.S. Economy (Washington, 2011), p.xiv.

Office of the US Trade Representative, 2005 National Trade Estimate Report on Foreign Trade Barriers (Washington, 2005), p.95.

⁷⁹ On further discussions of the dispute, see Peter K. Yu, "TRIPS Enforcement and Developing Countries" (2011) 26 Am. U. Int'l L. Rev. 727; Peter K. Yu, "The TRIPS Enforcement Dispute" (2011) 89 Neb. L. Rev. 1046.

Stage 5: What next?

Since the mid-2000s, the Chinese Government has begun to pay greater attention to the development of an innovation- and knowledge-based economy. Such a focus was greatly needed to facilitate continued economic growth in areas that could no longer rely on either agriculture or manufacturing. By changing the focus of its development strategy, China also seeks to avoid what policy makers and commentators have described as the "middle-income trap".80

In addition, a stronger focus on patent developments fits within the incremental approach that Chinese leaders have carefully implemented over the years. In the National Long-term Scientific and Technological Development Program released in February 2006, the State Council formally declared its commitment to turn China into an innovation-based economy within 15 years.⁸¹ Since then, top Chinese leaders have increasingly recognised the economic and strategic importance of a well-functioning intellectual property system. For example, President Hu Jintao remarked in the Group Study of the Political Bureau of the Central Committee of the Chinese Communist Party in May 2006:

"Strengthening the building of China's system of intellectual property right and vigorously upgrading the capacity of creation, management, protection and application regarding intellectual property are our urgent need for the purpose of enhancing independent and self-driven innovation capabilities and building an innovation-oriented country."82

Likewise, Premier Wen Jiabo observed:

"One thing necessary to stress is the need to concretely strengthen IP [intellectual property] protection. In the new era, global science and technology competition, as well as economic competition, is primarily a competition of IP rights. Promoting IP protection therefore promotes and inspires innovation."83

Taking the lead of these Chinese leaders, SIPO set very ambitious goals for its National Patent Development Strategy (2011–2020). Included in the 2015 goals were the following targets:

"The annual quantity of applying for patents for inventions, utility models and designs will reach 2 million. China will rank among the top two in the world in terms of the annual number of patents for inventions granted to the domestic applicants, and the quality of patents filed will further improve. The number of owning patents every one million people and the number of overseas patent applications filed by Chinese applicants will double. The proportion of patent applications in industrial enterprises above designated size will reach 8% and the quantity of owning patent rights will significantly rise period....The patent transaction services will be established in major cities of China with annual patent transaction amounts reaching 100 billion yuan.... The patent examiner[s] will reach 9,000.... The talents in the patent service industry will be greater and the professional categories will be more complete, with certified patent agents reaching 10,000."84

In addition, SIPO has been very active in developing professional ties with patent offices from around the world. In 2007, for example, its officials met with their counterparts from the European Patent Office,

⁸⁰ Peter K. Yu, "The Middle Intellectual Property Powers" in Randall Peerenboom and Tom Ginsburg (eds), Law and Development in Middle-Income Countries: Avoiding the Middle-Income Trap (Cambridge: Cambridge University Press, 2014).

⁸¹ Cao Cong, Richard P. Suttmeier and Denis Fred Simon, "China's 15-Year Science and Technology Plan" *Physics Today*, December 2006, p.38; Feng Xiaoqing, "The Interaction between Enhancing the Capacity for Independent Innovation and Patent Protection: A Perspective on the Third Amendment to the Patent Law of the P.R. China" (2008) 9 Pitt. J. Tech. L. & Pol'y 1, para.7; Mark Liang, "Chinese Patent Quality: Running the Numbers and Possible Remedies" (2012) 11 J. Marshall Rev. Intell. Prop. L. 478, 483-484.

⁸² Wu Handong, "One Hundred Years of Progress: The Development of the Intellectual Property System in China" (2009) 1 WIPO J. 117, 120. 83 State Intellectual Property Office, "China's Intellectual Property Protection in 2008", available at http://english.sipo.gov.cn/laws/whitepapers /200904/t20090427 457167.html [Accessed October 16, 2013].

⁸⁴ State Intellectual Property Office, National Patent Development Strategy (2011–2020) (Beijing, 2011), pp.4–5, available in English at http:/ /graphics8.nytimes.com/packages/pdf/business/SIPONatPatentDevStrategy.pdf [Accessed October 16, 2013]

the Japanese Patent office, the Korean Intellectual Property Office and the United States Patent and Trademark Office to discuss ways to "improv[e] the efficiency of their examination systems and to harmonize their office systems". 85 These so-called "IP5" discussions, which are ongoing and progressing, further strengthen SIPO's status as "a player in the top tier of patent offices that will dominate the emerging system of global patent administration". 86 Such a strengthened status is no surprise, considering that the Chinese Patent Office, and later SIPO, has served as an international searching authority for PCT purposes since 1994.87

While questions remain concerning what a country could do with two million patents per year and whether such ambitious goals would result in low patent quality, 88 it is hard not to be amazed by the quick turnaround China has experienced in the intellectual property arena in less than three decades. Although the country did not have a modern patent system before 1984, it is now on track to become the world's leader in both domestic and international patent applications. When questioned by The New York Times about SIPO's 2015 targets, David Kappos, the former director of the United States Patent and Trademark Office, could not help but describe those numbers as "mind-blowing".89

As of this writing, it is too soon to assess the impact of the Third Amendment or the efforts generated by the 2008 National Intellectual Property Strategy. Nevertheless, it is not difficult to notice China's continued innovation in developing its patent ladder. Although China used this ladder to catch up with developed countries, this ladder has now been transformed into a strategic tool that helps China to climb to a much higher place—a place that it hopes will be higher than the positions of many developed countries.

Lessons for the developing world

If one pays close attention to the recent developments in the Chinese patent system, one can notice China's eagerness to recruit "builders" and "designers" to develop a ladder that not only meets international standards, but also is "Made in China" and "Created in China". 90 To some extent, the debate on the Chinese patent system has raised the same question that has repeatedly come up in recent debates concerning China's role in the international policy arena: Does Beijing provide an attractive alternative model for other developing countries that are struggling to catch up economically and technologically in the present international economic system?⁹¹

More importantly, what lessons does the historical development of the Chinese patent system provide? To be certain, this development was the result of a confluence of factors, many of which are unique to China and therefore cannot be replicated abroad. As Deng Xiaoping reminded Ghana President Jerry Rawlings in 1985:

"Please don't try to copy our model. If there is any experience on our part, it is to formulate policies in light of one's own national conditions."92

Nevertheless, the developments in China do offer five important lessons for other countries in the developing world.

⁸⁵ Peter Drahos, The Global Governance of Knowledge: Patent Offices and Their Clients (Cambridge: Cambridge University Press, 2010), p.236.

⁸⁶ Drahos, The Global Governance of Knowledge (2010), p.233.

⁸⁷ Drahos, *The Global Governance of Knowledge* (2010), p.233.

⁸⁸ Liang, "Chinese Patent Quality" (2012) 11 J. Marshall Rev. Intell. Prop. L. 478; Dan Prud'homme, Dulling the Cutting-Edge: How Patent-Related Policies and Practices Hamper Innovation in China (Shanghai: European Union Chamber of Commerce, 2012); Peter K. Yu, "Five Oft-repeated Questions about China's Recent Rise as a Patent Power" [2013] Cardozo L. Rev. De Novo 78, 81-88.

⁸⁹ Steve Lohr, "When Innovation, Too, Is Made in China" New York Times, January 2, 2011, p.3.

⁹⁰ On China's eagerness to transform its industries, products and services from "Made in China" to "Created in China", see Michael Keane, Created in China: The Great New Leap Forward (London: Routledge, 2007); Li Yahong, Imitation to Innovation in China: The Role of Patents in Biotechnology and Pharmaceutical Industries (Cheltenham: Edward Elgar Publishing, 2010).

⁹¹ Peter K. Yu, "Sinic Trade Agreements" (2011) 44 U.C. Davis L. Rev. 953, 1018-1022.

⁹² Justin Yifu Lin, The Quest for Prosperity: How Developing Economies Can Take Off (Princeton: Princeton University Press, 2012), p.xvii.

First, a one-size-fits-all model does not work well at the global level, and retaining policy space is essential to the successful development of a country's patent system. As commentators have widely noted, overprotecting intellectual property rights can harm a country as much as underprotecting them.⁹³ While policy makers and industry leaders from intellectual property-exporting countries are eager to offer policy advice on how best to improve the patent system, policy makers from developing countries should pay close attention to their countries' local needs, national interests, technological capabilities, institutional capacities and public health conditions.⁹⁴

If anything, the evolution of the Chinese patent system has revealed the need for policy makers to take an incremental, pragmatic approach toward establishing a well-functioning patent system. Such development strongly resembles China's developments in other areas. The defining feature of the Chinese model—or what some commentators have described as the Beijing Consensus⁹⁵ or, more modestly, the Beijing Proposal⁹⁶—is not a definitive formula of success. Rather, it is the leaders' pragmatic approach to "groping for stones to cross the river" (*mozhe shitou guohe*) and their willingness to consider a wide variety of options.⁹⁸

Secondly, and relatedly, countries should maximise the flexibilities available in the existing international patent system. To be certain, the policy space available under today's system is much more limited than what was available in the system's early days. When the Paris Convention was first established more than a century ago, countries could decide whether to offer patent protection without worrying about losing their membership. That choice, however, disappeared with the arrival of the TRIPS Agreement and its international minimum standards. The establishment of TRIPS-plus bilateral, plurilateral, and regional trade, investment and intellectual property agreements has limited the policy choices even further.

Notwithstanding these growing constraints, some policy space still exists in the present system. For example, countries could still decide whether they want to promote the development of utility models, prohibit patent grants on second indications or introduce public interest exceptions into their laws. ¹⁰⁰ They could also explore the use of alternative models to generate incentives for inventors. ¹⁰¹ In China, for example, the utility model patent

"was set up to invite broader participation in inventive enterprises, especially by smaller collective enterprises and private citizens who are less likely to have resources devoted to invention patents". 102

Thirdly, countries that dare to develop their patent system at different paces or in different directions than what major intellectual property-exporting countries expect will likely be heavily criticised as pirating nations, or even "rogue" players in the international intellectual property community. The USTR's notorious s.301 process easily comes to mind. ¹⁰³ Even today, China continues to be criticised for not only its widespread piracy and counterfeiting problems but also the quality of its patent system. ¹⁰⁴ For small countries that heavily depend on aid and support from developed countries, it will be very difficult for them to withstand external pressure to reform their patent systems.

⁹³ White v Samsung Electronics America Inc 989 F.2d 1512, 1513 (9th Cir 1993) (Kozinski J, dissenting); Ian Hargreaves, Digital Opportunity: A Review of Intellectual Property and Growth (Newport: UK Intellectual Property Office, 2011), p.51; Josh Lerner, "The Patent System in a Time of Turmoil" (2010) 2 WIPO J. 28, 32.

⁹⁴ Peter K. Yu, "The International Enclosure Movement" (2007) 82 Ind. L.J. 827, 886–892.

⁹⁵ On the Beijing Consensus, see Stefan A. Halper, *The Beijing Consensus: How China's Authoritarian Model Will Dominate the Twenty-first Century* (New York: Basic Books, 2010); Joshua Cooper Ramo, *The Beijing Consensus* (London: Foreign Policy Centre, 2004).

⁹⁶ Hu Angang, China in 2020: A New Type of Superpower (Washington: Brookings Institution Press, 2011), p.17.

⁹⁷ Yu, "Sinic Trade Agreements" (2011) 44 U.C. Davis L. Rev. 953, 1006.

William H. Overholt, Asia, America, and the Transformation of Geopolitics (Cambridge: Cambridge University Press, 2007), p.118.
 Peter K. Yu, "International Enclosure, the Regime Complex, and Intellectual Property Schizophrenia" [2007] Mich. St. L. Rev. 1, 4.

¹⁰⁰ Yu, "The International Enclosure Movement" (2007) 82 Ind. L.J. 827, 863–866.

Peter K. Yu, "Intellectual Property and Human Rights in the Nonmultilateral Era" (2012) 64 Fla. L. Rev. 1045, 1077–1078.

¹⁰² Feng, *Intellectual Property in China* (2003), p.170.

¹⁰³ Yu, "From Pirates to Partners" (2000) 50 Am. U. L. Rev. 131, 140–154.

Liang, "Chinese Patent Quality" (2012) 11 J. Marshall Rev. Intell. Prop. L. 478; Prud'homme, Dulling the Cutting-Edge (2012).

Fourthly, there seems to be a "crossover point" at which countries go from a pirating nation to a nation respectful of patent rights. 105 As I noted in the inaugural issue of this Journal, such crossover took place in many once-developing countries, including the United States, Germany, Japan, Singapore and South Korea. 106 China's recent improvements in the patent area also suggest that the country will now follow the well-treaded path of other once-developing countries. Thus, even though many developing countries still have an underdeveloped patent system today, they will be in a good position to offer much stronger protection and enforcement as social, economic and technological conditions improve.

Finally, there is no quick and easy solution to the massive piracy problems confronting developing countries. It took developed countries centuries to develop their patent system to its current stage. Considered by most commentators as the world's oldest, the Venetian patent system was established in 1474, more than half a millennium ago. The British Statute of Monopolies came into existence in 1623, while the first US patent law was enacted in 1790. While it took China only three decades to build its present patent system from the ground up—a feat that no country has ever achieved—its many remaining problems and frequent and continued revisions suggest that China still has a long way to go before its patent system achieves maturity.

Thus, even though government leaders, policy makers and industry executives are often frustrated by the lack of progress in the Chinese intellectual property system—or, for that matter, the intellectual property system in other emerging countries—they need to think hard about what timeframe would be realistic for a country to develop a well-functioning patent system. After all, if it took a highly centralised country like China more than 30 years to develop such a system, is it realistic to expect a smaller, less centralised and less resourceful country to achieve the same feat in such a short period of time? If such development is indeed unrealistic, does it make sense for the current intellectual property powers to continue to rely solely or primarily on external pressure to drive improvements in the intellectual property system?

Conclusion

In the past three decades, China has been very careful in building a patent ladder to foster economic prosperity and technological proficiency. Although its path has been rugged and it remains subjected to pressure from countries that have already walked through that path, China has finally managed to turn its patent system around. Today, there is no denying that China has slowly emerged as a patent power, with not only the highest quantity of patent filings in the world, but also increasing assertiveness in international norm-setting activities.¹⁰⁷ The Chinese patent system is important not only because it developed at an unprecedented pace, but also because it provides many valuable lessons for other countries in the developing world.

Close to a century ago, Justice Oliver Wendell Holmes wrote, "a page of history is worth a volume of logic". 108 History, however, does not end on a single page. It comes back to haunt us in hundreds of volumes. More importantly, history loves to repeat itself. It is not "just one fucking thing after another", as playwright Alan Bennett reminded us colourfully and memorably in *The History Boys*. ¹⁰⁹ History has a penchant for reinforcing the logic to which Justice Holmes alluded. As philosopher George Santayana rightly cautioned us, "Those who cannot remember the past are condemned to repeat it." "110

Today, history remains one of the most favourite pastimes of intellectual property scholars. From conducting archive-based research to publishing scholarly literature to participating in symposia in specialised journals, these scholars have devoted a considerable amount of time, effort, energy and resources

¹⁰⁵ Peter K. Yu, "The Global Intellectual Property Order and Its Undetermined Future" (2009) 1 WIPO J. 1, 10–15.

¹⁰⁶ Yu, "The Global Intellectual Property Order and Its Undetermined Future" (2009) 1 WIPO J. 1, 13.

Peter K. Yu, "The Middle Kingdom and the Intellectual Property World" (2011) 13 Or. Rev. Int'l L. 209, 237–258.

¹⁰⁸ New York Trust Co v Eisner 256 U.S. 345, 349 (1921).

¹⁰⁹ Alan Bennett, *The History Boys* (New York: Faber and Faber, 2004), p.85.

George Santayana, The Life of Reason: Or the Phases of Human Progress (New York: Charles Scribner's Sons, 1932), p.232.

16 The WIPO Journal

to studying intellectual property history. History has provided us with important lessons and directions for both the present and the future. As *The WIPO Journal* celebrates its fifth anniversary and looks forward to the future, I invite you to join us in reflecting on the past through the many interesting articles a highly select group of contributors have put together. I hope you will enjoy this special issue.

A Page of History: Patents, Prizes and Technological Innovation

B. Zorina Khan

Professor of Economics, Bowdoin College and National Bureau of Economic Research

Europe; Innovation; Legal history; Patents; Prizes; Technology; United States

"A page of history is worth a volume of logic."

-Oliver Wendell Holmes (1921)1

Introduction

During the past two centuries technological change has made a significant contribution to advances in human welfare.² However, the nature of inventive activity and the processes through which individual creativity are transmuted into outward shifts in the production possibility frontier are still not well understood. Kenneth Arrow recently suggested that an important research agenda for the future comprises "measuring the significance of the patent system as an incentive for invention, including bringing the new product or process into the market".³ As such, current policy discussions would benefit from more systematic investigations into the function of patent institutions and other incentive systems and their impact on the course of technological change.

The patent and innovation controversies of the twenty-first century reveal a general lack of information about the evolution of intellectual property and allied rights. In a reprise of debates from the nineteenth century, scepticism has increased of late about whether state grants of property rights in patents and in copyright comprise the most effective incentives for increasing creativity and promoting social welfare. Gary Becker, who was awarded the Nobel Prize in Economics, has declared:

"Probably the best solution would be to maintain the patent system on drugs and a few other products that are expensive to innovate and cheap to copy, and eliminate patents on everything else."

Some economists today even consider patent systems to be "an unnecessary evil", creating "costly and dangerous" intellectual monopolies that should be eliminated.⁵

Pivotal Supreme Court decisions have in part been justified with references to history that exhibit a faulty understanding of the actual development of intellectual property markets. Whereas, extensive markets have always existed that allowed some patentees to license or sell their patent rights, without

¹ New York Trust Co v Eisner 256 U.S. 345, 349 (1921).

²E.g. Joel Mokyr, *The Lever of Riches: Technological Creativity and Economic Progress* (Oxford: Oxford University Press, 1990).

³ Kenneth J. Arrow, "The Economics of Inventive Activity over Fifty Years" in Josh Lerner and Scott Stern (eds), *The Rate and Direction of Inventive Activity Revisited* (Chicago: University of Chicago Press, 2012).

⁴ "Reforming the Patent System toward a Minimalist System—Becker", available at http://www.becker-posner-blog.com/2012/09/reforming-the-patent-system-toward-a-minimalist-system-becker.html [Accessed October 1, 2013].

⁵ Michele Boldrin and David K. Levine, *Against Intellectual Monopoly* (New York: Cambridge University Press, 2008).

⁶ In *eBay Inc v MercExchange* L.L.C., Justices Kennedy, Stevens, Souter and Breyer noted in a concurring opinion that injunctive remedies might not be as appropriate because "the nature of the patent being enforced and the economic function of the patent holder present considerations quite unlike earlier cases. An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees." 547 U.S. 388 (2006). See, for instance, Naomi R. Lamoreaux and Kenneth L. Sokoloff, "Market Trade in Patents and the Rise of a Class of Specialized Inventors in the Nineteenth-Century United States" (2001) 91 Am. Econ. Rev. Papers & Proc. 39.

engaging in production of the goods. From the first decades of the nineteenth century, strongly enforced property rights in patents facilitated trade and commercialisation, with all the attendant benefits of market exchange. These included price discovery and valuation, the ability to mobilise capital and resources, and the co-ordination of supply and demand. Impecunious inventors in particular benefited from technology markets, because they were able to specialise in inventive activity and obtain returns in the market place by selling or licensing their rights to others who wished to produce their discoveries. An extensive network of specialised intermediaries facilitated sales and licensing and helped to reduce the transactions costs of trades in new technologies, in both national and international markets. Although the nature of patent institutions has important implications for structuring incentives for innovation, recent debates tend to be based on anecdotal evidence, rather than reliable empirical analysis.

A parallel development to the anti-patent movement is that a growing number of economists have been persuaded by theoretical models of prizes and subsidies, and they lobby for these nonmarket-oriented policies as complements or superior alternatives to intellectual property rights. Increasingly, the US Government has begun to fund prizes as a means of generating new ideas and products. Little attention has been paid to the potential challenges and consequences that prizes and similar administered nonmarket-oriented awards have historically encountered. These include difficulties in assessing the value of the invention (owing to asymmetric information, delays in the determination of value and the difficulty of aggregating benefits which might accrue from sequential innovations), corruption or bias in awards, and a potential misallocation of resources.

The most extensive empirical studies of the economic history of technological change have relied on patents to gauge progress in the "useful Arts". The evidence on the nineteenth-century patent system in the United States suggested that the specific design of this institution played a substantial role in influencing the rate and direction of inventive activity. Moreover, the ability to protect their ideas through strongly-enforced property rights was successful in inducing relatively ordinary individuals to reorient their efforts to exploiting market opportunities. Still, it is quite possible that such findings owe to the generally more open economic and social institutions of the United States rather than to the nature of patent institutions per se. Similarly, Europeans were more apt to use prizes as policy instruments, but their inefficiencies could have derived from the general elitism in institutions of the time. At the same time, current policy proposals for national technology institutions cannot be fairly evaluated in light of the limited amount of actual evidence regarding the functioning and consequences of prize systems.

In a prescient 1862 publication, Samuel Sidney asked the question "Whether ... manufacturing inventions [can be] stimulated, by invitations to compete for substantial or honorary awards?" He rejected the purely theoretical approach others had adopted and spent 10 years investigating the data on prizes at exhibitions as well as distributions by various societies for encouraging industry. His conclusions were decidedly in the negative; instead, improvements in market demand and competition were the most likely to induce inventive activity, and consumers were more effective judges of success in the marketplace.

Administrative attempts to replicate the role of the market confronted significant obstacles. Judges had to combine technical competence and industry-specific knowledge with impartiality; decision-making

⁷ Joseph Stiglitz, an economist who was awarded the Nobel Prize for his work in other areas, proclaims: "[T]he alternative of awarding prizes would be more efficient and more equitable. It would provide strong incentives for research but without the inefficiencies associated with monopolisation. This is not a new idea—in the UK for instance, the Royal Society of Arts has long advocated the use of prizes. But it is, perhaps, an idea whose time has come." "Give Prizes Not Patents" New Scientist, September 16, 2006, p.21.

⁸ The America COMPETES Reauthorization Act of 2010 granted all federal agencies the authority to administer prize competitions to increase innovation, claiming that prizes "have a good track record of spurring innovation". Office of Science and Technology Policy, "Implementation of Federal Prize Authority: Progress Report", available at http://www.whitehouse.gov/sites/default/files/microsites/ostp/competes_report_on_prizes_final.pdf Accessed October 1, 2013].

⁹B. Zorina Khan, *The Democratization of Invention: Patents and Copyrights in American Economic Development* (Cambridge: Cambridge University Press, 2005).

¹⁰ Samuel Sidney, "On the Effect of Prizes on Manufacturers" (1862) 10 J. Soc'y Arts 374. Sidney was trained as a lawyer, and was also an Assistant Commissioner of the Crystal Palace Exhibition in London in 1851.

among panels was complicated by differences in standards, interpretation and sometimes language barriers. The necessary tests of the items displayed were complicated by a lack of comparability, poor information on marketability and price, and variations in taste. The most novel items were associated with the greatest risk, and therefore less likely to be selected. Such difficulties tended to lead to haphazard decisions, or were often overcome by simply making the award to the person or firm with the most established reputation.

As for the inventions that prevailed, the prize system merely encouraged "a long list of machines which, for practical purposes, are no better than toys". 11 The market value of useful inventions was far greater than any prize that could be offered, whether by private or state initiative. Even specialised institutions such as the Royal Agricultural Society and the prestigious Royal Society of Arts had failed to develop truly significant inventions.¹² However, prizes were useful to the winners because they were valuable advertisements. The competitor for the prize had an incentive to over-spend on the item in an attempt to win, regardless of whether such investments were practicable in the marketplace. As a result, winners tended to be among the wealthiest of the competitors:

"The theory that prizes encourage humble merit is only a theory, for experience shows that in a series of yearly contests wealth wins, as it must when hundreds of pounds must be expended to win ten". 13

Empirical analysis of patents and prizes

In order to address such issues, I have conducted empirical analyses of large panel datasets of patents and prizes that were awarded for technological innovations in the United States, England and France between 1750–1930. The data for prizes in England were drawn from the archives of the Royal Society of Arts, whereas the French data include awards made by the Society for the Encouragement of National Industry and the National Conservatory of Arts and Trades. These original datasets are sufficiently extensive in subject-matter and geographic scope to allow us to determine the specific impact of these institutions on individual inventors and innovations, as well as on the nature of technological change more broadly.

American economic progress was directly influenced by favourable institutions, most notably its legal and patent systems. The United States devised an intellectual property system which soon succeeded in its aim to "promote the Progress of Science and useful Arts". Other countries had already introduced patent and copyright systems, but the United States was unique in its emphasis on markets and the pursuit of benefits to the many rather than those of a narrow elite. Unlike those in France, Britain and elsewhere in Europe, the US patent rules and standards encouraged widespread participation. When transportation networks improved market access, the prospect of profit opportunities induced a diverse array of relatively ordinary individuals to participate in inventive activity, in a process of "democratisation". In the United States inventors of so-called great inventions and incremental inventions obtained property rights to their discoveries. Extensive markets in patent rights, both assignments and licenses, developed from the first decades of the nineteenth century, and soon comprised national and international networks. This response in patenting to the remarkable expansion of markets that accompanied industrialisation helped to propel the United States to the forefront of the world economy by the end of the nineteenth century. In direct contrast to the patent system, the American copyright regime was one of the weakest in the world, and the United States was reviled throughout the nineteenth century as a flagrant copyright pirate. I argue that such a distinction between patents and copyrights was economically efficient and accorded well with the objectives of a market-oriented democracy. Since the detailed results regarding such comparative intellectual

¹¹ Sidney, "On the Effect of Prizes on Manufacturers" (1862) 10 J. Soc'y Arts 374, 376.

¹² Sidney cited Balzac, who declared that "artists raised under this hot-house process are forgotten as soon as crowned". New York Trust Co 256 U.S. 345, 375 (1921).

13 Sidney, "On the Effect of Prizes on Manufacturers" (1862) 10 J. Soc'y Arts 374, 376.

property institutions are available in several other publications, here I will highlight the more recent research findings on prize systems.¹⁴

Prizes in Britain

The proponents of prizes tend to cite the award that was offered for a means of gauging longitude at sea; although it is ironic that the experience of the humble artisan John Harrison with the Board of Longitude would better serve as a caution against administered incentive systems. ¹⁵ This is especially true in the case of inventors who were not politically astute or those who were relatively uneducated and more likely to have been drawn from the "lower classes". Insights into the relationship between incentives and innovation can be gleaned from a large sample of British inventors who were responsible for the great inventions of the period before the Second World War. ¹⁶ These inventors were typically drawn from elite or professional backgrounds, and tended to be socially well-connected, even though productivity at invention was unrelated to such factors.

The sample includes information on all of the prizes and other forms of official recognition the British great inventors received, and close to 40 per cent of these inventors were recipients of awards. Statistical analysis of the probability that an inventor would receive a prize shows that patentees were more likely to get prizes, so the incremental incentive effects of an additional prize were likely quite low. Many observers attributed awards, medals and prestigious appointments to nepotism, bias and even corruption. The grants of prizes to British great inventors seem to have owed to personal connections rather than to factors that might have enhanced the technical value of the discovery. The most significant variable affecting the award of a prize was an elite or Oxbridge education, which doubled the likelihood of such winning recognition. At the same time, specialised education or employment in science or technology, which might be expected to increase inventiveness, had little effect on the probability of getting a prize. The growing disillusionment in Europe with prizes as an incentive mechanism for generating innovation was evident when the Royal Society of Arts abandoned the practice in 1900 because of its acknowledged lack of social value.¹⁷

Industrial prizes in the United States

In the United States prizes were not as prevalent as in Europe and, indeed, the most prominent of these honorific awards were introduced in the United States at the instigation of foreigners. However, industrial promoters sponsored private industrial fairs in most large cities in the United States, on a roughly annual basis, and these can be used to construct a panel dataset of innovations that were submitted for prizes.

¹⁴ E.g. Khan, The Democratization of Invention (2005); B. Zorina Khan, "Looking Backward" in Douglas Irwin and Richard Sylla (eds), Founding Choices: American Economic Policy in the 1790s (Chicago: University of Chicago Press, 2010); B. Zorina Khan, "Selling Ideas: An International Perspective on Patenting and Markets for Technology, 1790–1930" (2013) 87 Bus. Hist. Rev. 39.

15 For more details, see Dava Sobel, Longitude: The True Story of a Lone Genius Who Solved the Greatest Scientific Problem of His Time (New York: Penguin Books, 1995). The Longitude Act awarded as much as £20,000 for a "Practical and Useful" means of determining longitude at sea. Candidacy for the award was judged by a Board of Longitude, members of whom were drawn from the scientific, military and public elite, some of whom were themselves competing for the prize. These individuals were scornful of Harrison as a common uneducated artisan and hindered his attempts to collect the prize, which was never awarded. Instead, as Harrison was close to death, the King intervened and provided payment for achieving the task that had eluded the finest theoretical scientific minds up to that date.

¹⁶ B. Zorina Khan, "Premium Inventions: Patents and Prizes as Incentive Mechanisms in Britain and the United States, 1750–1930" in Dora L. Costa and Naomi R. Lamoreaux (eds), Understanding Long-Run Economic Growth: Geography, Institutions, and the Knowledge Economy (Chicago: University of Chicago Press, 2011). The British sample of over 400 inventors and several thousand inventions was compiled from a broader series of biographical dictionaries, including the 2004 Oxford Dictionary of National Biography and the Biographical Dictionary of the History of Technology, among others.

¹⁷ For an account of a similar development in France, see Maurice Crosland and Antonio Galvez, "The Emergence of Research Grants within the Prize System of the French Academy of Sciences, 1795–1914" (1989) 19 Soc. Stud. Sci. 71.

¹⁸ For instance, the John Scott Medal and premium was funded by a legacy from the London pharmacist, who bequeathed \$4,000 in 1815 for "premiums to ingenious men or women who make useful inventions". Awards from foreign governments and institutions were liberally bestowed on famous American patentees such as Thomas Edison, Hiram Maxim and Samuel Colt.

The sample of US prizes comprises some 20,000 innovations from major cities, including Boston, New York, Philadelphia, San Francisco, Cincinnati, St Louis, Atlanta and New Orleans. These observations were matched with the patent records to identify the inventions that were patented. The information has further been linked with the manuscript population censuses, yielding insights into the backgrounds of individual inventors, such as occupations, age, wealth and geographical mobility.

Observers of the US patent system in the nineteenth century noted that almost everything that could be patented was patented, and the data on the propensity to patent support these claims. At the same time, it is also true that a considerable and diverse amount of creativity at invention was indeed occurring outside the formal patent system, and we can speculate why such items were not patented. First, some might argue that such inventors actively rejected the patent option and instead decided to appropriate returns through other means such as trade secrecy. However, secrecy seems somewhat implausible as a general explanation, for it is unlikely that secrecy would be promoted by participating in a public exhibition. Secondly, inventors may have compared the costs of getting and enforcing a patent to the benefits of patent protection and decided that the net present value of patenting was negative. If so, this suggests that many of these unpatented inventions may have been of minimal economic value. Thirdly, a straightforward explanation is that many exhibits were simply not eligible to be considered for a patent, either because the degree of novelty or improvement was minimal or because the innovation fell outside the subject-matter that could be patented. It is not feasible to determine the amount of novel inventive capital vested in unpatented exhibits, but we can categorise the patentability of each item in terms of subject-matter. Application of this minimal filter of subject-matter suggests that close to half, or a total of 47 per cent of the sample, was patentable. A closer assessment of the unpatentable items reveals that a large fraction comprised final or consumer goods, a finding that supports the conventional view that patents may be a better measure of inputs than of output. Patentability statistics thus indicate that much of the creativity that we observe in exhibitions was quite different from the creativity that resulted in patents or in enhanced capacity for economic growth.

The stated objective of industrial fairs was to advance the standing of innovative workers and artisans. Nevertheless, participants in the fairs were drawn from more prominent occupations than the general population of patentees.¹⁹

Indeed, exhibitors were less likely to be artisans and ordinary labourers than were patentees, and the representation of artisans at the exhibitions also declined over time. However, occupational class does not directly translate into economic or social status or influence. For this, we turn to the records on wealth-holding in the federal population censuses, which allows us to more directly assess the economic status of exhibitors relative to patentees in general. The data reveal that the participants in the exhibitions were substantially wealthier than the general population. For instance, in 1860 the sample from the industrial fairs owned average personal property that was almost twice as extensive as that of patentees in general, and more than double their average real estate holdings.

Patents are granted because they satisfy specific rules and standards that are outlined in the laws. A key question is what determines whether an exhibit receives a prize or not. Statistical analysis indicates that almost all of the variation in the silver or gold awards also remains unexplained, implying that these grants were based on fairly random rationales. The one variable that does in part influence outcomes is financial status: exhibitors with greater personal wealth were more likely to win gold and silver medals. However, the mechanism through which wealthier exhibitors gained an edge over their competition is unclear. This finding was not due to their superior entries, but may have been associated with greater expenditures on their presentation at the fairs, or their name recognition, or perhaps to less obvious connections with the

¹⁹ B. Zorina Khan, "Promoting the Useful Arts: An Empirical Estimation of Technological Innovation Outside the Patent System, 1790–1880", working paper, 2013.

award juries. In general, the results support the notion that the majority of medals reflected factors other than inventiveness, productivity or technological innovation.

The judges for these technology classes stated their objective was to reward novelty and inventive ingenuity. In practice, they bestowed medals for an array of other reasons besides inventiveness, including overcoming adversity (such as age or physical handicaps), cheapness of the item, neatness and aesthetic factors. In addition, a mercantilist orientation was evident when awards were given to the producers of American goods that rivalled innovations originally created in foreign countries. The decentralisation of judging committees, the lack of transparency and private nature of their decision making process, and the absence of appeal from their rulings, all encouraged idiosyncratic and inconsistent decisions. It is therefore not surprising that observers continually criticised the arbitrary way in which the awards were given out, at domestic and international fairs alike. A lack of systematic methods of allocating awards was likely to reduce the incentives for inventors who realised that prizes in many instances were uncorrelated with inventive merit.

Prizes tended to be awarded to readily observable final goods that enhanced taste and consumption possibilities, rather than leading to the promotion of inventive activity. This raises the possibility that prize exhibits did not reflect the sort of technological creativity that could expand productive frontiers through spillovers. Part of my research has been directed towards a comparative assessment of the effects of different technological institutions, and how they might influence spillovers from inventive activity. The usual justification for offering patent protection proposes a bargain or a social contract by means of which inventors obtain a temporary monopoly in their discoveries, in return for disclosing their ideas in sufficient detail that the invention can be recreated by someone who is skilled in the arts. By contrast, alternative methods of appropriation include the use of lead time, private methods of exclusion, and trade secrecy. Although these mechanisms might benefit the owners of new technologies, at the same time they could impose a social cost if the information is not available to others despite its low incremental cost. Thus, it is not clear whether unpatented ideas would tend to generate knowledge spillovers, or to inhibit them.

Technological spillovers and patents and prizes

Patents and prize-winning innovations differed in many regards, including in terms of geography and location. If prizes were less systematic and had a lower likelihood of being associated with location and geography, then such awards would fail the necessary precondition for the prevalence of geographical and technological spillovers. Spatial autocorrelation analysis of patents and prizes revealed that patents were significantly influenced by the inventive activity in adjacent counties. This is consistent with the bargain or contract view of patents, which proposes that the limited grant of a monopoly right to inventors benefits society, because in exchange the public gains information about the discovery that increases social welfare. The patent grant requires a specification that is sufficiently detailed to enable a person who is skilled in the arts to recreate the patented invention. From the earliest years of the patent system, policy makers engaged in discussions about how to ensure that information was available to the broader public. Patent legislation included measures to publish information about patents that were granted in annual reports that were widely disseminated, and expired patents were published in newspapers. The US Patent Office maintained local despositories and offices throughout the country. Thus, even if the patentee had acquired a monopoly for (at that time) 14–17 years, access to the information about the discovery likely facilitated inventions that worked around the initial patent, or led to ideas for follow-on inventions.

²⁰B. Zorina Khan, "Of Time and Space: A Spatial Analysis of Knowledge Spillovers among Patented and Unpatented Innovations", working paper, 2013. Spatial autocorrelation exists when the values of a variable comprise a function of its location and spatial characteristics that are defined in terms of a specific measure of distance. If so, the usual method of merely adding fixed effects for regions or states leads to unobserved heterogeneity that will likely lead to biased results.

By way of contrast, the patterns of prizes were inconsistent with the presence of technological spillovers. Thus, trade secrecy or even open access to ideas did not generate as much diffusion of information as in the case of inventions that were protected by patent grants. Exhibits sponsored by the Franklin Institute or the Cincinnati Mechanics' Association might have been open to the public, and some inventors might have been able to copy from the displays, but there was likely a selection effect that influenced the owners of inventions that were readily duplicable to avoid displaying them at fairs. Moreover, even if inventors had access to knowledge about innovations from attending the fairs, if they did not physically attend the events, there were few or no mechanisms that might have led to the spread of information. This was of course a function of the decentralised nature of the prize system in the United States, but even in European countries that offered centralised institutions such as the Royal Society of Arts, access to unpatented inventions and knowledge about them was quite limited.

Patents and prizes, then and now

The popularity of such prizes faltered towards the end of the nineteenth century, and the Royal Society of Arts itself acknowledged that the system of inducement prizes was flawed. Exhibitions undoubtedly facilitated efforts to advertise and commercialise innovations. Many manufacturers accumulated medals at numerous fairs and highlighted their awards in magazines, journals and other advertisements. Medals may have proven useful in competitive markets as a means of product differentiation, and as a way of signalling higher quality or brand-name capital. Some observers go further and contend that prize systems performed as effective incentives to stimulate new inventions. However, whether the prizes that such private institutions proposed were indeed effective in encouraging creativity and inventive activity is difficult to determine. Many of the displayed items were entered into competition at multiple exhibitions, both domestic and international, so the effect of any one event is debatable. More important, procedures through which the prizes were determined were idiosyncratic and difficult to predict. The random nature of judging is a theme that recurs in numerous contexts both within and beyond the expositions. As stated before, competitors who were financially better off had an advantage in gaining the attention of the judges, regardless of the technological merits of their contributions. Decentralised judging encouraged a lack of uniformity in standards and also led to the award of premiums that did not necessarily reflect the same degree of inventive capital across technology classes. The lack of systematic allocation implies that, if potential inventors responded rationally to net expected benefits, then prize systems were arguably less than successful in achieving the Constitution's mandate to "promote the Progress of Science and useful Arts".

Today this history is forgotten, and once again there is a resurgence of interest in innovation prizes, in both the United States and other developed countries. Many of those who support the use of prize-granting institutions refer to casual anecdotes from the historical record to justify their positions. Such advocates of prizes are also promoting their adoption in developing societies, based on the belief that they will generate innovations and entrepreneurship. For instance, the Innovation Prize for Africa offers entrepreneurs cash prizes for such ideas as the use of fly larvae to produce animal feed.²¹ In Israel, a "brain prize" will be awarded to anyone who "can demonstrate an extraordinary breakthrough in brain technology with

²¹ See "Innovation Prize for Africa (IPA)", available at http://witug.org/tag/innovation-prize-for-africa/ [Accessed October 1, 2013]. Other suggestions for prizes in African agriculture are discussed in William A. Masters and Benoit Delbecq, "Accelerating Innovation with Prize Rewards: History and Typology of Technology Prizes and a New Contest Design for Innovation in African Agriculture" (2008) International Food Policy Research Institute, Discussion Paper No. 835.

global implications". 22 Numerous proposals have been made to reward other medical innovations in vaccines, therapeutics and medicines that are crucial for achieving development objectives.²³

At the same time, the analysis of the historical record suggests a number of difficulties were associated with administered prize systems, such as the potential for bias or corruption, unpredictable methods of allocation and outcomes, as well as other deficiencies attendant on a nonmarket-orientation. Even if a prize system were successful in generating new inventions, it would be unlikely to be effective in managing the unpredictable and often lengthy processes required to transform an idea into a commercially viable product. These issues are all the more likely to be problematic in developing countries, where complementary institutions and governance mechanisms are typically flawed. Such observations do not imply that inducement or reward prizes are never effective generating technological innovations, for they can prove to be useful in certain specific circumstances. For instance, prizes may be necessary to substitute for private initiatives in the event of market failure, such as in the area of tropical vaccines. They may further serve to elicit the attainment of unique and well-specified targets, as long as the difficulties of decision-making and governance issues are explicitly recognised and addressed. The point is that policies are unlikely to be effective unless all the costs and benefits of alternative options are fully taken into account.

Conclusion

In summary, this project examined the impact of alternative technological institutions through a systematic comparison of the patterns in patenting and those of innovation prizes during the "long nineteenth century". The overall conclusions that can be drawn from the empirical analysis are that intellectual property institutions were successful in the United States largely because they ensured open access to creative individuals, and because they were associated with decentralised decision-making, extensive markets for technology, and strong enforcement of such rights. However, as observers noted in the nineteenth century, industrial prizes in large part faltered because of their lack of market-orientation. Even the democratic nature of economic institutions in the United States could not overcome these deficiencies in administered prize systems. Given the potential for corruption and the absence of efficient institutions in many of today's developing countries, the introduction of industrial prizes seems all the more likely to be problematic. In any event, significantly more research needs to be completed before we can conclude that such awards should be re-introduced in the twenty-first century as a means of promoting entrepreneurship and technological progress.

²² Israel Brain Technologies, "B.R.A.I.N Prize", available at http://israelbrain.org/b-r-a-i-n-prize/ [Accessed October 1, 2013].

²³ Paul Wilson and Amrita Palriwala, "Prizes for Global Health Technologies", Results for Development Institute, Washington DC, 2011; Robert Hecht, Paul Wilson, and Amrita Palriwala, "Improving Health R&D Financing for Developing Countries: A Menu of Innovative Policy Options" (2009) 28 Health Aff. 974.

Collective Invention and Patent Law Individualism: Origins and Functions of the Inventor's Right of Attribution

Graham Dutfield

Professor of International Governance, School of Law, University of Leeds

Attribution; Employees' inventions; Fairness; Inventors; Moral rights; Patent applications

Introduction

Why do inventors continue to be named in patents when most are owned by firms rather than individuals? And what role, if any, does inventor-naming play in the management of intellectual property rights? This article seeks answers.

Why should the persistence of the named inventors be worthy of attention? Because in certain respects, it appears quite anomalous. The slow demise of the true and first inventor has been noted for decades, in some cases approvingly. As early as 1941, Charles Kettering of General Motors commented that "a one-man invention isn't very possible these days" and opined that it would be unfair to single out individuals for collective attainments. However, even before then the trend was becoming evident. The downgrading of the inventor from autonomous genius to semi-anonymous team player in the employ of others, and a cog in a much bigger innovation "wheel", is evident, for example, in the 1877 German Patent Law. This legislation heralded the first-to-file principle, which is now the global norm. By favouring large businesses with their own scientific workers, this was partly strategic. But it was justified by the argument that modern inventions were collectively achieved and depended primarily on capital investment in laboratories, equipment and skilled employees.²

The second industrial revolution of the late nineteenth century, pioneered largely by Germany and the United States, is associated with several phenomena favouring more collective—and potentially anonymous—conceptions of the inventive act and a diminished autonomy for inventors. These are: (i) the emergence of corporate in-house research and development; (ii) the professionalisation of science manifested in the gradual replacement of gentlemen scientists and individual inventors by well-trained employee scientists; and (iii) the industrial application of the scientific knowledge coming out of laboratories manned by this new scientific-worker class. "Heroes of invention" never did disappear from the public gaze or from the journalistic imagination.³ But team invention became increasingly the norm during the

^{*}This is an edited and revised version of the author's "Collective Invention and Patent Law Individualism, 1877–2012; Or, The Curious Persistence of Inventor's Moral Right" in Stathis Arapostathis and Graham Dutfield (eds), *Knowledge Management and Intellectual Property: Concepts, Actors & Practices* (Cheltenham: Edward Elgar, 2013), pp.109–126.

¹ Quoted in Larry Owens, "Patents, the 'Frontiers' of American Invention, and the Monopoly Committee of 1939: Anatomy of a Discourse" (1991) 32 Tech. & Culture 1076. See also David F. Noble, *America by Design: Science, Technology, and the Rise of Corporate Capitalism* (New York: Alfred A. Knopf, 1977). For a more recent history-based discussion, see Mark A. Lemley, "The Myth of the Sole Inventor" (2012) 110 Mich. L. Rev. 709; Michael S. Carolan, "Constructing the 'Pure' Inventor: Individual, Collective, and Corporate Authorship within Patent Law" (2008) 27 New Genetics & Soc'y 301.

² Kees Gispen, New Profession, Old Order: Engineers and German Society, 1815–1914 (Cambridge: Cambridge University Press, 1989), p.265. In 1936, Nazi-ruled Germany rejected the long-established "applicant principle" (Anmelderprinzip) in favour of the "inventor principle" (Ersinderprinzip). See G. Klauer, "The New German Patent Law" (1936) 18 J. Patent Off. Soc'y 481.

³ Christine MacLeod, *Heroes of Invention: Technology, Liberalism and British National Identity 1750–1914* (Cambridge: Cambridge University Press, 2007). The "great inventors" of the past are still revered. *Science* magazine reported "the 2012 Lemelson-MIT Invention Index [which] surveyed

twentieth century, and a legally well-recognised one at that. This trend has endured notwithstanding the significant role that entrepreneur-inventors continue to play in the modern economy.

Patent law and management came to reflect these developments. Increasingly, patents were owned not by the inventors but the companies employing them. Accordingly, patents were ceasing to be personal property, at least in any general sense. Instead, they were changing into a class of business asset used by firms for two ends: (i) to actively and strategically control information and industrial processes and products embodying this information; and (ii) to negotiate access to the valuable information, processes and products of others.

Herein lies a puzzle: with a growing acceptance of inventing's collective nature, the role of business and other establishments in providing the inventive environment, and the corporate ownership of patents, one might have expected the names of inventors to disappear from patent documents, leaving only the names of the firms or other institutions that paid and stocked the labs, hired the scientists, applied for the patents and took ownership of them once granted. And yet, inventors did not disappear. Despite this transformation from personal property to business asset, we still name each member of the small group of individuals who are most closely associated with the invention described. Indeed, the individual (or joint) inventor today has just as prominent a place on patent documents as in the past.

This article associates this present-day fact, inter alia, with efforts by organised scientific labour and its supporters in the two decades after the First World War to achieve a fair recognition of their personal contributions to inventing and discovering, and to consequent commercial gains accruing to others. These were made under the auspices of the League of Nations and the Paris Union, whose Convention for the Protection of Industrial Property provides norms in the area of patents, trademarks and other forms of industrial property.

However, to understand why inventors continue to be named in patents, it is insufficient merely to refer back to activities that took place eight decades ago as if those provide a complete explanation. Does, or did, inventor-naming have a function? Or are we protecting a moral right supposedly independent of any direct commercial purpose, akin to copyright's moral right of attribution as provided by the Berne Convention for the Protection of Literary and Artistic Works (Berne Convention)? Is it a quid pro quo for assignment of the patent to the employer? Is it a way to enhance legal certainty by enabling courts to more definitively pinpoint the origin of the invention in time and space? The latter is likely to be a factor, especially with a first to invent system as prevailed in the United States until very recently. Or is this merely an instance of *regulatory inertia*: an obsolete requirement persisting because it offends nobody sufficiently for them to seek to abolish it. If it does serve some purpose, what implications, if any, does this have for knowledge management? Accordingly, this article speculates whether the naming of inventors has some additional advantages in terms of patent management that might explain the persistence and universal adoption of the practice.

"A one-man invention isn't very possible these days"

Patents seem nowadays to function in the modern economy primarily as rather impersonal business assets; like stocks and shares they are a form of intangible capital and are frequently bought, sold and licensed. Despite this, the patent system cannot quite let go of the personal: every patentable invention is still deemed to be attributable to one or a few human beings. The general population appears to share the sentiments. The difference between public perception and legal reality, of course, is that to the public the inventor works alone. In actuality, the inventor is probably not working alone and is likely to be an employee having to assign her or his invention.

Americans aged 16 to 252". When asked "who they thought was the greatest innovator of all time, 54% of the 1000 respondents named the inventor and holder of more than 1000 U.S. patents—taking a bite out of second-place holder and Apple Inc. co-founder Steve Jobs, who weighed in at 24%". That holder of over 1000 patents was Thomas Edison. *Science*, February 3, 2012, p.508.

Why do we continue to name inventors in patents? And is it purely a question of morality, or are there some underlying strategic advantages in doing so? These questions are more puzzling than many might think. Since the second industrial revolution beginning in the late nineteenth century, which was characterised among other things by the rise of the research-based corporation and a dramatic increase in patenting, the demise of the inventor has been predicted again and again. Kettering was quoted above. And as mentioned before, Germany, where the first in house corporate research laboratories were established and inventing became more manifestly team-based than ever before, went so far as to allow companies to file patents without naming inventors at all (until 1936).

Despite this, the inventors' names stubbornly remain on the patents. Six decades after Kettering made that claim, in 2001 the US Court of Appeals for the Federal Circuit still felt moved to pronounce:

"An expectation of ownership of a patent is not a prerequisite for a putative inventor to possess standing to sue to correct inventorship under §256 [Correction of named inventor]."4

Accordingly, true inventors with a legitimate interest in an invention have recourse in cases of deliberate exclusion of their name even when they have no ownership rights to the patent. This is not tantamount to admission of a broad moral right of attribution. But we need to consider the court's decision in light of the long-standing requirement in s.115 of the Patent Act that "[t]he applicant shall make oath that he believes himself to be the original and first inventor". It is true that the Leahy-Smith America Invents Act has changed the language slightly to accommodate the United States' new adherence to the first-to-file principle, the most important difference in the present context being the deletion of the words "and first" after "original". Nonetheless, that the United States held out for so long against first-to-file testifies to the high importance placed for so long on ensuring that nobody but the true inventor could file a patent.⁵ According to the court:

"Chou argues that a reputational interest alone is enough to satisfy the requirements ... That assertion is not implausible. After all, being considered an inventor of important subject matter is a mark of success in one's field, comparable to being an author of an important scientific paper. Pecuniary consequences may well flow from being designated as an inventor. However, we need not decide that issue because Chou has alleged a concrete financial interest in the patent, albeit an interest less than ownership."

The UK Patents Act is quite explicit in its implementation of art. 4ter of the Paris Convention, which provides for the inventor's right of attribution (see below). There is no provision for the right to be waived, as there is, oddly enough, in the country's copyright law for authors⁶:

"The inventor or joint inventors of an invention shall have a right to be mentioned as such in any patent granted for the invention and shall also have a right to be so mentioned if possible in any published application for a patent for the invention and, if not so mentioned, a right to be so mentioned in accordance with rules in a prescribed document".

While many, probably most, scholars take an instrumentalist position on why we have patent laws, their economic role in society and how they should function, especially in the common law world, Mossoff's historical research on the US patent system suggests a more inventor-centric orientation:

⁴ Chou v University of Chicago 254 F.3d 1347 (Fed Cir. 2001).

⁵ Chou 254 F.3d 1347.

⁶ Copyright, Designs and Patents Act 1988 s.87 (as amended).

⁷ Patents Act s.13(1).

"[E]arly American patent law [developed] under the meaningful guidance of the social contract doctrine and the labor theory of property of natural rights philosophy."8

Further, "the ideas of John Locke were the fountainhead behind the evolution of patents for inventions". In consequence, he argues:

"[A]n inventor's moral right to the property in one's invention should play a role in the ongoing debate concerning the protections afforded by the patent laws". 10

Be that as it may, Lockean thinking about patents had little if anything to do with moral rights of inventors becoming a principle of international law. So what was behind it? The next section traces the emergence of the norm of team invention in order to provide the context. It then directly addresses this specific query.

The emergence of "team invention"

From 1877 to 1952, patent law, first in Germany and eventually in the United States, changed specifically to accommodate the common view among research-intensive firms that inventing is inherently, or at least largely, collective, relatively impersonal and incremental, rather than individual, personal and ingenious. It is not surprising that Germany did this. From the 1860s, German chemical firms like Bayer, BASF and Hoechst (as it later became known) emerged as the world's first large-scale scientific research-based corporations. In 1877, the German Patent Act was passed. It was a new law designed from scratch and was drawn up in close collaboration with industrial chemists and engineers and largely reflected their interests. The Act referred to applicants with no mention of inventors. Company scientists working for the large firms were well remunerated by the standards of the day," but they had no right to be named as inventors in patent documents. In 1891, following the Congo Red case at the Supreme Court, German patent law afforded as much recognition to the "useful", "valuable" and "unexpected" but not particularly inventive as to more manifestly ingenious inventions. In the process, the Court crafted the "new technical effect" doctrine. 12 The effect was to further weaken the old-fashioned idea that inventing was the work of the individual genius, and it encouraged the mass filing of patents for inventions of modest inventiveness and small difference with what already existed.

The United States was the second country with companies moving towards in-house R&D-based industrial development. This was heralded by the establishment of Thomas Edison's Menlo Park facility in 1876. However, the story is somewhat different from Germany. The inherently individualistic US Constitution is an obvious factor as of course is the fact that the United States remained a first-to-invent jurisdiction up to 2011, long after the principle had been abandoned elsewhere.¹³ The famous art.1, s.8, clause 8 empowers Congress:

"To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

This was a potential threat to the emergent scientific research-based corporations, though evidence suggests that it did little, if any, harm to the corporate bottom line. Indeed, it took quite a long time, by the end of

Adam Mossoff, "Who Cares What Thomas Jefferson Thought about Patents? Reevaluating the Patent 'Privilege' in Historical Context' (2007) 92 Cornell L. Rev. 953, 1012.

Adam Mossoff, "Rethinking the Development of Patents: An Intellectual History, 1550–1800" (2001) 52 Hastings L.J. 1255.
Mossoff, "Rethinking the Development of Patents" (2001) 52 Hastings L.J. 1255.

¹¹ Johann Peter Murmann, Knowledge and Competitive Advantage: The Coevolution of Firms, Technology and National Institutions (New York: Cambridge University Press, 2003).

¹² Henk van den Belt and Arie Rip, "The Nelson-Winter-Dosi Model and Synthetic Dye Chemistry" in Wiebe E. Bijker, Thomas P. Hughes and Trevor Pinch (eds), The Social Construction of Technological Systems (Cambridge, Mass.: MIT Press, 1989), p.154.

the 1920s, for formal corporate control to be finally achieved through contract. 14 But already the courts had become amenable:

"It was in the twentieth century, when judges imagined firms as originators, or at least as essential incubators, of the *idea*, that the position of the inventive employee changed. That change in thinking required a significant re-imaging of the status and nature of inventors", 15

and was in the nature of a shift in the perception of such people as autonomous exemplars of free labour, to subordinate workers forming part of a large innovation system. But already, from the late nineteenth century we start to see patent individualism being balanced, as it is today, by the freedom of companies to require employees to assign their inventions to those paying their wages. This was assisted by a view that the law, as in Britain, generally required from successful patent applications no great feats of personal inspiration. Thus, the Supreme Court in Hotchkiss v Greenwood, which crafted the criterion of non-obviousness, required an invention to be "something more akin in terms of ingenuity than the work of a skilled mechanic", but did not expect any sparks of extraordinary brilliance. ¹⁶ The decision in *United* States v Burns made it lawful for employees to be required to assign their patents. 17

However, US courts were unable for a long time to shake off the idea of the individual inventive genius, even if the Patent Office could. The Supreme Court was not immune from this tendency. In 1941, in Cuno Engineering v Automatic Devices, America's highest court formulated the "flash of creative genius test" to the consternation of many in industry. 18 Things were to change drastically in 1952, though, when the United States overhauled its patent legislation and consequently this became no longer good law; indeed, that was intended. The non-obviousness requirement was incorporated into the statute in the form of the new s.103(a).

The provision was subsequently interpreted by both the Patent Office and courts to mean that, as in the above-mentioned Congo Red case, no great inspiration was necessary in the means employed to achieve the inventive result, and this obviously suited industry. ¹⁹ In the United States, as in the United Kingdom, the person having ordinary skill in the art, who is the nominal determiner of non-obviousness, is still presumed a rather dull unimaginative fellow, a type in Britain once referred to by a judge as "a nerd" albeit "not a complete android". 20 Intriguingly, and probably not coincidentally, by this time therapeutic revolutions in such areas as antibiotics and hormones had taken off and there was undoubtedly some concern that discoveries arising from sometimes quite routine screening and isolation processes would be found unpatentable on obviousness grounds.²¹ The new law helped ensure that industry had nothing to worry about in this regard.

The genesis of inventor's moral rights in international law

As an international principle of law, the inventor's moral right of attribution came into being in 1934 by virtue of the insertion into the Paris Convention of art.4ter, which succinctly states that "[t]he inventor shall have the right to be mentioned as such in the patent".

¹⁴ Catherine Fisk, Working Knowledge: Employee Invention and the Rise of Corporate Intellectual Property, 1800–1930 (Chapel Hill: University of North Carolina Press, 2009).

¹⁵ Fisk, Working Knowledge (2009), p.249.

¹⁶ Hotchkiss v Greenwood 52 U.S. (11 How.) 248, 248 (1850).

¹⁷ United States v Burns 79 U.S. (12 Wall.) 246, 246 (1870). For discussion see William Kingston, Beyond Intellectual Property: Matching Information Protection to Innovation (Cheltenham: Edward Elgar, 2010), p.51.

Cuno Engineering Corp v Automatic Devices Corp 314 U.S. 84 (1941).

¹⁹ Kingston, Beyond Intellectual Property (2010), p.54; David Philip Miller, "Intellectual Property and Narratives of Discovery/Invention: The League of Nations' Draft Convention on 'Scientific Property' and its Fate" (2008) 46 Hist. Sci. 299, 319.

Rockwater Ltd v Technip France SA [2004] EWCA Civ 381 (Jacob L.J.). See also Technograph v Mills & Rockley [1972] R.P.C. 346, 355. 21 Graham Dutfield, Intellectual Property Rights and the Life Science Industries: Past, Present and Future (Singapore: World Scientific, 2009); Kingston, Beyond Intellectual Property (2010), p.54.

The proclamation of this right should not be seen in isolation from other efforts during the 1920s and 1930s, and earlier, to secure the interest of scientific labour. Perhaps the most important of these was the attempt to develop an international convention on scientific property under the auspices of the League of Nations. Aiming to further both the moral and material interests of scientists, this effort can be seen largely as a response to the First World War's devastating impacts on this relatively new professional class, particularly on the European continent. However, the idea of protecting scientific property goes even further back, being discussed during the 1880s and 1890s at meetings of the *Association Litteraire et Artistique Internationale* (International Literary and Artistic Association (ALAI)).²²ALAI was founded by Victor Hugo to promote the interests of authors and artists and advocate for an international agreement on intellectual property which culminated in the 1886 Berne Convention.²³

Such initiatives to achieve a fair deal for scientists must be seen in the context of the corporate-led collectivisation of scientific invention and discovery described above, the norm that employers be assigned patents, and the general tendency to exclude scientific discoveries and theories from patentability for lack of utility or industrial application. But another major impetus was the persisting view held especially by the French (but supported in some forums by the Latin American nations) that all creative people have natural rights over their achievements, and that the law should offer recognition of both their moral and material interests. This recognition, it was frequently argued, should extend not just to authors and artists producing literary and artistic works but to scientists and inventors as well. By treating them all as "authors", moral or material grounds to treat them as legally different became much harder to defend. This view proved quite enduring, informing debates on scientific property held by the League of Nations during the 1920s and on the drafting of the 1948 Universal Declaration of Human Rights at the newly created United Nations Organization which had replaced the League (see below). In the United States, the condition of the professional scientist was generally superior to that in Europe, and their work was far better funded, including from industry. Consequently, while the idea of a scientific property right certainly attracted interest, there was not felt to be any compelling need, at least among those having the power to make or influence policy. As Miller explains:

"[M]any believed that economic stimulus for science via individual scientific property rights was unnecessary. The US response to the issue of scientific property was to find arms-length ways for industry to fund research. Academics assigning normal patents to university corporations (in a way parallel to industrial practice) seemed a part of the solution".²⁴

The official British view was hardly more enthusiastic about scientific property.

In hindsight, the League of Nations' scientific property initiative, which officially came to nought, might appear as a total failure given the absence of any treaty. However, as mentioned, in 1934 the Paris Convention was revised in response to scientists' demands by adding a moral right of attribution (see below). The adoption of this provision by state parties to the Convention (which formed the "Paris Union") should not be seen entirely to be an unrelated event. The League of Nations' Committee on Intellectual Property, which was so involved in the scientific property convention initiative, was directly engaged in the deliberations on moral rights and employee inventions at the 1934 Paris revision conference. Two years later, Germany shifted to inventor naming. In 1948, the Universal Declaration of Human Rights provided language which appears to support the rights of scientists as "authors", though it did not go so far as it might have done in terms of the explicitness of the wording (see below).

²² Miller, "Intellectual Property and Narratives of Discovery/Invention" (2008) 46 Hist. Sci. 299, 303

²³ Sam Ricketson and Jane Ginsburg, *International Copyright and Neighbouring Rights: The Berne Convention and Beyond* (Oxford: Oxford University Press, 2006).

²⁴ Miller, "Intellectual Property and Narratives of Discovery/Invention" (2008) 46 Hist. Sci. 299, 318; Stephen P. Ladas, "The Efforts for International Protection of Scientific Property" (1929) 23 Am. J. Int'l L. 552.

The Paris Convention's art.4ter was adopted at the 1934 Revision Conference following an extensive discussion held by a conference subcommittee not only on a proposed moral right equivalent to the right of attribution in copyright law, but also on employee inventions and a possible right of remuneration. Indeed, the moral right of inventors was hardly the most ambitious proposal. As suggested, this proposal did not come out of the blue. In 1929, the International Labour Office's Consultative Commission of Intellectual Workers set forth a request that the then forthcoming revision conference of the Paris Convention place on its agenda a project for adopting a new art.4ter comprising two principles: (i) all patents name the author²⁵ or authors where these can be established; and (ii) where the law recognises the right of employers to patents on inventions made by employees, if the latter do not receive an equitable remuneration then they should receive a supplementary remuneration related to the value of the invention and the circumstances in which it was achieved.²⁶ However, the International Bureau, which serves as the Paris Union's secretariat, evasively responded that because the issue of employee inventions in many countries fell outside national patent legislation, concerning employment contracts instead, it was not an appropriate item for the conference programme. It was, however, receptive to the inventor's moral right of attribution.²⁷

However, this was not the end of it. Moral rights and employee inventions were discussed by the 1934 conference subcommittee. The Dutch delegation returned to equitable remuneration for employee-inventors as had previously been covered by the 1929 proposal of the above-mentioned ILO Consultative Committee. The Mexican delegation went so far as to propose mandatory co-ownership of patents by the employee-inventor and the employer.²⁸ Evidently, the firmest opposition to remuneration came from (pre-1936) Germany and the United Kingdom, both on the grounds of respect for contracts. But opposition came from elsewhere including Japan, the United States and Sweden. However, all these opposing nations agreed to a second and more modest Dutch proposal, accompanied by supporting ones from Sweden, Norway and Switzerland. This one dealt solely with the moral right of attribution, and this was carried with no votes against and only three abstentions. Subsequently, accompanied by a rather grandiose speech by the head of the Italian delegation who proclaimed that the measure transcended the sphere of individual private rights and supported the public interest and the social and moral order, it was adopted by the conference as a revision to the Paris Convention.²⁹

As for the 1948 Universal Declaration of Human Rights, France proposed the following language concerning the moral and material interests of authors, artists and scientists:

"The authors of all artistic, literary, scientific works and inventors shall retain, in addition to just remuneration for their labour, a moral right on their work and/or discovery which shall not disappear, even after such a work and/or discovery shall have become the common property of mankind."30

Clearly, it was intended that inventors be extended moral rights as authors and artists already were. This time, inventors were not authors. But their entitlements were just the same. This distinction was consistent with the position of several Latin American countries which had led them earlier that year to proclaim the American Declaration of the Rights and Duties of Man at a conference at which the Organization of American States was established.³¹ As negotiations progressed, the initial French proposal was replaced with a joint Cuban, French and Mexican submission:

²⁵ In the original French, the word "author" is used rather than "inventor".

 ²⁶ Union Internationale pour la Protection de la Propriété Industrielle, "Actes de la Conférence Réunie a Londres du 1er Mai au 2 Juin 1934", p.91.
 27 Union Internationale pour la Protection de la Propriété Industrielle, "Actes de la Conférence Réunie a Londres du 1er Mai au 2 Juin 1934",

pp. 160–161.

28 Union Internationale pour la Protection de la Propriété Industrielle, "Actes de la Conférence Réunie a Londres du 1er Mai au 2 Juin 1934", pp. 371.

"A trade la Conférence Péunie a Londres du 1er Mai au 2 Juin 1934", p. 514. ²⁹ Union Internationale pour la Protection de la Propriété Industrielle, "Actes de la Conférence Réunie a Londres du 1er Mai au 2 Juin 1934", p.514. ³⁰ United Nations Commission on Human Rights, Second Session, "Report of the Working Group on the Declaration on Human Rights", December

^{10, 1947,} E/CN.4/57, p.15, quoted in Johannes Morsink, The Universal Declaration of Human Rights: Origins, Drafting and Intent (Philadelphia: University of Pennsylvania Press, 1999), p.220.

³¹ Morsink, The Universal Declaration of Human Rights (1999), p.220.

"Everyone, has, likewise the right to the protection of his moral and material interests in any inventions or literary, scientific or artistic works of which he is the author".³²

However, the final version of art.27.2 of the Universal Declaration of Human Rights, following some tweaking of the wording by (then non-communist) China to make it acceptable to sufficient negotiators for its adoption, failed explicitly to mention the inventor (or invention):

"Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author".³³

The replacement of "work" with "production" does give the statement marginally less of a copyright gloss than before. Nonetheless, it seems to leave the existence of inventors' moral rights in international human rights law as a matter of interpretation. The international community chose vagueness over clarity on the matter. So while the inventors' moral right of attribution persists to this day, some uncertainty remains as to its human right status. The upshot of all this, though, is that how or whether it is officially justified, the practice of naming individuals inventors in all patents is well established in all the major patent jurisdictions, and there are no moves afoot to counter this.

Avoiding anonymity: In the corporate interest?

It seems axiomatic that a work of literature must have an author. Even so, Anglo-American copyright law enables the author to disappear to be replaced by a corporation. This is achieved in the United States through the work-for-hire doctrine. In the United Kingdom, as mentioned, the author can—and is frequently encouraged to—waive her or his moral rights including the right of attribution. Ironically, the patent specification is itself an anonymous work.³⁴ Unless he or she appears in court, the "author" is an unnamed and unknown patent attorney.

All of this is possible despite the existence of authors' moral rights in international copyright law under the venerable 1886 Berne Convention through its 1928 revision and in human rights law. And also despite the common presumption among the public that literary works almost by definition are productions of creative individuals' minds either working alone or jointly with one or a few others. And yet, the inventor has not experienced a similarly ignominious fate despite the corporatisation and collectivisation of invention (and the patent systems) of the past 150 years.

Of course, some scepticism about the whole notion of the invention (and the inventor) is perfectly legitimate. Wolf-packs and termites' nests notwithstanding, humans are collaborative creatures to a unique degree: all creative manifestations stem from a greater or lesser degree from the wisdom of crowds rather than the genius of a few. Arguably, that is how most human innovation has been conducted since pre-history, and in such a scenario there would most commonly be no moral imperative to single out certain people. Indeed, it might actually be immoral to do so.

But wherever the truth lies, we nearly all believe there is such a thing as inventing just as there is literary authorship. We are not ready to erase inventors either from popular discourse or from law and policy. The same goes for authors. Even those who purport to disbelieve in the author as one who creates something nobody else could be happy to place their names on their writings expressing this opinion. Likewise, the inventor is a figure that will survive hostile critique. Perhaps it is because we do not know what to put in its place.

³² United Nations General Assembly, Third Session, Third Committee, "Draft International Declaration of Human Rights. Cuba, France, Mexico: Joint Amendment to Article 25 of the Draft Declaration (E/800)", A/C.3/360, November 20, 1948.

³³ United Nations General Assembly, Third Session, Third Committee, "Draft International Declaration of Human Rights. China: Compromise Text for Article 25 of the Draft Declaration (E/800)", A/C.3/361, November 22, 1948. Almost identical language was adopted for art.15(1)(c) of the 1966 International Covenant on Economic, Social and Cultural Rights

International Covenant on Economic, Social and Cultural Rights.

34 Kara Swanson, "Authoring an Invention: Patent Production in the Nineteenth Century United States" in Mario Biagioli, Peter Jaszi and Martha Woodmansee, Making and Unmaking Intellectual Property (Chicago: University of Chicago Press, 2011), p.42.

In the present climate, then, naming the inventor does seem eminently fair and culturally appropriate in most industrialised societies. Even if one rejects the traditional heroic inventor model as being mostly mythical, one can hardly deny the presence of a person or small group of people close enough to the inventive conception and its practical reduction to be named as inventors, and who deserve to be acknowledged. As long as such people can be identified with at least some semblance of reasonableness, it is difficult to argue, logically or morally, that they should not at the very least be named in the patent. Nonetheless, I accept that how "invention" (and for that matter "authorship") are conceived is a matter of interpretation that cannot be wholly objective. Undoubtedly patent law influences our notion of what an invention is, just as certain views as to what an invention is shapes its legal definition.

The vast majority of all valuable patents are owned by corporations, not individual inventors. Consequently, inventors' moral right of attribution looks like a fair quid pro quo that can do no harm to businesses and which satisfies a general sense that it is just. But how secure really is the legal position of the employer institution? Looking at various countries one sees a range of approaches to the regulation of employee invention. But overall, one finds that what is invented in a company's lab or workshop will probably come largely under the control of that company one way or another.

If we accept that the position of employers in terms of controlling rights to most of the inventions coming out of their laboratories and workshops is reasonably secure, the moral right of attribution seems harmless to their interests. And yet, given the way inventing is done, is not the need in all cases to personalise invention in danger of looking manifestly irrational and subjective? Or else, to the extent it is credible, does it not reinforce the perception that inventing can only be individualistic and substantial, and never collective and cumulative?

Would it not be more convenient, then, for industry to demand that invention be depersonalised as was done previously in Germany for corporate inventions? Accordingly, rights would be purely economic, and these would automatically vest in the employers of those technicians whose achievements can be described in such a way as to pass the novelty, inventive step and industrial application tests under patent law. And yet industry is not clamouring for this. The final part of the article offers some explanations.

Conclusions

As we all know, the inventors' names remain on the patents. Why is this? The simplest plausible answer to hand is that this is merely an instance of "regulatory inertia": if the inventor's right of attribution does not harm corporate interests then why bother to remove it? But perhaps it does serve some useful functions unrelated to bureaucracy or legal clarity.

There are three further plausible explanations for the absence of moves to abolish the morally-based legal requirement for individuals to be named as inventors in patent applications, including those patents assigned to companies. One reason concerns the employer-employee relationship. Creative, hard-working people do not care to be treated like drones. Good morale requires such people to enjoy appreciation and recognition when these are merited. Respecting their moral rights of attribution is a way to publicly acknowledge the inventor-employee's value.

A second likely reason relates to the public image of the patent system. If corporations rather than nameable individuals invent, the patent system becomes nothing more than a business monopoly in the eyes of the public. Having the names of individuals on patents gives moral legitimacy to the system that it may otherwise lose, even when the companies employing them are the actual owners. It also provides immense propaganda value.35

The third reason focuses on the legal advantages the employers may gain. The inventor function serves the practical purpose of pinning the invention in space and time in a way that would be much harder if

³⁵ Fisk, Working Knowledge (2009), p.252.

invention were anonymised. Besides, if all else fails, who better to give substance to, and defend, an invention's existence and site of origin, one might think, than the persons named on the patents?³⁶

There is in fact no contradiction or damage to industry interests in recognising collective and incremental invention on the one hand whilst continuing to allow inventions to be personalised, especially when appeals and demands are made in moralistic forms of discourse. As long as inventors are primarily employees of institutions providing their salaries, equipment and research funds, *and* their collaborators are mostly colleagues within the same institution, naming the inventors in the patents can actually be *good* for industry.

It may be concluded that the moral right of the "inventor" has a function. This inventor-function suits industry. It is not really the quid pro quo for handing over control of the inventor to the employee. Rather, it underpins the function's usefulness. It is good for the employee. But it is even more beneficial to the employer.

³⁶ This is admittedly a contestable claim. It is true that Nobel laureate Kary Mullis's defence of the patented polymerase chain reaction (PCR) technique with which he is usually credited is very likely to have influenced the court. However, patent attorneys and other legal practitioners have for long been the main defenders in court of patents being litigated. Arapostathis and Gooday show that in late-nineteenth-century Britain, the patent agent who wrote the specification of the disputed patent was often the one appearing in court to vouch for its validity. Of course, the agent's authority derived in large part from his authorship of the inventor's patent. See Stathis Arapostathis and Graeme Gooday, *Patently Contestable: Electrical Technologies and Inventor Identities on Trial in Britain* (Cambridge, Mass.: MIT Press, 2013).

The History of Copyright History (Revisited)

Martin Kretschmer*

Professor of Intellectual Property Law, School of Law, University of Glasgow

Lionel Bently

Herchel Smith Professor of Intellectual Property Law and Professorial Fellow, Emmanuel College, University of Cambridge

Ronan Deazley

Professor of Copyright Law, School of Law, University of Glasgow

^U Copyright; Historical jurisprudence; Legal history

What is copyright history?

History has normative force. There was no history of colonialism, gender, fashion or crime until there were contemporary demands to explain and justify certain values. During much of the twentieth century, "copyright" history (the history of legal, particularly proprietary, mechanisms for the regulation of the reproduction and distribution of cultural products—as opposed to the history of art, literature, music, or the history of publishers and art-sellers) was not thought of as a coherent, or even necessary field of inquiry. It was a pursuit of individual often rather isolated scholars, not an urgent contribution to knowledge.

This was not always so. Copyright history had been the subject of intense and sustained study during several periods in the past, in the sense that there was a common set of questions, a community of scholars who read and responded to each other's concerns, and an audience to which this history mattered. Between around 1740 and 1790 copyright history was elevated to an academic sub-discipline under this (sociological) definition in at least Britain, France and the German-speaking countries. William Blackstone (1723–1780), Denis Diderot (1712–1784) and Johann Stephan Pütter (1725–1807) all searched in different ways for the historical sources of a law prescribing norms of copying. Copyright history is also present in virtually every nineteenth-century jurisprudential treatment of literary property, author's rights, publisher's rights or copyright law.

Following the adoption of an international framework of treaties—most prominently the Berne Convention for the Protection of Literary and Artistic Works (Berne Convention) of 1886—interest in copyright history appeared to wane. As Martti Koskenniemi remarks in the context of international law: "For a functionally oriented generation, the past offered mainly problems, and few solutions." Lawyers for most of the twentieth century were functionalists, oriented towards the future.

Several fields of legal scholarship experienced a new historical turn towards the end of the twentieth century. Why did the need to understand how we got to where we are arise? For international law, the changing world order after the fall of the Berlin Wall has been suggested as an obvious stimulus. For copyright law, the renewed interest in history may be traced to the translation of Michel Foucault's 1969

^{*} An earlier version of this article was published as the introduction to Ronan Deazley, Martin Kretschmer, Lionel Bently (eds), *Privilege and Property: Essays on the History of Copyright* (Cambridge: OpenBook, 2010).

Martti Koskenniemi, "The History of International Law Today" (2004) Rechtsgeschichte 61.

essay *Qu'est-ce qu'un auteur?* (*What is an author?*), which first appeared in English in the mid-1970s.² Poststructuralist author theory influenced literary scholars profoundly, just at a time when digitisation began to pose questions of authorship and ownership. In the Anglo-American context, the landmark texts of recent copyright history are perhaps Martha Woodmansee's *The Genius and the Copyright* (1984), turning her gaze on the aesthetic, economic and legal conditions which made enlightenment thinkers frame copyright law in the first place, and Mark Rose's 1988 article "Author as Proprietor", developing an argument from the case of *Donaldson v Becket* (1774) that, historically, there was no necessary connection between author and text.³

Given the burgeoning interest in copyright history over the last 30 years, the time has come for a more fundamental historiographical challenge.⁴ Historiography is meta-history, the philosophy of science of historical scholarship. As the field is maturing, how do copyright historians identify their objects of inquiry, the primary sources that matter? How do scholars offer explanations, conceptual explications, and narratives of causes and effects in the evolution of the norms of copying? Which justificatory goals are served by historical investigation?

In March 2008, we launched *Primary Sources on Copyright (1450–1900)*, a digital archive funded by the UK's Art and Humanities Research Council (AHRC), containing 550 documents with approximately 10,000 pages in facsimile, transcription and translation—with accompanying editorial commentary of about 500,000 words (*www.copyrighthistory.org*). Two years later, we published an open access edited collection to accompany the digital resource: *Privilege and Property: Essays on the History of Copyright* (a collection in which an alternative version of this article was first published).⁵

In the funding application for the *Primary Sources* project, we claimed to know which jurisdictions mattered (France, Germany, Italy, the United Kingdom and the United States), as well as what kind of materials mattered (statutes, materials relating to legislative history, case law, tracts and commentaries). But more than that, we claimed considerable consensus among legal scholars as to the key points in the intellectual history of copyright law: the feudal regime of printing privileges in late fifteenth century Venice; the establishment of stationers' companies in Basel and London; the first statute in England 1710; and so on.⁶ The backward projection of modern nation states into historical jurisdictions (while also omitting important regional centres such as The Netherlands) may be excused by the need to explain the project to potential funders; we had to convey at least confidence in the possibility of copyright history.

Our methodology then aimed to select documents for the digital archive according to three criteria⁷: (1) documents that open up alternative interpretations of copyright history: that is, documents that might contradict the manner in which particular national copyright laws have become associated with distinct philosophical traditions; (2) documents that illustrate the interaction of copyright laws with commercial and aesthetic developments; and (3) documents that evidence influence across jurisdictions, that challenge copyright histories that are told as if national systems remained hermetically sealed from one another.

From a historiographical perspective, our main thrust was to investigate the construction of narratives around the reference points of copyright history *already taken as given*. We did not confront the orthodoxy that views copyright history as *the history of laws*. We recognised that history is more than an accumulation of legal materials within the context of national jurisdictions, politics and perhaps diplomacy, but we did not systematically address how inquiry could reach beyond the documents of government. However,

² Michel Foucault, "What Is an Author?", translated by James Venit (1975) Partisan Review 603.

³ Martha Woodmansee, "The Genius and the Copyright: Economic and Legal Conditions of the Emergence of the 'Author'" (1984) Eighteenth-Century Studies 425; Mark Rose, "The Author as Proprietor: Donaldson v Becket and the Genealogy of Modern Authorship" (1988) Representations 51.

⁴ Kathy Bowrey had already posed the question in "Who's Writing Copyright's History?" [1996] Eur. Intell. Prop. Rev. 322.

⁵ Deazley, Kretschmer, Bently (eds), *Privilege and Property* (2010).

⁶ Lionel Bently and Martin Kretschmer, "Primary Sources on Copyright (1450–1900)", application for a digital resource enhancement grant to the AHRC (2004).

⁷ Cited from the methodology section in the FAQ of *Primary Sources on Copyright (1450–1900)*, available at http://copy.law.cam.ac.uk/cam/index.php?select=faq [Accessed November 11, 2013].

establishing the meaning of concepts within a closed circle of legal reasoning that finds persuasive authority in historical sources of law does not suffice. "Copyright law" needs to be understood as having been only one mechanism for the articulation of proprietary relationships; other legal norms (personal property, contract, bailment)—and, more interestingly, other social norms—allowed for systems of ascription and control, flows of money, as well as the transfer and sharing of ideas and expression. Copyright history is not just another branch of positive law.

In this article, we invite readers to take a historiographical perspective on copyright history as a discipline. We do this by suggesting a number of meta-narratives, i.e. narratives about the construction of history at various periods. We then evaluate the essays within the Privilege and Property collection in that methodological light: how did the scholars in that collection convert sources into explanations?

A brief historiography of copyright

Historical narratives of copyright were first prominently mobilised during the eighteenth century. As one would expect, this occurred when norms of reprinting and copying where contested in the context of political, economic and aesthetic shifts.

In Britain, the seminal debate interweaving strands of historical and legal argument sought to establish, or refute an author's right "at common law" that may survive the limited copyright term of the Statute of Anne (1710). For example, in the so-called "battle of the booksellers" between Scottish and London publishers, the Tonson family of publishers used a contract under which Simmons had acquired Milton's Paradise Lost in 1667 to seek an injunction against the Scottish printer Walker in 1739 (when the 21-year term for books already in print under the Statute of Anne had clearly expired).8 This common law historiography was developed through cases such as Tonson v Collins (1762), Millar v Taylor (1769) and Donaldson v Becket (1774). As Deazley suggests in his Primary Sources commentary on Tonson: in the first extended pre-history of English copyright, Wedderburn and Blackstone (counsels for the plaintiff)

"took the judges back through the bye-laws of the Company of Stationers, the printing patent cases of the late seventeenth century, and the Licensing Act 1662; back through the various decrees of the Star Chamber, the incorporation of the Stationers, and the origins of the prerogative right to grant printing privileges; back to the very introduction of printing itself by Caxton in 1471".

In response, Thurlow and Yates (counsels for the defendant) characterised the stationers' bye-laws as "private regulations", the letters patent were "merely privileges", the King's prerogative had nothing to do with the present case, and the decrees of the Star Chamber were dismissed as being merely political in scope and intent.9

At about the same time, Denis Diderot (commissioned by the Paris Guild) gave himself the task of "tracing the establishment of our laws on privileges in the book trade from their origin to the present day". 10 The first third of Diderot's extensive 1763 pamphlet Lettre historique et politique sur le commerce de la librairie narrates the numerous conflicts between the provincial booksellers and the Paris Guild, and various attempts by the French Parliament and Council to circumscribe the guild's monopoly.

⁸ Peter Lindenbaum, "Milton's Contract" in Martha Woodmansee and Peter Jaszi (eds), The Construction of Authorship: Textual Appropriation in Law and Literature (Durham: Duke University Press, 1994), pp.175-190.

⁹ Ronan Deazley (2008), "Commentary on Tonson v. Collins (1762)" in Primary Sources on Copyright (1450–1900), available at http://copy.law .cam.ac.uk/cam/tools/request/showRecord?id=commentary_uk_1762 [Accessed November 11, 2013].

10 Denis Diderot, Lettre historique et politique adressée à un magistrat sur le commerce de la librairie (Paris, 1763), p.15, reprinted in *Primary*

Sources on Copyright (1450-1900), with commentary by Frédéric Rideau, available at http://copy.law.cam.ac.uk/cam/tools/request/showRecord.php?id =record \(\int_1763 \) [Accessed November 11, 2013]. Page numbers refer to the English translation of the manuscript (translated by Lydia Mulholland).

Seventeenth-century regulations, from the incorporation of the Paris Guild in 1618 to the book trade relations of 1649 and 1665, had eventually confirmed that unlimited extensions could be obtained to privileges for "new" books, as well as through renewals of privileges for "ancient" works. However, during the eighteenth century, persuasive arguments were made that any privilege, as a temporary monopoly, must eventually expire. In this context, Diderot's historical excursions aim to show that the privilege system should be simply understood as a system of state approval for publication (or censorship) and that the prior right lay with the author who dealt with this as a matter of contract. Diderot claims that

"the possessors of manuscripts purchased from authors may obtain permission to publish, and seek as many continuations of this permission as they wish; they may transmit their rights to others by selling them, passing them on to their heirs or abandoning them". 12

In effect, he provides a justification for a perpetual transferable copyright.

The leading eighteenth-century German jurisprudential commentary by Johann Stephan Pütter, *Der Büchernachdruck nach ächten Grundsätzen des Rechts* (1774),¹³ devotes about two-thirds of this 206-page treatise to the historical sources of the principles that should govern the issue of reprinting. The argument contains a potted history of the book trade, an account of the early privileges (Venetian, Papal, French and Imperial, back to 1494), a discussion of the governance of the imperial trade fairs in Frankfurt and Leipzig (such as the Frankfurt *Büchercommission* of 1579), and the views of earlier thinkers. It is Pütter who elevates Martin Luther's 1525 preface admonishing unauthorised reprinters to a foundational text of German copyright discourse.¹⁴ Pütter aimed to legitimate printing privileges provided by both the Empire and the confederate states as reaching beyond Germany's many internal borders. His justification of copyright has its roots not in Roman or Canon (church) law, but in European wide practice [*Europäische Gebräuche*].¹⁵ And as in the British common law debate, we have an attempt to lend support to systematic reasoning from a historical perspective, although Pütter (1774, p.118) concedes that the past may be "darkened by prejudice" [durch Vorurtheile verdunkelt], and at variance with what he calls the "true principles of law" [den ächten Rechtsgrundsätzen].

Although Diderot's letter is more overtly a political intervention, with rhetorical flourishes dominating the argument, these debates in Britain, France and Germany all evidence narratives that combine, in a typically eighteenth-century manner, historical explanation with justificatory concerns. The early copyright historians in Britain, France and Germany argue as if past rules, practices, statutes or court decisions may serve as normative precedents in a doctrinal sense.

Within the constraints of this article, we cannot offer a historiography of 250 years of copyright historical writing since Wedderburn and Blackstone's plea in *Tonson v Collins* (1762). The history of copyright history is yet to be written. However, we would like to invite such future research with some observations on the use of copyright history in nineteenth-century jurisprudential commentaries, and on the revival of copyright history since Foucault's intervention in 1969.

¹¹ Book Trade Regulations (1649), reprinted in *Primary Sources on Copyright (1450–1900)*, available at http://copy.law.cam.ac.uk/cam/tools/request/showRecord.php?id=record_f_1649 [Accessed November 11, 2013]; French Book Trade Regulations, Paris (1665), reprinted in *Primary Sources on Copyright* (1450–1900), available at http://copy.law.cam.ac.uk/cam/tools/request/showRecord.php?id=record_f_1665 [Accessed November 11, 2013].
12 Diderot, Lettre historique et politique adressée à un magistrat sur le commerce de la librairie (1763), p.12.

¹³ Johann Stephan Pütter, The Reprinting of Books Examined in the Light of True Principles of Law (Göttingen: Widow of Vandenhoek, 1774), reprinted in *Primary Sources on Copyright (1450–1900)*, with commentary by Friedemann Kawohl, available at http://copy.law.cam.ac.uk/cam/tools/request/showRecord.php?id=record_d_1774 [Accessed November 11, 2013].

14 Pütter cited almost in full Luther's preface to the 1525 edition of *Interpretation of the Epistles and Gospels from Advent to Easter* [Auslegung

¹⁴ Pütter cited almost in full Luther's preface to the 1525 edition of *Interpretation of the Epistles and Gospels from Advent to Easter* [Auslegung der Episteln und Evangelien]. Pütter, *The Reprinting of Books Examined in the Light of True Principles of Law* (1774), p.125.

¹⁵ Citing Adrian Beier (1634–1712), a law professor at Jena university: "It does not follow: where there is no privilege, there is no law, no help, no sin, no punishment. [Folgt darum nicht: wo kein Privilegium, da sey kein Recht, keine Hülfe, keine Sünde, keine Strafe. Das natürliche Recht, die Vernunft weiset einen jeden an, liegen zu lassen, was nicht sein ist.]" Pütter, *The Reprinting of Books Examined in the Light of True Principles of Law* (1774), p.127.

Robert Maugham (1788–1862) published the first substantive explication of British copyright law in 1828. 16 In many respects, his treatment of the subject is orthodox in that he provides a reasonably exhaustive doctrinal account of the current state of the law, not just for works of literature, but also with respect to dramatic works, lectures and artistic works (engravings and sculpture). However, two of Maugham's bêtes noires dominated and shaped the structure and tenor of his treatise: the duration of copyright in literary works, ¹⁷ and the library deposit provisions. ¹⁸ Respectively, Maugham considered that limiting the duration of copyright to the statutory periods of protection was a "monstrous injustice", "9 whereas the library deposit provisions were "iniquitous", a "disgrace to the country" and obnoxious to "[elvery principle of political economy". On both issues, Maugham's "historical view" of the law was marshalled to present "a striking proof of the injustice of their nature".20

Whereas Maugham engaged a range of historical sources in mapping out an agenda for copyright reform, John Lowndes, who published the first treatise (within Britain at least) specifically concerned with the history of copyright, wrote his work in support of Thomas Noon Talfourd's attempts to overhaul the copyright regime between 1837 and 1841, which eventually led to the passing of the Copyright Act in 1842. Two editions of the work were published in 1840 and 1842, both of which were dedicated to Talfourd "[f]or his generous advocacy of the rights of authors". Like Wedderburn and Blackstone, Lowndes was convinced that the concept of an author's natural right of literary property was one of long standing, and that copyright existed at common law predating the Statute of Anne; his treatise was an exercise in demonstrating the same. As for his "motive in laying it before the public", he hoped

"to remove the misapprehensions which prevail with regard to this species of property, both as to its former existence, and as to the effect and the expediency of the measure proposed by Sergeant Talfourd".21

In this regard, Lowndes's work was overtly propagandist in both nature and intent.

The Swiss jurist Johann Kaspar Bluntschli (1808–1881) included a section on the history and nature of author's rights in his 1854 treatise on German private law (Deutsches Privatrecht).²² Bluntschli constructs a sequence of four historical stages, ascending "to ever greater perfection" in the recognition of author's rights [bildete sich zu höherer Vollendung aus]:

- "a) the point of view of a privilege [der Standpunkt des Privilegiums]. Whilst the latter had before been conferred in individual cases, it was now granted universally. However, the form of a preferential concession [Vergünstigung] and a special right [Ausnahmerecht] was nevertheless retained, even though what was actually being protected was a universal right. That is, the need for protection of these rights was felt, but there was no understanding as yet of their nature.
- the point of view of a publishing right [der Standpunkt des Verlagrechts], which was often b) tied to the aforementioned privilege. In this consideration the interests of the publishers were uppermost and their publishing right was to be safeguarded. However, this was a most

¹⁶ Robert Maugham, A Treatise on the Laws of Literary Property (London: Longman, 1828), reprinted in Primary Sources on Copyright (1450–1900), with commentary by Ronan Deazley, available at http://copy.law.cam.ac.uk/cam/tools/request/showRecord.php?id=record_uk_1828 [Accessed November 11, 2013].

The term of protection for literary works was 28 years from the point of publication and, if the author was alive at the end of that period, then for the residue of his natural life: Copyright Act 1814 s.4.

¹⁸ Copyright Act 1814, ss.2–3, 5–7.

¹⁹ Maugham, A Treatise on the Laws of Literary Property (1828), p.196.

²⁰ Maugham, A Treatise on the Laws of Literary Property (1828), p.x.

²¹ J.J. Lowndes, An Historical Sketch of the Law of Copyright, 2nd edn (London: Saunders and Benning, 1842), p.vii, reprinted in Primary Sources on Copyright (1450–1900), available at http://copy.law.cam.ac.uk/cam/tools/request/showRecord.php?id=record_uk_1842a [Accessed November 11,

<sup>2013].

22</sup> Johann Kaspar Bluntschli, "Vom Autorrecht" ["On Author's Rights"] in Deutsches Privatrecht [German Private Law] (Munich: Literarisch-artistische Privatrecht ["On Author's Rights"] in Deutsches Privatrecht ["On Author's Rights"] av authorische Privatrecht ["On Author's Rights"] av authorische Privatrecht ["On Author's Rights"] in Deutsches Privatrecht ["On Author's Rights"] av authorische Privatrecht ["On Author's Rights"] in Deutsches Privatrecht Anstalt, 1853), translated by Luis Sundkvist, reprinted in Primary Sources on Copyright (1450-1900), available at http://copy.law.cam.ac.uk/cam/tools /request/showRecord.php?id=record_d_1853a [Accessed November 11, 2013].

- unsatisfactory approach because it failed to take into account that the authorised publisher and the unauthorised reprinter have a different right only by virtue of their different relationship to the author, and that a monopoly granted to the former without consideration for the author, merely for the sake of the priority of the commercial enterprise, lacks any proper foundation.
- the point of view of intellectual or *literary property* [der Standpunkt des *litterarischen Eigenthums*], which is championed above all by writers, but is of no use juristically. For common parlance, which calls a person's control over his nerves, his hands, or his thoughts, ownership and applies this term to anything which belongs to the person and is peculiar to him, certainly makes sense, but it simply covers too many different kinds of circumstances for it to be of use in civil law.... Moreover, the author's right is also different from ownership in the sense that the former always refers back to the author as a specific individual person, from which it can never dissociate itself completely, as long as it exists as such, whereas ownership is not concerned with the individual person of the owner....
- d) the fourth point of view, according to which *the author's right* is seen not as a property right, but, rather, as a *personal right of the author*, as *the right of the originator* [der vierte Standpunkt, von welchem das *Autorrecht* nicht als Sachen-, sondern als ein *persönliches* Recht des Autors betrachtet wird, als *Recht des Urhebers*]. It is to the philosopher Kant²³ that the merit belongs of having been the first to clearly point to the personal nature of author's rights. In other respects, though, his exposition of the matter is immature. The French jurist Renouard,²⁴ in an excellent treatise on author's rights, has greatly furthered our understanding of this question, although even he concentrates too much on the property right aspect of author's rights and thus ends up describing these as a kind of privileged monopoly, albeit one that is fully deserved by the author and holds universally. This means that he too overlooks the personal nature of the author's right."²⁵

Bluntschli chastises legislators and judges, with reference to the 1774 decision of the English House of Lords (i.e. *Donaldson v Becket*), who until recently failed to understand the historical logic in the development of author's rights.

A cross-jurisdictional study of the spread of the teleological story of copyright during the nineteenth century—from the dark beginnings of privileges to the full recognition of author's rights—has also yet to be written.²⁶ Why did the ideological emphasis on authorial works coincide with an increasing industrialised mode of exploitation? One answer stems from Marxist theory that understands law as a representation of the conditions of production in capitalism. For the specific case of photography, Bernard Edelman has argued that the French courts recognised during the nineteenth century a creative, authorial contribution in photographic activity in order to enable the operation of a property logic that served the interests of capital.²⁷

Edelman's Marxist conception of law influenced Anglo-American writers in the Critical Legal Studies movement but has had little influence on the recent trajectory of copyright history as a discipline. As we suggested earlier, for much of the twentieth century copyright discourse was dominated by positive law

²³ Immanuel Kant, "Von der Unrechtmäßigkeit des Büchernachdrucks" ["On the Unlawfulness of Reprinting"] in Berliner Monatszeitschrift (Berlin: J.E. Biester and F. Gedike, 1785), Vol.5, pp.403–417, reprinted in *Primary Sources on Copyright (1450–1900)*, available at http://copy.law.cam.ac.uk/cam/tools/request/showRecord.php?id=record_d_1785 [Accessed November 11, 2013].

²⁴ A.-C. Renouard, Traité des droits d'auteur dans la littérature, les sciences et les Beaux-Arts (Paris: Jules Renouard & Co, 1838), Vol.1.

²⁵ Bluntschli, "Vom Autorrecht" in *Deutsches Privatrecht* (1853), pp.186–190.

²⁶ In the United States, copyright law resisted the continental story of non-utilitarian author's rights well into the twentieth century. Yet, here too doctrine developed that combined, in Oren Bracha's words, "a metaphysical concept of the copyrighted work as an intellectual essence that could take many specific forms and a dominant concern for protecting the work's commercial value in all secondary markets that could be traced to it." Oren Bracha, "Commentary on Folsom v. Marsh (1841)" in Primary Sources on Copyright (1450–1900), available at http://copy.law.cam.ac.uk/cam/tools/request/showRecord?id=commentary_us_1841 [Accessed November 11, 2013].

²⁷ Bernard Edelman, Ownership of the Image, Elements of a Marxist Theory of Law (London: Routledge & Kegan Paul, 1979).

in a climate where the basic settlement of the Berne Convention (that the author should have exclusive control over the full value of the works created) was applied and extended to new forms of exploitation (such as radio, television and reprography). The law looked forward to solutions, in which the proprietary model held central place, 28 not backwards to history.

Research on material which we would now consider to be an integral part of copyright history continued outside the discipline of legal scholarship: an important strand being contributions to publishing history, and in particularly the history of the Stationers' Company published on the pages of the journal, The Library. Contributions were made by scholars of journalism (such as Frederick Siebert), librarians and bibliographers (such as Gordon Duff and Graham Pollard), as well as publishers themselves, such as Edward Arber and Cyprian Blagden, probably the two most significant historians of the Company. Some of this historical work focused on "copyright" as such: literary historian Harry Ransom published his influential work on the origins of the Statute of Anne,²⁹ while librarian Simon Nowell-Smith and historian James J. Barnes produced important work exploring the politics of international copyright relations between the United States and Great Britain in the nineteenth century.³⁰ The existence of this painstaking research was crucial groundwork on which recent scholars from a range of disciplines have been able to draw.

In the Marxist and post-structuralist intellectual debates of 1960s France, it was the concept of authorship (in the analysis of Roland Barthes and Foucault) that became the subject of historical study. In English-speaking discourse, Foucaultian arguments about the "author function" as a set of beliefs governing the production, circulation and consumption of texts gained wide currency among literary scholars. Foucault's concern was with the genealogy of "authorship", understood as an ideological construction through which responsibility for texts had come to be allocated, culture organised and the proliferation of meaning controlled. Foucault's key observation was that, historically speaking, the attribution of authors to texts/ascription of texts to authors was a relatively recent phenomenon, and one on which practices had (and continued) to vary as between "scientific" and "non-scientific" texts. In an attempt to explain this, Foucault not only linked the genealogy of authorship historically to the legal system of censorship, but also identified an important shift in the history of authorship: that from responsibility to ownership. From around 1800, he claimed, a new conception of authorship emerged, that of the "author-as-proprietor". It was this insight that led (it seems) Woodmansee and Rose to begin their seminal studies of copyright history in eighteenth- and early nineteenth-century England and Germany.

For copyright lawyers, it was probably the advent of digitisation that motivated a turn to history as a strategy for understanding what copyright was intended to do, how it has functioned and for paths that we could now take. Simultaneously, an expanding higher education sector and a burgeoning interest in the field of "intellectual property" (fed by assumptions of its growing economic importance in the developed world) led to the appointment of a new generation of (copyright) scholars looking for research projects. Computer programming, digital sampling and the production of databases,³¹ prompted interrogation of legal notions of "authorship", "originality" and "work" and raised doubts about the appropriateness of proprietary models of regulation. Foucault's genealogy of authorship offered a vital pointer towards

²⁹ Harry Huntt Ransom, *The First Copyright Statute: An Essay on an Act for the Encouragement of Learning, 1710* (Austin: University of Texas Press, 1956).

30 James J. Barnes, Authors, Publishers and Politicians: The Quest for an Anglo-American Copyright Agreement, 1815–1854 (London: Routledge

²⁸ Even if copyright practice witnessed increasing levels of collective management.

[&]amp; Kegan Paul, 1974); Simon Nowell-Smith, International Copyright Law and the Publisher in the Reign of Queen Victoria (Oxford: Clarendon Press, 1968).

31 Jane Ginsburg's historical exploration of copyright law in revolutionary France and the United States was published almost simultaneously with

her examination of the legal protection of compilations, a year before the US Supreme Court decision in Feist Publications v Rural Telephone Service Co 499 US 340 (1991). The Feist decision and the authorial ideology that the decision expressed were a key focus of US copyright scholarship. Jane Ginsburg, "A Tale of Two Copyrights: Literary Property in Revolutionary France and America" (1990) 64 Tul. L. Rev. 991; Jane Ginsburg, "Creation and Commercial Value: Copyright Protection of Works of Information" (1990) 90 Colum. L. Rev. 1865.

understanding the underlying logics and epistemic underpinnings of the institutions and practices of copyright that legal commentators during the twentieth century had pretty much taken for granted.³²

Of course, not all contributions to the new copyright history sprang from the appropriation of post-structuralist ideas. Foucault had little influence on the work of certain English and Continental scholars, such as Feather, Cornish, Seville, Kawohl or Pfister.³³ Reviewing the range of contributions to the Privilege and Property volume as well as their methodological base offers an opportunity to explain the "selection problem" for our *Primary Sources on Copyright* (1450–1900) archive. This also may serve as a more general examination of the state of copyright history as a discipline.

Revisiting Privilege and Property

The historical treatises of the eighteenth century analysed the legal character of privileges as antecedents of a general law regulating reprinting: Were privileges an encroachment on common rights or liberties, were they necessarily limited in term, could they extend across borders, did they permit or rely on certain rights of the author? As we have seen during our brief historiographical sketch, many jurisprudential commentaries have continued to view privileges as part of a continuous line that eventually led to the recognition of authorship and copyright law proper.

In the first essay of the *Privilege and Property* collection, "From Gunpowder to Print: The Common Origins of Copyright and Patent", Joanna Kostylo, a cultural historian, steps out of this trajectory. Kostylo explores the instruments of Renaissance letter patents on their own terms, locating them in the "very material world of craftsmanship and mechanical inventions". 34 According to Kostylo, the history of copyright

"must be explored from a wider perspective of contemporary arts, crafts, music, painting and print making, as well as the aesthetic theories of Italian humanism that influenced these various disciplines".35

It follows that the primary source material that concerns the historian may be as much rich social material (for example about the transmission of knowledge in guilds) as proto-legal material (such as the Venetian printing privilege for Johannes of Spyer of 1469). Here the historiography of copyright is at its most fluent.

The subsequent essays in the collection mostly return again to law (and its immediate context) as the object of study, although there are certain exceptions, such as Mark Rose's ambitious reading of Habermas's theory of the public sphere into a single English seventeenth-century text (Milton's Areopagitica)³⁶ or Katie Scott's account of the contribution of the visual arts, and in particular maps, to establishing property claims in seventeenth- and eighteenth-century France.³⁷

³² E.g. James Boyle, Shamans, Software, and Spleens: Law and the Construction of the Information Society (Cambridge, Mass.: Harvard University Press, 1996); Brad Sherman and Lionel Bently, The Making of Modern Intellectual Property Law: The British Experience, 1760–1911 (Cambridge: Cambridge University Press, 1999); Peter Jaszi, "Toward a Theory of Copyright: The Metamorphoses of Authorship" [1991] Duke L.J. 455.

³³ W.R. Cornish, "Authors in Law" (1995) 58 Mod. L. Rev. 1; John Feather, "The Book Trade in Politics: The Making of the Copyright Act of 1710" (1980) Publishing Hist. 19; Catherine Seville, Literary Copyright Reform in Early Victorian England (Cambridge: Cambridge University Press, 1999); Friedemann Kawohl, Urheberrecht der Musik in Preußen 1820–1840 (Tutzing: Hans Schneider, 2002); Laurent Pfister, L'auteur, propriétaire de son œuvre?: La formation du droit d'auteur du XVIe siècle à la loi de 1957, PhD thesis, University of Strasbourg, 1999.

⁴ Joanna Kostylo, "From Gunpowder to Print: The Common Origins of Copyright and Patent" in Deazley, Kretschmer, Bently (eds), Privilege and Property (2010), p.22.

Kostylo, "From Gunpowder to Print" in Deazley, Kretschmer, Bently (eds), Privilege and Property (2010), p.22.

³⁶ Mark Rose, "The Public Sphere and the Emergence of Copyright: Areopagitica, the Stationers' Company, and the Statute of Anne" in Deazley, Kretschmer, Bently (eds), Privilege and Property (2010). Rose makes a complex causal argument about the role of a bourgeois public sphere in the collapse of traditional press controls, enabling the recognition of authorship in the Statute of Anne (1710). The public sphere (in the sense of Habermas) is an early modern political force that emanated in new civic institutions of conversation and exchange, such as coffee houses, newspapers and clubs: Jürgen Habermas, The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society, translated by Thomas Burger (Cambridge, Mass.: MIT Press, 1991).

³⁷ Katie Scott, "Maps, Views and Ornament: Visualising Property in Art and Law. The Case of Pre-modern France" in Deazley, Kretschmer, Bently (eds), Privilege and Property (2010).

It is not surprising that the focus of investigation tends to narrow as the analysis progresses through time, and a body of jurisprudence is becoming known as copyright law in its various incarnations—such as literary property, droit d'auteur or Verlagsrecht (publishers' right). This steers the historian's selection of primary sources towards decisions by courts and documents of the legislature.

It is important to note that this is not necessarily a disciplinary choice. Legal, cultural, economic, art, book and literary, music or intellectual historians may, or may not, differ in their selection of objects. The same materials may serve different explanations, depending on explanatory goals and methods used.

The type of objects covered in *Privilege and Property* include specific narrow legal interventions, for example, on performing rights in the United Kingdom, publishing contracts in Prussia, perpetual copyright in Venice, artistic property in France and the United Kingdom, as well as wider surveys on the customs of the publishing trade, freedom of commercial exploitation under Scots law, the regulation of the printing press in the North American colonies, the concept of the author in the French privilege system, or formalities in nineteenth-century Europe. Some essays even attempt to spin threads through several centuries, for example on the personality interests of the author and on the political economy hidden in metaphors of intellectual property.

Following an identification of the *objects* of investigation, a second set of observations relate to the goals of historical analysis. Here we can distinguish among the various contributions to Privilege and Property. There are commentaries that make claims about national identity and influence, such as Alistair Mann's essay on the importance of Scotland's influence within British copyright's "pre-history". 38 There are papers that make claims for disciplinary relevance. Katie Scott, for example, argues the contribution that visual art has made in the formulation of contemporary copyright, which in turn invokes the importance of being able to "read" the visual. 9 Some papers set out to challenge existing, dominant narratives about copyright history. In this respect, Kystolo's work has already been mentioned, concerning the significance of industrial privileges in the formation of the concepts such as the "authorial ego" and the "intangible work". 40 And finally, there are contributions that draw upon the history of copyright with a view to interrogating contemporary policy.

Thirdly, and perhaps most controversially, we would like to offer an interpretation of the *methods* used in the essays that make up *Privilege and Property*. How are primary sources converted into explanations? A "legal positivist" analysis of copyright law as part of an institutionalised system of social recognition will seek explanations immanent to law.⁴¹ At the other end of spectrum, copyright law may be explained by technological, economic, political, social or aesthetic factors, i.e. explanations outside law.

In Privilege and Property, grand theories, such as the "romantic author hypothesis" (explaining the rise of author's rights at the end of the eighteenth century from an aesthetics of genius), theories about the "public domain" (conceiving of copyright as a regulatory mechanism for the benefits of learning), or teleological stories about the ascent of copyright laws from privileges to authorial consciousness are challenged by micro-studies that bring a wider range of methods to bear on a wider range of sources. This is a sign of disciplinary evolution. There may be no grand pattern that explains the development of copyright laws across all societies, yet carefully sustained work on primary materials may discover new narratives for new social conditions, aware of one of the central paradoxes of legal theory: that law is both a set of rules and a discourse about what these rules should be.

John Milton, in his 1644 Areopagitica speech, "For the Liberty of Unlicensed Printing", accuses parliament of having been deceived by the "fraud of some old patentees and monopolisers in the trade of bookselling" (i.e. the Stationers' Company):

³⁸ Alastair J. Mann, "A Mongrel of Early Modern Copyright': Scotland in European Perspective" in Deazley, Kretschmer, Bently (eds), Privilege and Property (2010).

Scott, "Maps, Views and Ornament" in Deazley, Kretschmer, Bently (eds), Privilege and Property (2010).

⁴⁰ Kostylo, "From Gunpowder to Print" in Deazley, Kretschmer, Bently (eds), *Privilege and Property* (2010).

⁴¹ H.L.A. Hart, *The Concept of Law* (Oxford: Clarendon Press, 1994).

44 The WIPO Journal

"Truth and understanding are not such wares as to be monopolized and traded in by tickets and statutes and standards. We must not think to make a staple commodity of all the knowledge in the land, to mark and license it like our broadcloth and our woolpacks."

Today, we still struggle to relate norms of communication and norms of transaction (as copyright law forces us to do). That is why copyright history matters.

Afterword

During the five years since the launch of the *Primary Sources* archive, we have attempted to widen the scope of inquiry to more countries, publishing materials from Spain in 2012 (edited by José Bellido), and soon from The Netherlands. More radically, we are revisiting our concept of jurisdiction in response to proposals to include Jewish and Papal documents.

⁴² Mark Rose, Authors and Owners: The Invention of Copyright (Cambridge, Mass.: Harvard University Press, 1993), p.29.

Copyright History as History of Technology

Oren Bracha

Howrey LLP and Arnold, White & Durkee Centennial Professor, University of Texas School of Law

Copyright; Historical jurisprudence; Technology

There is a common narrative underlying popular versions of copyright history. Copyright's history is told from this perspective as the path leading from "Gutenberg to the Celestial Jukebox" or as a series of technological developments and the legal reactions to them. There is nothing remarkable about the undeniable proposition that the development of copyright has been closely entangled with technological change. The narrative, however, usually contains additional latent assumptions. Typically, copyright and the law more generally are presented as purely reactive. The printing press is developed, and the law reacts with the creation of copyright. Sound recording technology is invented, and copyright law adapts with new legal entitlements. And so on and so forth. Law and technology also appear to be completely exogenous to each other. Technology develops in its own sphere according to the forces that drive technological change, and the law, a social area completely detached from that process, reacts to the output of the technological developments. Finally, accounts written from this perspective usually contain more than a smidge of determinism. They strongly imply that given certain technological developments, copyright law had to become what it is.

In this essay I explain why this way of understanding the relationship between the history of copyright and the history of technology may be unsatisfactory and offer an alternative framework for combining the two. In a nutshell, understanding copyright's history as a series of reactions to exogenous technological developments is a reductionist account that tends to leave out the most interesting parts of the story of the interaction between society, technology and the law and make both copyright's past and future seem deceptively inevitable. What may be the alternative? New approaches in sociological and historical study of technology analyse technology as a social phenomenon shaped not by its own hermetically sealed logic, but rather by close interaction with all aspects of society, including interests, ideology, politics and the law. One of the main insights of legal realism, later developed by the Critical Legal Studies (CLS) school, is the understanding of the law as a distributive mechanism that shapes social power relations through the allocation of economic and symbolic bargaining power. This allocation of power model applies to technology as well as the law and to the interface between the two spheres. Combining those two approaches from two very different fields in the historical study of law and technology creates a distinct perspective—that of critical history.² In what follows, I explain the central elements of critical history of copyright and technology and suggests how the study of copyright's history from this perspective might look.

Copyright as a reaction to technological change

The view that sees copyright history as a series of legal reactions to technological developments comes in two main variants. The first assumes (but almost never articulates) a version of Harold Demsetz's theory

² Robert Gordon, "Critical Legal Histories" (1984) 36 Stan. L. Rev. 57.

Paul Goldstein, Copyright's Highway: From Gutenberg to the Celestial Jukebox (Stanford: Stanford University Press, 2003).

of the origin of property rights.³ Demsetz famously argued that property rights appear when social-economic conditions are such that the total benefits of such rights outweigh the social cost of creating and maintaining a property rights regime. When this account is applied to copyright history, technological development naturally fits into it as the most important factor affecting the cost/benefit calculus of property rights. By creating new media or new forms of representing information and allowing effective dissemination of such new forms of expression technology establishes and expands new valuable markets. The (often dramatic) increase in the value of the informational resource and sometimes new modes of commodifying that resource result in a higher value of property rights. Similarly technological development may bolster the threat that the property right of copyright is designed to counter, i.e. free riding by others through copying or use of a non-excludable intellectual resource.⁴

Consider, for example, the invention of the telegraph that, among other social impacts, revolutionised the gathering and dissemination of news and the business models associated with them.⁵ Under the assumptions just described, the relation between technological innovation and copyright in this historical episode is straightforward. The appearance of telegraphy and the widespread deployment of fast communication networks fundamentally changed the business of news. For the first time news could be effectively gathered on a comprehensive national and then international scale and disseminated on a timely nationwide basis. This changed the nature and perhaps the value of the informational resource known as "news", and more importantly the business model underlying it. Numerous local newspapers publishing mainly material of local interest and taking part in a news "exchange system" were supplanted by concentrated national networks for news gathering and dissemination. At the same time telegraphy substantially increased the threat of copying by enabling almost instantaneous nationwide communication as demonstrated by the paradigmatic cases of the era of west coast newspapers "appropriating" news published by east coast newspapers authorised by a news gathering agency.⁶ The result of these developments was new property rights in news whether as a branch of copyright or as happened in the United States in the form of a separate "misappropriation" doctrine. In this account the line connecting technological innovation to copyright is straight and simple: technology changes the market which creates a "need" for new property rights which, in turn, appear in due course.

This first variant of the reactive model of copyright is what Robert Gordon called many years ago "evolutionary functionalism". It assumes that society, or rather economic activity, at a particular stage of technological development has certain "needs", that there is a clear link between such needs and certain legal forms necessary to meet them, and that in due course the functionally appropriate legal forms will appear. A different variant of the reactive model takes one step away from functionalism by replacing economic needs with interests. In this account the economic changes brought about by technological developments create new configurations of private interests in regard to intellectual resources. These

³ Harold Demsetz, "Toward a Theory of Property Rights" (1967) 57 Am. Econ. Rev. Papers & Proc. 347.

⁴ The arguments in the text assume that the social value of property rights increased by the rise in value of an informational resource or by the increased threat of copying outweighs any social costs of property rights. This is not necessarily always the case, however. Changes in the value of an informational resource and public access to it may increase the inevitable social cost of copyright just as they increase its social benefits. For a similar criticism of the application of the Demsestz theory to copyright, see Brett M. Frischmann, "Evaluating the Demsestzian Trend in Copyright Law" (2007) 3 Rev. L. & Econ. 649.

⁵ E.g. Lionel Bently, "Copyright and the Victorian Internet: Telegraphic Property Laws in Colonial Australia" (2004) 38 Loy. L.A. L. Rev. 71; Lionel Bently, "The Electric Telegraph and the Struggle over Copyright in News in Australia, Great Britain and India" in Brad Sherman and Leanne Wiseman (eds), Copyright and the Challenge of the New (The Netherlands: Wolters Kluwer, 2012), p.43.

⁶ For a description of the effects of telegraphy on the news gathering business in the United States (not necessarily sharing the functionalist outlook), see Robert Brauneis, "The Transformation of Originality in the Progressive-Era Debate over Copyright in News" (2009) 27 Cardozo Arts & Ent. L.J. 321, 339–350.

International News Service v Associated Press 248 U.S. 215 (1918).

⁸ Gordon, "Critical Legal Histories" (1984) 36 Stan. L. Rev. 57, 59–65.

⁹ Gordon identified the shift from social needs to interests as the first level of departure from functionalist legal history. Gordon, "Critical Legal Histories" (1984) 36 Stan. L. Rev. 57, 71–74.

interest groups act through the social-political bargaining process to shape copyright law into the pattern that best serves their interests.¹⁰

Consider, for example, the rise of the film industry at the dawn of the twentieth century. Motion pictures technology was developed in the last decade of the nineteenth century with a clear focus on mass commercial exploitation. Within a decade, film became a national (soon to be international) industry operating in a lucrative market and dominated by a few big commercially sophisticated firms. Even before commercial exploitation, actors in the field understood the potential private value of copyright for protecting their investment and tried to extend it to the new medium by registering copyright for the very first motion pictures produced. Soon after, the dominant players used their resources and sophistication to convince the courts to give an official imprimatur to this extension. By the second decade of the twentieth century these players, led by the Edison Company, established and successfully used an intricate lobbying apparatus designed to solicit from Congress copyright legislation conducive to their economic interests.¹¹

These two outlooks capture important aspects of the interwoven histories of technology and copyright. Technological innovation has been an important engine in creating new forms of expressions as well as modes of economic exploitation built on them, and these changes left their mark on copyright law. Interest groups interaction has been a central shaping force in the history of copyright. It is also an important explanatory element that fills in the causal mechanism connecting social value to legal change missing in Demsetz's original theory. Accounts based on these outlooks allow, however, a glimpse only at part of the picture of copyright's history. When this partial glimpse is taken as the whole, the result is likely to be a distorted image. One difficulty with such accounts is the sharp distinction they assume between the sphere of technology and other social spheres. The underlying premise is that technological change happens within its own sphere according to the internal logic and forces that drive technological change and in insulation from other social spheres including the law. The outcome is a completely exogenous model: technological change is a black box producing certain outcomes through which the links of markets and interest groups end up shaping copyright law. Relatedly, the legal sphere is understood as completely reactive. The "real action", as it were, happens elsewhere. Copyright law only reflects or reacts to those more fundamental social spheres of technology, markets and politics.

Finally, accounts based on the reactive model smack of determinism. Given a certain output produced in the technological sphere, other developments, most clearly those taking place in the reactive field of the law, appear to be inevitable. This is most obvious with the functionalist variant that simply assumes that certain technological conditions require specific legal forms and that these forms will eventually appear. Depending on their exact version, interest group-based accounts may break with the strong Panglossian undertones of functionalism. Interest group politics may be inflicted by certain failures, such as collective action problems, that may systematically lead to suboptimal results in the field of copyright law. Shifting the lens to that of interest group politics probably also loosens somewhat the grip of determinism connecting technological to legal change. But only a little. The path leading from technology to interests to certain legal forms, while perhaps a little less inevitable than functionalism's legal reflection of social needs, is still rather firm and straightforward. In short, copyright history written on the basis of the assumptions of the reactive model is deterministic (and sometimes apologetic), and reductionist in treating legal forms as the necessary results of exogenous technological developments.

¹⁰ Robert P. Merges, "One Hundred Years of Solicitude: Intellectual Property Law, 1900-2000" (2000) 88 Cal. L. Rev. 2187.

¹¹ Oren Bracha, "How Did Film Become Property? Copyright and the Early American Film Industry" in Sherman and Wiseman (eds), Copyright and the Challenge of the New (2012), p.141.

¹² Thrainn Eggertsson, *Economic Behavior and Institutions* (Cambridge: Cambridge University Press, 1990), p.250; Thomas W. Merrill, "The Demsetz Thesis and the Evolution of Property Rights" (2002) 31 J. Legal Stud. 331, 333.

Technology as a social phenomenon

Is there an alternative to the reactive model of copyright history? The first necessary step toward such an alternative is a different understanding of the relationship between technology and society. Such an alternative understanding is found in a loosely related group of approaches that have developed in recent decades within the sociological and historical study of technology. I shall refer to these approaches collectively as the Social Shaping of Technology (SST) and offer a description that ignores the nuanced differences between them that are less relevant for present purposes. 13 The SST outlook had appeared as a reaction to what was seen by its proponents as simplistic and over-deterministic premises underlying at the time much of the historical and sociological research of technological development. The most fundamental premise of this kind was that technology and society are completely distinct spheres. The influence of technology on society was acknowledged, sometimes to the point of technological determinism that reduced complex social systems (e.g. Feudalism) to isolated technological innovations (e.g. the stirrup). The premise, however, was that technology shapes society in a completely exogenous way. Technology was assumed to develop according to the internal logic and forces of a distinct technological sphere. Once produced the output of this technological process may profoundly influence society, but technological innovation remains a black box: an autonomous and external factor impervious to the tools for analysing social phenomena.

SST offered an alternative model in which technology and society are seen as mutually-constitutive spheres interacting endogenously. For example, the technological innovation of vehicles powered by an internal combustion engine (such as cars) deeply shaped many social aspects spanning the range between suburbanisation and norms of courtship or sexual behaviour. The technological innovation itself, however, happened within society in the sense of being influenced by multiple social factors. The technological design of a car, the meaning of the technology and how it was used and applied were shaped by, among other things, the relative power of various interest groups and the interaction between them, the degree of governmental legitimacy for regulating the "private sphere", and common cultural and legal concepts such as "efficiency", "environment" or "consumer protection". Technology and society, SST maintained, are locked together in this sort of mutually constitutive relationship. At every stage of technological development—research and development; commercialisation and marketing; and application by users—social actors and forces shape the meaning and uses of technology and often its design features.¹⁵

It follows that the analysis of technology and society should be done as one combined system: the socio-technological system. The electricity system, for example, is made not only of power stations, power lines and transformers, but also of, inter alia, engineers, power companies and their directors, banks and bankers, power users, and the various norms, interests and beliefs that underlie the actions of such actors. An appropriate analysis of a socio-technological system must take into account the different social actors whose actions create the system. A particular technological framework is conceived of as the outcome of the interaction and negotiation between various individuals and groups holding different, and often competing, preferences in regard to technological design and use. These actors and their behaviour vis-à-vis the technology are shaped and influenced by multiple factors: economic interests, institutional roles, ideologies, social norms and cultural conceptions.¹⁶

SST offered two fundamental concepts for making sense of how these multiple factors interact with technology: interpretive flexibility and stabilisation. *Interpretive flexibility* is the assumption that at every

¹³ Hughie Mackay and Garret Gillespie, "Extending the Social Shaping of Technology Approach: Ideology and Appropriation" (1992) 22 Soc. Stud.

Sci. 685; Robin Williams and David Edge, "The Social Shaping of Technology" (1996) 25 Res. Pol'y 865.

14 Lynn White Jr, *Medieval Technology and Social Change* (Oxford: Clarendon Press, 1968); Bert Hall, "Lynn White's Medieval Technology and Social Change after Thirty Years" in Robert Fox (ed.), Technological Change: Methods and Themes in the History of Technology (London: Routledge,

¹⁵ Philp Brey, "Philosophy of Technology Meets Social Constructivism" (1997) 2 Techné J. Soc'y Phil. Tech. 56, 58.

¹⁶ Thomas P. Hughes, "The Seamless Web: Technology, Science, Etcetera, Etcetera" (1986) 16 Soc. Stud. Sci. 281.

stage of the process of developing and applying technology there is room for different choices or directions for the design, meaning and use of the technology. These choices are made not on the basis of purely "technological" or engineering-based considerations, but rather as part of the social process of interaction between different groups or individuals and the factors that shape their actions. At the end of the nineteenth century, for example, there were several radically different designs of the new vehicle known as "the bicycle" and multiple possible trajectories for technological development. Developers and manufactures of bicycles interacted with different social groups of potential users including women, young men and older men, each operating within a unique set of interests, cultural assumptions and norms (e.g. performance and speed, safety, modesty). The ultimate design of the bicycle was the product of the compromises or arrangements born out of the interaction between these groups, their preferences and norms. ¹⁸ Stabilisation is the assumption that, despite the theoretically ever-present multiple trajectories for technological development, socio-technological systems usually reach a stage where a particular framework "hardens". Once a particular framework becomes entrenched in a social-institutional-ideological system built around it, changing it becomes harder. 19 Thus, for example, after 20 years of fluid social negotiation, a relatively stable model of the meaning of "bicycle" and of the technological problems and challenges requiring solution in this area crystalised and became entrenched.20 The states of interpretive flexibility and stabilisation are always relative and dynamic: while the resistance created by stabilisation may be substantial, changing social circumstances may destabilise the system or allow "subversive activity" that brings about new eras of relative interpretive flexibility.

What might copyright history written within this alternative SST framework look like? To begin with, it would drop the assumption of a linear and inevitable progression from technological innovation to economic needs and (through the mediation of interests) to legal forms. Consider the early appearance of proto-copyright in England in the sixteenth century soon after the arrival of the printing press. The printing press with the opportunities and dangers it brought was, no doubt, an "agent of change" in multiple areas including the law. But the connection of its appearance to the rise of proto-copyright was mediated through an interaction with various social factors. There were multiple interest groups involved: English members of the book trade organised within the Stationers' Company had economic interests in protecting their investment and in smothering potential local and foreign competition; internal divisions in the book trade between dominant booksellers, smaller booksellers and printers created different interests within the trade; and monarchs and aristocracy had an interest in restricting the subversive potential of the press and the risk it posed to existing political and symbolic orders. These interests did not simply translate, however, into the legal forms of proto-copyright. The way the interests were defined and understood as well as the legitimate or even imaginable arrangements available to them were heavily structured through the time's ideology and common institutional forms.

The two administrative-legal mechanisms for regulating printing rights that appeared were the printing patent (an ad hoc exclusive royal privilege to print conferred on a specific publisher)²² and the stationers'

¹⁷ Trevor J. Pinch and Wiebe E. Bijker, "The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other" in Wiebe E. Bijker, Thomas Parke Hughes and T.J. Pinch (eds), *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology* (Cambridge, Mass.: MIT Press, 1987), p.29.

¹⁸ Pinch and Bijker, "The Social Construction of Facts and Artifacts" in Bijker, Hughes and Pinch (eds), *The Social Construction of Technological Systems* (1987), p.40–44.

¹⁹ Thomas Hughes used the term "technological momentum" to refer to this assumption. Thomas P. Hughes, "Technological Momentum" in Merritt Roe Smith and Leo Marx (eds), *Does Technology Drive History? The Dilemma of Technological Determinism* (Cambridge, Mass.: MIT Press, 1994).

²⁰ Pinch and Bijker, "The Social Construction of Facts and Artifacts" in Bijker, Hughes and Pinch (eds), *The Social Construction of Technological Systems* (1987), pp.44–46.

²¹ Elizabeth L. Eisenstein, The Printing Press as an Agent of Change: Communications and Cultural Transformations in Early Modern Europe (Cambridge, Mass.: MIT Press, 1979–1980).

²² On the printing patent see John Feather, *Publishing, Piracy and Politics: An Historical Study of Copyright in Britain* (New York: Mansell, 1994), pp.10–14; Lyman R. Patterson, *Copyright in Historical Perspective* (Nashville: Vanderbilt University Press, 1968), pp.78–113.

copyright (a standardised exclusive privilege within the guild framework).²³ The printing patent was a readily available mechanism. It took the form of a very common policy tool used by English monarchs in a variety of areas, namely, exclusive trade privileges conferred on a chosen recipient as an act of political discretion, grounded in the royal prerogative and justified in the name of promoting the good of the realm. Through the combined economic and political control it created, the printing patent was grounded in the meeting of the economic interest of a few dominant publishers with that of the monarch in tight control of printed expression. The stationers' copyright embodied a similar meeting of interests instantiated in another prevalent institutional form: the guild structure. The guild was more than an economic institution. It was an intricate form of social organisation with established norms and procedures.²⁴ It was the centralised regulative power of the guild that induced the monarch to grant the Stationers' Company a charter (later buttressed by other royal decrees), granting it far-reaching powers which created not simply a property right in texts, but rather an inseparable system of licensing of content and economic rights. The guild institutional context also shaped the features of the economic right that would become copyright, including both its increasingly standardised right-like form and persisting discretionary, ad hoc elements traceable to the guild's internal institutions. This entire system was supported by a particular prevalent ideology in regard to both the legitimate and necessary role of tight regulation of public expression and a concept referred to as "a well regulated book trade" which encompassed much more than economics. The Stationers, as evidenced by their many official petitions, became masters of deploying and manipulating that ideology.

This social system that consolidated early in the sixteenth century was not a superstructure entailed by a base in the form of the printing press and the economic interests wrought by newly created markets. It was a socio-technological system whose parts were connected by multiple causation and influence. It is not easy, although perhaps not impossible, to tell a clear story of social factors shaping the changing design of printing technology in this era. There is no doubt, however, that the social uses, application and meaning of printing technology were heavily shaped by the social system in which the technology was embedded. Who could possess and operate a press, in what manner, under which conditions and with what produced content—in short, all significant aspects of the operation and meaning of printing technology—were strongly constrained by various social factors, including direct legal regulation of the technology itself.

In England the socio-technological system of proto-copyright stabilised around the middle of the sixteenth century and held for about 150 years. When the system eventually destabilised and a new era of interpretive flexibility arrived, it was again due to diverse social factors, including a decline in the legitimacy of tight political censorship, the old policy tools of royal monopoly grants falling out of favour, weakened guild power and emerging ideologies of possessive individualism and authorship. In the new system that appeared—an occurrence that is commonly traced to the 1710 Statute of Anne regime, but in fact involved a more gradual process—many of the elements of the previous socio-technological order were carried over and continued to exert their force.

Law and technology as mediums of power

Can the insights of legal scholarship add anything to the way we understand the combined history of copyright and technology? An early criticism of SST was its relative disregard of social relations of power.²⁵ Too much emphasis on negotiation and compromise among social groups runs the risk of obscuring the power dimension of socio-technological systems in the sense of both the balance of power that often shapes a particular system and the power allocation entrenched by a system. This is where, surprisingly

²³ On the stationers' copyright, see Feather, *Publishing, Piracy and Politics* (1994), pp.14–36; Patterson, *Copyright in Historical Perspective* (1968), pp.42–77.

pp.42–77.

24 On the Stationers' Company as a guild, see Cyprian Blagden, *The Stationers' Company: A History, 1403–1959* (Stanford: Stanford University Press, 1977).

²⁵ See Mikael Hard, "Beyond Harmony and Consensus: A Social Conflict Approach to Technology" (1993) 18 Sci. Tech. Human Values 408; Stewart Russel, "The Social Construction of Artefacts: A Response to Pinch and Bijker" (1986) 16 Soc. Stud. Sci. 331.

perhaps, legal theory comes in. In the first half of the twentieth century realist legal scholars and their institutional economists allies had developed a model for analysing law as a pervasive system for allocating social bargaining power across individuals and groups. Half a century later critical legal scholars expanded and radicalised this model. The allocation of power model can be applied to law, technology and the relationship between them, thereby correcting SST's blind spot.

The realist model of law as a mechanism for allocating coercive power is best understood as a reaction to the private ordering paradigm. In that paradigm individuals and groups are seen as fashioning through free agreements among them the social arrangements by which they are governed, such as the division of income. Bargaining is conceptualised as a series of voluntary private choices, free from coercion. The realist model is an antithesis of private ordering. It sees the "deals" worked out between individuals and groups with conflicting interests as a function of their bargaining power, which is, in turn, determined by their potential coercive power over each other.²⁶ A freely negotiated employment contract, for example, is the product of the power exerted by the parties upon each other through coercive "threats". More specifically, this bargaining power is constituted by two elements: the pressure means available to each party as part of the bargaining process (e.g. a sit in or no cause dismissal) and the alternatives open to them in the absence of an agreement (e.g. unemployment insurance or employing immigrant labourers). The employer and the employee "freely" agree on the employment terms only as a result of this balance of power defining what they could "do to each other" or do in the absence of the other's co-operation. The law is a crucial factor in creating this balance of bargaining power. To a large extent, it is the law that determines what is allowed as part of the bargaining process and which alternatives are open to the parties. As Robert Hale put it:

"It is the law of property which coerces people into working for factory owners—though... the workers can as a rule exert sufficient counter-coercion to limit materially the governing power of the owners."27

This places government at the heart of the sphere of private ordering allegedly free from coercive governmental intervention. The legal rules backed by coercive governmental power allocate bargaining power and thereby shape the outcomes of the bargaining process. This is true even when the law "does not intervene". Given an effective legal system, the legal relation of a "privilege" leaving the parties to act as they will with no legal duty or right against each other still allocates bargaining power.²⁸ From this perspective, law becomes a system of background rules that structure social power relations, the bargaining process in which this power is exerted and the distributive outcomes of the process.

Half a century after it was developed CLS scholarship had extended the realist model of law as power in three different ways. First, the model's sphere of application was expanded from labour/capital relations in the economic realm on which the realists tended to focus to any social distribution of resources in the broadest sense. Race, gender, family relations and a variety of other contexts were all analysed in these terms.²⁹ Secondly, CLS writers highlighted the connection between the model of law as power and another realist theme, namely, legal indeterminacy. Given a reality in which, in any particular moment, a substantial part of the legal rules are "up for grabs" in terms of their exact meaning or application, these writers argued, conflicting social groups use their bargaining power to try to shape the rules to fit their agendas.³⁰ The legal rules that structure the bargaining process are then, at least in part, a product of that process. Finally, CLS scholarship, inspired by critical theory, expanded the concept of power to include cultural

²⁶ See Duncan Kennedy, "The Stakes of Law, or Hale and Foucault" (1991) 15 Legal Stud. F. 327, 328–332; Warren J. Samuels, "The Economy as a System of Power and its Legal Basis: The Legal Economics of Robert Lee Hale" (1973) 27 U. Miami L. Rev. 261; Barbara H. Fried, The Progressive Assault on Laissez-Faire: Robert Hale and the First Law and Economics Movement (Cambridge, Mass.: Harvard University Press, 1998).

²⁷ Robert Lee Hale, "Coercion and Distribution in a supposedly Non-Coercive State" (1923) 38 Pol. Sci. Q. 470, 473.

²⁸ Kennedy, "The Stakes of Law, or Hale and Foucault" (1991) 15 Legal Stud. F. 327, 333.

²⁹ Kennedy, "The Stakes of Law, or Hale and Foucault" (1991) 15 Legal Stud. F. 327, 341–354.

³⁰ Kennedy, "The Stakes of Law, or Hale and Foucault" (1991) 15 Legal Stud. F. 327, 336.

and social shaping of subjectivity.³¹ At the heart of this move is the premise that the law shapes human behaviour not only through external incentives (i.e. a threat of a sanction or a promise of a reward), but also "from the inside", by constituting a system of cultural categories, meanings and practices that shape human consciousness.³² This is a Foucaultian concept of power (ironically applied to the realm of formal state power that Foucault sought to trivialise). The law shapes the bargaining process here and influences its outcomes, by structuring the parties' beliefs, categories and preferences.

Interestingly, the realist-crit model of the law as a mechanism for allocating power is equally applicable to technology. Both the law and a particular technological framework can be usefully understood as structuring social power relations on three levels. First and most apparently, both law and technology directly regulate human behaviour, the former through sanctions or rewards, the latter through imposing physical constraints or opening up possibilities. Secondly, both law and technology shape the social bargaining process by defining the (legal or technological) bargaining tools and alternatives available to the parties. Thirdly, both areas also shape the bargaining process by constituting the parties' consciousness through cultural categories and social practices. As law and technology also influence each other, what emerges is a combined system for structuring the social bargaining process on all three levels.

Copyright history offers vast opportunities for fruitful application of this model of law and technology. Consider, for example, the history of sound and image recording and its interaction with copyright. Existing accounts skilfully portray the development of copyright in this area as the result of the interaction between numerous stakeholders: authors and performers, music publishers, recording companies, manufacturers of recording equipment, radio and television broadcasters, and of course the largest group who usually did not get a sit at the table, i.e. consumers or users.³³ The SST outlook adds to this analysis attention to the ways that the negotiations between these groups and the compromises hammered out were shaped by other social factors such as various ideologies or the institutional roles of various players. The model of law and technology as mediums of power creates yet another explanatory layer. It raises a host of additional questions such as: How were the copyright arrangements worked out at a particular stage influenced by the relative bargaining power of the various parties involved and how did existing background arrangements of law and technology help to shape this balance? How did the resultant copyright and technological arrangements created at one stage of this process affect the division of the bargaining power and the result of the bargaining in successive stages?

The more recent history of the 20 years of interaction between copyright and digital technology practically begs for a similar exploration of the iterative power dynamics of copyright, technology and social bargaining. The model seems particularly promising in this context because of the rise during this period of conscious strategies for combining legal and technological regulation epitomised by examples such as secondary liability imposed on technological intermediaries, anti-circumvention legislation or graduated response schemes implemented by ISPs. The depth and pervasiveness of some of these techno-legal strategies also underscores the importance of the third dimension of power relating to the structuring of the subject. Such measures raise the spectre of legal-technological structuring of the practices of human interaction with informational goods in ways that are bound to shape individual expectations, concepts and values in this field. In this sense one crucial aspect of what has been dubbed "The Battle over the Institutional Ecosystem in the Digital Environment" is a (still ongoing) battle over symbolic and cultural

³¹ Kennedy, "The Stakes of Law, or Hale and Foucault" (1991) 15 Legal Stud. F. 327, 351–362

³² Gordon, "Critical Legal Histories" (1984) 36 Stan. L. Rev. 57; Austin Sarat and Thomas R. Kearn, "Beyond the Great Divide: Forms of Legal Scholarship and Everyday Life" in Austin Sarat and Thomas R. Kearn (eds), Law in Everyday Life (Ann Arbor: University of Michigan Press, 1993), pp.27–32.

Battles over the Public Performance Right" in Sherman and Wiseman (eds), Copyright and the Challenge of

the New (2012), p.115; Stuart Banner, American Property: A History of How, Why, and What We Own (Cambridge, Mass.: Harvard University Press, 2011), pp.109-129.

allocation of bargaining power that is likely to influence all future legal-technological arrangements for interacting with information.34

Conclusion: critical copyright history

Copyright history that combines the insights of technology as a social phenomenon and of the power model of law and technology is critical copyright history. What is copyright history written from this perspective good for? Is it a worthwhile endeavour, given the difficulty involved in producing it?

One important feature of critical copyright history is its rejection of the pervasive assumption about technological or economic "needs" that require a particular legal "response" in the form of copyright. When the multitude of social factors that interact with technology and copyright is explored, the belief that a specific technological innovation or a configuration of markets inevitably leads to certain forms of copyright loses its plausibility. This opens up space for the classic project of CLS: "unfreezing legal reality" by weakening the hold that current legal forms have over us and freeing us to imagine alternatives.³⁵ Relatedly, such history can expose the patterns of power embedded in our current copyright system. It can show that a particular legal-technological framework is not the product of irresistible, impersonal and objective forces such as technological innovation or economic efficiency, but rather the result of a power struggle between specific social groups involving winners and losers. Another facet of this effect of critical copyright history is a better understanding of the ways in which the product of the past embedded in our copyright system helps shape the future by allocating legal and technological bargaining power. Critical copyright history is particularly useful in helping us come to terms with the third dimension of legal and technological power, namely, the shaping of individual consciousness. Copyright law is strewn with ideological concepts (think "originality", "idea/expression" or "the work") that structure the way we understand what copyright is about and what our feasible or even imaginable alternatives are. Tracing the genealogy of those concepts, relativising them by historicising them and better understanding the power structure embedded in them may help loosen their hold upon us.

For those who find this brand of history writing promising, copyright history is a fertile ground. It offers many opportunities to the student of law and technology who is interested in exploring the interaction of the two as critical copyright history. There is much to be done.

³⁴ Yochai Benkler, "The Battle over the Institutional Ecosystem in the Digital Environment" (2001) 44 Communications of the ACM 84. 35 Gordon, "Critical Legal Histories" (1984) 36 Stan. L. Rev. 57, 70–71; Robert Gordon, "Unfreezing Legal Reality: Critical Approaches to Law" (1987) 15 Fla. St. L. Rev. 219.

The Ecological Origins of Copyright Scepticism

Adrian Johns

Allan Grant Maclear Professor, Department of History, University of Chicago

© Copyright; Economics and law; Legal history; United States

That intellectual property (IP) is an ecological topic ought to be obvious. After all, it is a structuring element of the modern creative world, and as such it cannot fail to participate in the ever-shifting relationship between society and nature. But for the most part this has not typically been apparent to commentators on IP issues. And if the situation has changed somewhat in recent years that is only because the domain of creativity has itself become overtly ecological. The debate over genetically modified organisms (GMOs) has inevitably drawn attention to the intellectual property regime within which they are deployed: fears about monocultures are rooted in patent law at least as much as in bioscience per se. As a result, participants in this debate are now sometimes explicit about their positions at least having ecological consequences. That is all to the good. Yet there remain deeper questions about the ecology of intellectual property itself—about the very constitution of IP being in some way essentially ecological. I think it is time to ask them.

Or rather, I think that they have already been asked, and it is time to attend to the answers. For there was a period in the past in which ecological criticism was brought to bear, in particular on copyright, but also on patents. At the origin of what became an ideology of copyright scepticism, protagonists fought over the proper relationships between nature, economics and creativity, with the interaction of natural and social systems very much in mind. In the mid to late nineteenth century this range of reference ceased to characterise debates, for complex reasons. Some of those reasons will be explored here, but for the moment it is sufficient to note that it was at around the same time that *intellectual property* made its appearance as a standard concept.²

Scepticism about copyright, as about intellectual property in general, is an everyday reality in the late-modern world. It pervades our information culture, taking different but related forms in the realms of music, digital media, software, biotech and genomics, not to mention publishing—which is where it began. Some of its manifestations have been extremely passionate (think of protests in the developing world against pharmaceutical patenting or GMOs), some anarchic (Anonymous and Lulzsec) and some extremely consequential. For an example of that, we need look only to the sciences, where "open access" protocols have helped transform the communication and reward system on which our most reliable knowledge depends, or to the Internet itself, which depends on open-source code for its routine operations.³ For all that copyright is a major structuring element of the information age, scepticism about it is undeniably a force to be reckoned with too.

^{*}Early versions of this article were presented at Oberlin College, The New School in New York and University College, London. I am grateful to the audiences there for important and percipient criticisms, and to James Green at the Library Company of Philadelphia for facilitating my access to the Company's copy of Henry Carey's *Harmony of Nature*.

¹ The literature on this topic is large and contentious, but for brief accounts that show the separability of biotech from monoculture, see Alessandro Delfanti, *Biohackers: The Politics of Open Science* (London: Pluto, 2013) and Janet Hope, *Biobazaar: The Open Source Revolution and Biotechnology* (Cambridge, Mass.: Harvard University Press, 2008).

² Brad Sherman and Lionel Bently, *The Making of Modern Intellectual Property Law: The British Experience, 1760–1911* (Cambridge: Cambridge University Press, 1999).

³ Michael Nielsen, Reinventing Discovery: The New Era of Networked Science (Princeton: Princeton University Press, 2012), pp.187–207; Steve Weber, The Success of Open Source (Cambridge, Mass.: Harvard University Press, 2004), pp.224–272; John Willinsky, The Access Principle: The Case for Open Access to Research and Scholarship (Cambridge, Mass.: MIT Press, 2006).

Yet our understanding of where this scepticism came from, and hence of what it really means, is for the most part primitive. Critics view it as essentially derivative—as a set of responses to intellectual property, and in particular to intellectual property law. They do not see it as something with other constituent elements, distinct roots and its own history. In the last few years this has begun to change, as researchers have pointed to the influence of countercultural movements in the 1960s and to classical liberal beliefs inherited from John Stuart Mill. Christopher Kelty has made the sophisticated and suggestive observation that hackers themselves are fond of peddling stories of their affinities with past movements such as Reformation Protestantism.4 So there are signs that copyright scepticism may yet be recognised as the complex, historically-shaped and informed ideology that it is. But it remains the case that we have as yet very little comprehension of the different pathways that have brought it to its current position. Its origin and history are still neglected because the consensus is that they do not really matter. It is hard to think of another social movement of comparable consequence the history of which is regarded with such complacent ignorance.

Activists and copyright sceptics themselves represent only partial exceptions to this rule. Declarations of the positive economic, creative and moral virtues of openness, copying and sharing abound in writings by such figures as Cory Doctorow, Chris Kelty, Richard Stallman, Yochai Benkler and Kembrew Macleod, to mention a representative handful from relevant communities.⁵ But even here the assertions tend to be historically superficial. Moreover, when they do venture longer-term stories, they invariably adopt the terms, chronologies and analytical perspectives familiar from standard histories of copyright law, extending all the way back to the initial 1710 Statute of Anne. This is starkly ironic, because such histories, like all histories, are not neutral. They incorporate the conviction that progress, modernisation and even virtue have always aligned with the proponents of copyright: indeed, this is arguably what they were originally meant to do.⁶ The very groups who assert alternatives to ever-increasing copyright constraint therefore rely on a received history predicated on their own marginality.

I submit that we can and should do better. The questions of how copyright scepticism arose and of its change over time deserve our sustained attention because this scepticism is far more than a mere idea: it has become, over the generations, a fully-fledged corpus of principles, stances, values and practices. Knowing where an ideology like this came from and how it developed helps us understand what it really is, what motivates its adherents and where it may go next. To see that, however, we shall need to recognise the possibility of defining the bounds of our inquiry more broadly. Excavating the deep history of copyright scepticism requires us to accept the criteria of relevance that previous generations did. It will therefore mean moving beyond our accustomed terrain of legal doctrine, book-trade custom and economics. Indeed, in the case of economics it means questioning the historical salience of the discipline itself.

This matters particularly because of the moment when copyright scepticism appeared. While traces of scepticism can be found in the first days of copyright itself (and arguably even earlier), in our sense it coalesced only later, in the decades from the mid-eighteenth century to the mid-nineteenth. This was a period of imperial expansion and industrial growth. Print went through its own transition, in which steam-powered machines produced the first true mass medium, and the "publisher" came into existence as a stable, recognised profession. But above all it was a period of radical upheaval in all the intellectual

⁴ Adrian Johns, *Piracy: The Intellectual Property Wars from Gutenberg to Gates* (Chicago: University of Chicago Press, 2009), pp.463–491; Christopher M. Kelty, Two Bits: The Cultural Significance of Free Software (Durham: Duke University Press, 2008), pp.65–79; E. Gabriella Coleman, Coding Freedom: The Ethics and Aesthetics of Hacking (Princeton: Princeton University Press, 2013), pp.118-119.

Yochai Benkler, The Wealth of Networks: How Social Production Transforms Markets and Freedom (New Haven: Yale University Press, 2006); Kelty, Two Bits (2008); Kembrew McLeod, Freedom of Expression: Overzealous Copyright Bozos and Other Enemies of Creativity (New York: Doubleday, 2005); Richard M. Stallman, Free Software, Free Society: Selected Essays (Boston: Free Software Foundation, 2002). For Doctorow's views, see his many contributions to BoingBoing.net [Accessed October 1, 2013].

⁶ See, for example, the explicit discussion in Eaton S. Drone, A Treatise on the Law of Property in Intellectual Productions in Great Britain and the United States (Boston: Little, Brown & Co, 1879), pp.67–68, which asserts that "the history of literary property ... shows" that it existed for more than 200 years before the Act of Anne, and that this fact effectively disqualifies any argument that copyright is a monopoly. E.g. Robert A. Gross and Mary Kelley (eds), A History of the Book in America (Chapel Hill: University of North Carolina Press, 2010), Vol.2.

disciplines. The formative years of copyright scepticism coincided with a time when the categories that western society used to sort out the world were in flux, to an extent that has never been matched before or since. Copyright scepticism was especially inflected by the eclipse of older pursuits known as *political economy* and *natural history* by the new enterprise of economics. This process involved a re-sorting of some fundamental categories: nature, society, work, energy, time and space. As a result, one strand of sceptical commitment was not concerned with property, as such, at all. And far from originating in principles of liberalism and *laissez-faire*—the cornerstones of modern libertarian "hackerdom"—it arose in radical opposition to those doctrines. Instead it engaged different but no less fundamental problems—problems of economy, ecology and empire. These themes had been conjoined in the older enterprise of natural history, but they tended to be formally disconnected in the new approaches associated with figures like David Ricardo and J.R McCulloch. Yet in practice economics could not, even in its liberal guise, shed them entirely. So how they related to each other was a question that came to preoccupy nineteenth-century experts. And the stakes for sceptics at this juncture were both different from and higher than what we now take them to be.

Reprinting as practice and principle

The starting point for this process, at least, is relatively familiar: the "system" (as contemporaries called it) of reprinting in nineteenth-century America. This system has been described too many times to warrant another detailed treatment here. Briefly, the new United States did adopt a copyright law, but it did not involve any commitment to copyrights observed in other countries. That was entirely conventional by the standards of the time. But the United States was unusual in what it wanted the printed book to do. ¹⁰ A fast-growing republic proud of its literate population, it sought to develop its own industry and culture, if necessary by helping itself to the technologies and skills of Europeans. As Doron Ben-Atar has described at length, early national Americans invested extensively in the appropriation of European knowledge, men and machines. ¹¹ Book publishing in particular had by the 1820s become an industry centred on the reprinting of books originally issued in London and other European cities. The "game", as players called it, took on an extraordinarily febrile character, as publishers competed for the latest novels, histories, memoirs and travel literature. There was nothing illegal about it; the question was whether there *should* be something illegal. Out of that question came a movement to internationalise—and, at length, to universalise—copyright. But in the meantime, this practice of reprinting shaped what was published in the United States, how it was published, where it was published and how it was read.

Among the most respected players of this game—and in effect its rule-maker—was Henry C. Carey of Philadelphia. Carey's business had been established before the Revolution by his father, Mathew, a radical Irish émigré who became not only the first major American publisher but also an important political and economic ideologue. His publishing house was by the 1810s one of the largest in the western hemisphere. When he inherited it, Henry perfected the strategies of reprinting, for example by employing the first permanent "agent" in London to actively search for new works. So when Britain mounted the first organised

⁸ Jon Klancher, Transfiguring the Arts and Sciences: Knowledge and Cultural Institutions in the Romantic Age (Cambridge University Press, forthcoming); Robin Valenza, Literature, Language, and the Rise of the Intellectual Disciplines in Britain, 1680–1820 (Cambridge University Press, 2009), pp.10–20; Denise Phillips, Acolytes of Nature: Defining Natural Science in Germany 1770–1850 (Chicago: University of Chicago Press, 2012).

⁹ See especially Dipesh Chakrabarty, "The Climate of History: Four Theses" (2009) 35 Critical Inquiry 197; Fredrik Albritton Jonsson, "Rival Ecologies of Global Commerce: Adam Smith and the Natural Historians" (2010) 115 Am. Hist. Rev. 1342; Matt Price, "Economics, Ecology, and the Value of Nature" in Lorraine Daston and Fernando Vidal (eds), The Moral Authority of Nature (Chicago: University of Chicago Press, 2004), pp. 182–204. This new body of work moves decisively beyond the interesting but schematic assertions relating nature, society and modernity made by Bruno Latour and others—for example, in Latour's We Have Never Been Modern (Cambridge, Mass.: Harvard University Press, 1993).

¹⁰ Trish Loughran, *The Republic in Print: Print Culture in the Age of U.S. Nation Building, 1770–1870* (New York: Columbia University Press, 2007), pp.21–29 and passim; Meredith L. McGill, *American Literature and the Culture of Reprinting 1834–1853* (Philadelphia: University of Pennsylvania Press, 2003), pp.85–87.

¹¹ Doron S Ben-Atar, Trade Secrets: Intellectual Piracy and the Origins of American Industrial Power (New Haven: Yale University Press, 2004).

resistance to reprinting in the late 1820s he stepped up to defend it. He became probably the most important Anglophone critic of copyright in the nineteenth century.

Championing a very strong principle of literary property indeed—stronger than anything in the United Kingdom itself—the British publishers denounced American publishers as "Literary Pirate[s]" who not only expropriated works but "dismembered" them. 12 They set up an office in New York, hoping to supplant these pirates. The tactic proved disastrous (the office quickly collapsed), but the moral strategy endured. Charles Dickens and others pressed home the charge repeatedly. For decades, British claims of moral justice confronted American counterclaims of democratic accessibility. Each side framed the issue as a struggle for the very soul of the republic. Henry Carey's contribution was a strikingly radical argument against universal literary property. His position was complex, however, because it arose in conjunction with a much grander intellectual project. Carey christened this project "societary science." 13

Societary science was one of a number of ambitious, totalising visions promoted by intellectuals of the mid-nineteenth century such as Auguste Comte, Herbert Spencer and Karl Marx. It was by far the most influential of them to be produced within the United States. And it was built substantially out of reprints—especially of Comte, copies of whose positivist writings Carey circulated to friends along with his own anti-copyright tracts. ¹⁴ Carey agitated ceaselessly in its name for about 40 years, during which he became the foremost American political economist of the age, and a major figure in the early Republican Party. He authored several hefty volumes of societary science itself, plus an unending torrent of letters, tracts, pamphlets and editorials applying its principles to every topic of the day. Copyright was just one of them.

Like Comte—although Carey grew increasingly leery of the comparison—Carey meant to build a unified science based on a hierarchy of natural laws. Briefly, it began with the individual human, "the molecule of society". This molecule had, he believed, a natural need for "association" with others. By a "great law of molecular gravitation", humans attracted each other, forming first villages, then cities. This law was "the indispensable condition of the existence of man". These systems did not implode, partly because the attraction of one centre was counterbalanced by that of another (Philadelphia versus New York, for example). But another reason was that attraction was counterbalanced by a principle that Carey dubbed "societary circulation". A rather slippery entity called "societary force" apparently pursued an endless rotation through any given society, and the faster the better. This force was akin to all the other forces that commanded scientists' attention at this time: magnetism, electricity and so on. The "correlation", "conversion" or "conservation" of these agencies was the topic of the day for Michael Faraday and his peers, and like them Carey insisted that the implications of his "force" and "circulation" shaped social forms. Societary science was therefore the discipline devoted to analysing societary force in all its movements and transformations.15

Carey thought of societary force primarily as analogous to electricity. (Occasionally, but suggestively, he also spoke in terms of that equally mysterious circulating entity, capital.) Electrical circuits became his archetype for societary circulation. Citizens, he announced, played roles as terminals in a battery. As "giver and receiver, teacher and learner, producer and consumer", everyone could be considered "positive" and negative". When they were properly arrayed, societary force would flow, producing power. A modern, free society thus depended on local diversity. Without distinctions of roles, there could be no "positives and negatives" to create social batteries, and hence no power generated. So Carey spoke admiringly of what he called the "conductors" in any community: the makers of cloth, iron, instruments, ships, houses, mills, furnaces—and books. On the other hand, he despised institutions that acted at a distance, particularly

¹² American, A Plea for Authors, and the Rights of Literary Property (New York: Adlard and Saunders, 1838), pp.4–7.

¹³ For details, see Johns, *Piracy* (2009), pp.309–325.

¹⁴ Johns, *Piracy* (2009), p.312

¹⁵ Henry Charles Carey, The Unity of Law: As Exhibited in the Relations of Physical, Social, Mental, and Moral Science (Philadelphia: Henry Carey Baird, 1872), pp.79-84, 111-114 (italics in original).

the merchants and traders he accounted "middlemen". These he described as insulators: they obstructed flow by eliminating distinctions between neighbours. Much of Carey's occasional writing was devoted to attacks on middlemen. He blamed them for the worst problems of the period, up to and including the American Civil War.¹⁶

Carey's claim was thus that civilisation itself depended on the maintenance of diverse, local and decentralised sets of circulations. Government policy must be directed to producing the most effective diversity of citizens' roles. With good policies in place, he declared, "economic force" would "flow ... smoothly ..., happiness and prosperity, [and] improved mental and moral action, following in its train". Politics was the art of making circuits. The German *Zollverein* was a favourite example. So was the Union under Lincoln, in which "almost perfect circulation [had] been established throughout a gigantic battery of 20,000,000 pairs of plates". By contrast, the British Empire always represented for Carey the antithesis of civilisation. Here one found the stultifying effects of middlemen in their purest form. The free-trade empire elevated the interests of commerce above those of locality, and of homogenised class above diversity. Britain's "machines" of the industrial revolution were all devices for acting at a distance and reducing local diversity: ships, railways and telegraphs. With positive and negative plates kept far apart, free trade imperialism prevented circulation and therefore forestalled "any development whatsoever of mental force". The result was slavery and stagnation. The great Irish and Indian famines were entirely symptomatic outcomes.¹⁷

The relevant point here is that Carey thought that the wiring of his great societal battery was made out of printed paper. The faster print moved, the more society progressed. Copyright, accordingly, was one of the worst insulators of all—it prevented circulation and therefore progress. Inhibit printers, he declared, and circulation in any society would cease—which was exactly what had happened in Ireland after British copyright was introduced there in 1800. When Dublin reprinting ceased, the country became a land of "slavery, depopulation, and death". London had never again permitted "Irish positives and negatives to come together in such order as was required for production of any societary force whatsoever". It was no surprise, then, that "half a century of international copy-right has almost annihilated both the producers and the consumers of books". The potato famine was on this account a direct consequence not only of British commercial policy, but of copyright in particular. Indeed, Carey believed that the contemporary book trades reinforced the point. The great publishers of the 1830s–1850s, he insisted, were the equivalent of steamship or railroad magnates, and had the same imperial tendencies. A printer who worked for such a copyright publisher experienced, he said, "the nearest approach to serfdom that I know to exist in civilized life". "Transporters and publishers are alike middlemen": the only thing restraining either was "a salutary fear of interlopers". "Precisely so is it with nations", Carey concluded: a colony's predicament was "that of the printers". Printers were to publishers as India was to Britain. 18

Hence the vehemence with which Carey upheld the American reprinting system. "Our present copy-right system looks to the decentralization of literature", he declared, enhancing "the whole mind of the country". The epistemology of reprinting that would loom large in digital-era defences of copying—that is, in his terms, the notion that "positive knowledge" rested in facts and as such was "the common property of all"—was here a second-order point, subordinate to his broader argument. Besides, those pressing for "the interests of science" in Britain's international copyright campaign, he pointed out (and here he had a point), were in truth "literary" figures rather than actual scientists. They were middlemen *par excellence*. "

Henry Charles Carey, Review of the Decade 1857–1867 (Philadelphia: Collins, 1867), p.5; Carey, The Unity of Law (1872), pp.v–xi.
 Henry Charles Carey, Principles of Social Science (Philadelphia: J.B. Lippincott & Co, 1858), Vol.II, p.175; Carey, The Unity of Law (1872), pp.190–191, 206, 219–223.
 Johns, Piracy (2009), pp.320–335; Henry Charles Carey, The Resources of the Union (Philadelphia: Henry Carey Baird, 1866), p.24; Henry

Charles Carey, *The Way to Outdo England without Fighting Her: Letters to the Hon. Schuyler Colfax* (Philadelphia: Henry Carey Baird, 1865), p.31. ¹⁹ Henry Charles Carey, *Letters on International Copyright* (Philadelphia: A. Hart, 1853), pp.10–25.

The natural law of information

The pioneer of a systematic practice of reprinting thus developed an ambitious defence of that practice in terms of a radical and sweeping critique of contemporary political-economic orthodoxy. It was certainly not based on classical liberal economics or opposition to protectionism. Fundamentally, anti-copyright had to do here with localisation and decentralisation—the politics and economics of space itself. And the struggle became, for Carey, the pivot point in an epochal clash between "centralization and civilization".

But there is a major puzzle here. In fact, Carey had not always been a radical of this kind. During his time as a practicing reprinter he was a notable and adamant advocate of laissez-faire and free trade, denouncing his own father as one of the architects of American protectionism. So what motivated him to abandon this orthodoxy at the same time as he ceased the practice of reprinting, and in their place to create such an extravagant and, to our eyes at least, quixotically counterintuitive ideology?

The key to an answer lies in Carey's own formative experience as an author. He began his writing career at a moment of change both personal and professional. His firm was leaving the frenzy of reprinting behind, to focus instead on science and medicine. As it did so, he decided to retire and write a book. The book he had in mind would confirm and prove the triumph of Adam Smith's intellectual legacy. He gave it the evocative title *The Harmony of Nature*. But having completed and even printed the book, Carey experienced a dramatic change of heart. He suddenly called it in and destroyed the whole impression. This was the moment when he became a radical enemy to much of the Smithian orthodoxy of political economy. Both he and his friends repeatedly referred to it in quasi-religious terms, as his epiphany. Apparently Carey had realised all at once that laissez-faire was a mere tool of British imperialism, exploitation and tyranny. But all one could do was take their word for it. The book itself did not exist to tell us any more. Or did it?

It has always been clear that some copies of *The Harmony of Nature* survived Carey's bibliocide. Quotations have surfaced here and there in obscure studies—and some not so obscure: references in Das Kapital imply that Marx had read it.²⁰ It turns out that it has been hidden in plain sight for about 150 years. One copy sits ignored in Johns Hopkins University.²¹ And recently another has shown up at the Library Company of Philadelphia, complete with contemporary annotations by a critical friend of Carey's.²² As a result, we can now see far more clearly what was going on at this pivotal moment in the creation of an anti-copyright ideology. At the heart of the matter was the relation between the powers of nature and society in the creation of wealth and progress.

After Adam Smith, conventional political economists ultimately referred to the fecundity of nature—to soil fertility in particular—as the source of all prosperity.²³ Exemplary in this respect was the work that more than any other defined the dismal science: David Ricardo's *Principles of Political Economy* (1817). Beginning with the powers of the soil, Ricardo undertook to deduce "iron" laws governing the division of wealth between classes of labourers, landowners and capitalists. He had little time for the natural historians, however, whose expertise had been highly valued by the cameralist governments of the Enlightenment. Ricardo disdained their fine ecological distinctions between landscapes and their calls to manage climate, flora and fauna. For him, the key point was simply that land was inherently productive. Moreover, it combined natural creative power with the property of being enclosable. Unlike air and water, it could therefore be rendered into property, and as a result its "original and indestructible powers" commanded rent. But the other key fact about soil was that it was not uniform: some soils were more productive than others. As populations grew, Ricardo assumed that they must expand from better soils to worse. Rent therefore increased just as food productivity declined. This must produce Malthusian pressures,

²⁰ Karl Marx, Capital: Volume I (London: Penguin, 1990), pp.705-706.

²¹ JHU classmark HB161.C23 1836.

²² Library Company of Philadelphia, classmark Carey 91577.D.

²³ Fredrik Albritton Jonsson, Enlightenment's Frontier: The Scottish Highlands and the Origins of Environmentalism (New Haven: Yale University Press, 2013), pp.130-134.

but Ricardo was actually sanguine about their effects: he believed that human ingenuity responded to such pressures, making for progress. Yet it also meant that wealth was in the end a zero-sum game, with the classes in perpetual and inescapable competition for finite resources. The upshot was that classic nineteenth-century combination of laissez-faire and workhouse.²⁴

Ricardo's political economy thus made the powers of the soil into the ultimate explanation for progress and disaster alike. But this was a theoretical axiom, meant to hold true always and everywhere: Ricardo did not see the detailed empirical analysis of particular ecologies as pertinent, although natural historians insisted it was essential. The Harmony of Nature went even further, and denied the salience of soil quality altogether. Carey's book was distinctive in not appealing at all to the powers of different soils. In that sense it was an early effort towards the "denaturalization" of political economy, to use Margaret Schabas's term.25 But there was more to it than that. Carey agreed with Ricardo that nature had laws, that they were universal and that they were inexorable in their operation. It was just that humanity's resort to poorer soils over time was not one of them. Carey denounced this central axiom—that progress involved moving to inferior soils—as simply untrue. Soils' powers were in practice too easily alterable by chemicals and machines for the formula to hold good. (He travelled across the Atlantic partly to pay homage to Justus Von Liebig, the apostle of chemical agriculture, whose science, he believed, refuted Ricardo.) And in any case, any differences resulting from soil quality were swamped by the effects of sheer distance. "I say nothing of the fitness of the soil", he declared, "because I wish to show why New England, with a barren soil, is more prosperous than Jamaica, with a fertile one". However attractive it might sound, Ricardo's axiom was disproved by the facts—a point that Carey came to see as entirely representative of the methodological problems of British political economy.

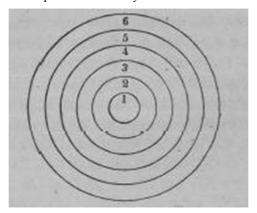


Figure 1: Diagram showing the relative importance of communication and soil quality. H.C. Carey, The Harmony of Nature (Philadelphia: Carey, Lea, and Blanchard, 1836), p.16.

To introduce his alternative, Carey indulged in a thought experiment. Posit land of uniform soil quality surrounding a central settlement. The population increases to occupy all the land. Then a trader arrives at the settlement with goods. This amounts to an increase in the ratio of capital to population. Settlers closest to the centre, at (1), begin to buy his goods, exchanging for them the food they have grown. As they do so, they save labour and are therefore able to start accruing capital. Zones (2) to (5) steadily do the same, but the trader charges more as the distance increases, because it is expensive to move goods away from the centre. So (1) accrues more than (2) and so on. This produces a real difference in value between the

²⁴ David Ricardo, On the Principles of Political Economy, and Taxation, 3rd edn (London: J. Murray, 1821), p.53; Donald Winch, Riches and Poverty: An Intellectual History of Political Economy in Britain, 1750–1834 (Cambridge: Cambridge University Press, 1996), e.g. pp.349–350.
²⁵ Margaret Schabas, The Natural Origins of Economics (Chicago: University of Chicago Press, 2005), pp.2–21.

zones: rent arises because of that. Divisions of labour thus appear in the centre first, giving rise to a bank and a "market-house", which becomes "the centre of attraction". Meanwhile zone (1) can now afford machines to improve the soil's production and roads to cheapen transport. The beneficial influence is therefore intensified. The effect of the new capital, Carey says, "is felt like that of heat":

"The two are governed by the same laws. When no obstacle is interposed, they diffuse themselves equally in all directions, decreasing in intensity with the increased distance from the centre."

In short, it looks like fig.2.26

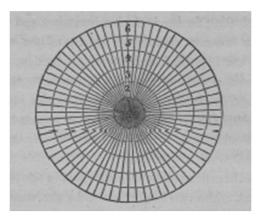


Figure 2: Diagram showing the radial effects of communication. Carey, Harmony of Nature, p.20.

So rent does not come from any difference in the natural powers of soils, but from an increase in capital relative to population ("capital" here included roads, manure or threshers—all of which Carey counted as machines). This is confirmed if one imagines a trader now arriving at zone (6), previously the poorest region: now zones (1)–(5) have to go to (6) to make their exchanges. "The tables are turned completely, solely because of the change in the ratio of capital." The same argument would work for mines, fisheries and even shipping, Carey adds. And in a striking conclusion, he ends by saying that it applies to words too:

"An author receives a large or small rent for his copyrights, according to the amount to be employed and the rate of profit. In all these cases, rent is paid for the use of capital; it has a tendency to increase with any increase in the ratio which that bears to population."²⁷

This, according to Carey, was the *real* law of nature.

The implication was immediate and profound. Ricardo's class war did not exist. On the contrary, nature decreed that there was no true difference of interests between "the sovereign and the subject; the landlord and the tenant; the capitalist and the workman; [and even] the planter and the slave".28 Policies devised on the assumption of a fundamental conflict were therefore not only mistaken, but contrary to nature itself. And that made them actively disastrous, because nature was above all a recursive, cycling system, primed to correct imbalances in its own drastic ways. "It might have occurred to them", Carey remarked of Britain's rulers:

²⁶ Henry Charles Carey, The Harmony of Nature: As Exhibited in the Laws Which Regulate the Increase of Population, and of the Means of Subsistence (Philadelphia: Carey, Lea, and Blanchard, 1836), pp.15-34, 42.

Carey, The Harmony of Nature (1836), p.58 (italics in original).

²⁸ Carey, The Harmony of Nature (1836), title page, pp.299–310. Carey's comments in Harmony of Nature on slavery were gradualist to a fault; he would later become a much more resolute antagonist to the slave states. There is much to be said on how property in persons and property in ideas interacted in the antebellum United States, but it is a complex topic best left for another paper. In the meantime, see Stephen Michael Best, The Fugitive's Properties: Law and the Poetics of Possession (Chicago: University of Chicago Press, 2004).

"that the same great power that devised the laws which govern our planetary system, also devised those under which man is produced; that the same power implanted in him the passions which tend to cause his reproduction.... They might have seen, that although, in the system of the universe, there are slight perturbations constantly occurring, there is also established a system of compensations productive of the most perfect harmony, and doing so, they might well have doubted the correctness of their doctrine, and supposed the *apparent* discord to be 'harmony not understood'".²⁹

The notion of a natural balance sustained by feedback processes marked this out as what Ernst Haeckel in Germany would soon define for the first time as an "ecology".³⁰

In effect, then, Carey believed that capital was ecological. He even attributed to it the natural power of reproduction. Prosperity simply depended on its reproducing faster than the population. By nature, fortunately, capital did indeed tend to outpace children—but only as long as trade were not constricted. "The laws under which man exists are sufficient", he insisted, "if man could be persuaded to let nature alone". 31 Freedom of communication was the key. This meant two things: access to market centres, whether by proximity or via canals, roads and railroads; and flows of "information". Information fed knowledge, and knowledge led to better machines, which were a focused form of capital. Progress rested not on Malthusian pressures, but on the speed and ease of information transfer. This explained why the United States was rising so much faster than Britain: with an unconfined print trade circulating knowledge, "men work every sort of machine, and select those which are most likely to be productive". By stark contrast, in Ireland poor knowledge, ensured by a constricted print industry, had led to catastrophe. The same was imminent for India, and at length must befall even France.³²

The Harmony of Nature represented America as the closest thing to a natural polity that the world then possessed. That was why the United States had the fastest growing population, industry and exports of any nation. Contra Ricardo, inferior land there commanded higher rents than superior, because of proximity to New York or Philadelphia. Contra Malthus, too, increasing population there led to greater wellbeing, with progress in sciences, morals and arts. America's frenetic circulation of information was at the heart of this success, and as it continued so it constantly redoubled the advantage. Pennsylvania alone offered "the most extraordinary spectacle, in regard to artificial communications, that can be found in the world". Before long, "the United States will furnish, throughout their immense territory, a facility of intercommunication such as will be without parallel". Even human nature itself was changing, thanks to this law of nature. With improvements, Carey thought, every citizen's "mind begins to expand", producing a new "habit of thoughtfulness".33

The Harmony of Nature thus contended that the true "system of nature" was laissez-faire, but on very different grounds from Ricardo's. Only this policy allowed a people to progress, because only it permitted them to enjoy "the advantages arising out of the dissemination of information". But with it in place, according to Carey, "the same harmony exists on earth, when the laws are properly understood, as has been ascertained to exist among the heavenly bodies". "Such", he concluded (decades before Lincoln), "are the results of government of the people". 34

This, then, was the doctrine that Carey suddenly repudiated, apparently with all the ferocity of a convert. It turns out that his epiphany originated where the doctrine itself had: in the powers of nature. He had already convinced himself that Ricardo's argument about soils was a false axiom. Now he decided that

²⁹ Carey, The Harmony of Nature (1836), p.4, restated verbatim in Henry Charles Carey, Principles of Political Economy (Philadelphia: Blanchard and Lea, 1840), Vol.1, p.89. The last quotation comes from Pope's Essay on Man, in the passage culminating with the famous remark that "Whatever is, is right"; it captured Carey's intent solidly enough that he used it as the epigram on his title page.

30 Robert J. Richards, *The Tragic Sense of Life: Ernst Haeckel and the Struggle over Evolutionary Thought* (Chicago: University of Chicago Press,

³¹ Carey, The Harmony of Nature (1836), pp.6–7.

³² Carey, *The Harmony of Nature* (1836), pp.191–194, 291–292, 358–361.

³³ Carey, *The Harmony of Nature* (1836), pp.360–369.

³⁴ Carey, The Harmony of Nature (1836), p.363.

its falsity tainted everything it touched. It was the principle behind free-trade, for example; so free trade had to go, along with the British Empire that revered it. The immiseration, exploitation and corruption of empire were not effects of poor policy decisions. They were the Ricardian system, applied as an ecology and on a global scale. In a string of diatribes, Carey now tackled "this atrocious theory", as one eulogist put it, with "a demonstration of its falsity that has scarcely a parallel in the history of science". 35 Corralling massive amounts of empirical data from countries across the world, he asserted that real societies always began by cultivating uplands with thin soil, and only moved on to richer, lower country as wealth and technology permitted. After all, this made sense: their natural fertility would make rich lands hard to farm with primitive machinery. History thus showed a common thread of progress from less production to more: from poorer to more sophisticated roads, from simpler to more complex commerce, from primitive to more powerful machines. It was this anti-imperial ecology that Carey went on to develop into his extravagant societary science. And it was to preserve it that he entered the lists against copyright.³⁶

Yet the major reason for that lies in the two convictions that Carey did not jettison from The Harmony of Nature. First, he remained convinced that true political economy was indeed ecological, and that nature was characterised by self-correcting circulations. Society consequently exhibited not a class war but a harmony of interests, and one grounded in an escapable natural order. And, secondly, progress and prosperity depended on maximising the circulation of information. The origins of anti-copyright ideology lay in those pivotal convictions and in the historical moment that produced them—the moment of nation-building, international reprinting and the splitting of political economy into ecology and economics. In the end, it was not the putative "denaturalizing" of economics that mattered, but its abandonment of spatial ecology.

In that light, Carey's model of ecological progress was cutting-edge by the standards of its time. As economic expertise increasingly disengaged from natural history—a process as distinctive of the transition to modernity as anything in the sciences—so some practitioners sought to incorporate a spatial component instead.³⁷ Carey's model offered perhaps the most sophisticated early attempt to do this. In particular, it compares well to what is traditionally identified as the original theory of this kind: that of the German landowner Johann Heinrich Von Thünen, whose The Isolated State appeared in 1826. Von Thünen, like Carey, assumed uniform soil fertility and suggested a model of concentric rings. But his rings were crudely assigned to different kinds of agriculture, and his ideal state was, as his title put it, "isolated". Trade played no part, and the model itself was therefore silent on perhaps the most fiercely contested economic issue of the century. That could certainly not be said of Carey's. Yet Carey's model disappeared completely from view with his destruction of *The Harmony of Nature*, whereas Von Thünen's at least retained a certain niche notoriety. Much later, with the return of environmental perspectives in the social sciences, it would be Von Thünen's scheme that reappeared, in works like William Cronon's renowned Nature's Metropolis.38

Meanwhile, however, in 1937 the young Ronald Coase's famous paper on the nature of the firm turned on a similar diagram. Although Coase avowedly based it on Von Thünen, his version—which focused on industries rather than agriculture, and on information flows rather than production—was much closer in spirit to Carey.³⁹ And this is intriguing for two reasons. One is that Coase's argument would go on to play a pivotal role in the reappraisal of intellectual property orthodoxies in the age of the internet.⁴⁰ The other is that Coase had at that point been a research assistant to Arnold Plant, who would be the single most

³⁵ William Elder, A Memoir of Henry C. Carey (Philadelphia: Henry Carey Baird, 1880), p.15.

³⁶ For the intricacies of Carey's campaign against international copyright, see Johns, *Piracy* (2009), pp.291–326. The principal primary sources are Carey, Letters on International Copyright (1853); Henry Charles Carey, Letters on International Copyright, 2nd edn (New York: Hurd and Houghton, 1868); and Henry Charles Carey, The International Copyright Question Considered (Philadelphia: Henry Carey Baird, 1872).

³⁷ Claude Ponsard, *History of Spatial Economic Theory* (Berlin: Springer, 1983), pp.13–21.

³⁸ William Cronon, Nature's Metropolis: Chicago and the Great West (New York: W.W. Norton, 1991), pp.48–52.

³⁹ R.H. Coase, "The Nature of the Firm" (1937) 4 *Economica* 386, especially 402–403.

⁴⁰ Yochai Benkler, "Coases's Penguin, Or, Linux and The Nature of the Firm" (2002) 112 Yale L.J. 369.

important author of a neo-classical critique of intellectual property in that generation, and the only economist to introduce his analysis of IP with a reappraisal of Henry Carey.⁴¹ Taken together, these observations suggest that the ecological critique of copyright may in the end prove to have greater resilience than has been recognised.

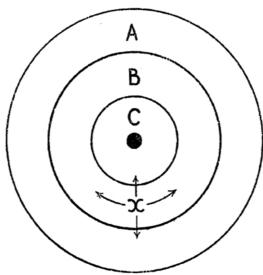


Figure 3. Coase's diagram explaining the role of transaction costs in the formation of firms. R. Coase, "The Nature of the Firm" (1937), p.402.

Certainly, a wide-ranging international debate on intellectual property took place in the second half of the nineteenth century, centring precisely on Carey's nexus of nature, economy and empire. I have only scratched its surface here, and in only one place: it took many forms, and all deserve our attention. But with the consolidation of IP as the guiding concept of an emerging information economy, the earlier debate was forgotten. Or rather, it was very selectively remembered. Campaigners in Roosevelt's America returned to Carey to question the new dominance of AT&T in telecommunications, and in the UK Plant did the same to mount his own attacks on copyright and patents. But those were partial and opportunistic recoveries. The explicitly ecological character of the initial critique was largely lost as the argument now took place on the terrain of modern, "denatured" economics. If we can take notice of it again, that may be partly because the relationship between the natural and the social for so long accepted in economic logics is once more looking artificial, and at a time when the consequences of the conventional separation are coming home to roost. We live in a moment when conversations about intellectual property could and should take a different tack, if not quite an unprecedented one.

⁴¹ Johns, Piracy (2009), pp.414–416; Adrian Johns, Death of a Pirate: British Radio and the Making of the Information Age (New York: W.W. Norton, 2010), pp.74–78, 96–102.

Criticism in the Courtroom: *Nichols v Universal* (1930) and the Determination of Infringement

Mark Rose*

English Department, University of California, Santa Barbara

Dramatic works; Expert evidence; Films; Legal history; Plagiarism; United States

Nichols v Universal, decided by the great Judge Learned Hand, is perhaps best known for the "pattern test" that Hand presents as a framework through which to consider allegations of infringement. "Upon any literary work, and especially upon a play", Hand writes:

"a great number of patterns of increasing generality will fit equally well, as more and more of the incident is left out. The last may perhaps be no more than the most general statement of what the play is about, and at times might consist only of the title; but there is a point in this series of abstractions where they are no longer protected, since otherwise the playwright could prevent the use of his 'ideas,' to which, apart from their expression, his property is never extended. Nobody has ever been able to fix that boundary, and nobody ever can."

This famous passage—still relevant in American copyright jurisprudence—is frequently discussed in law school classes and is what probably comes first to mind when one thinks about *Nichols v Universal*. But Hand's opinion is also well known for his expression of irritation at the use of expert testimony. "Argument is argument", Hand said:

"whether in the box or at the bar, and its proper place is the last. The testimony of an expert upon such issues, especially his cross-examination, greatly extends the trial and contributes nothing which cannot be better heard after the evidence is all submitted. It ought not to be allowed at all; and while its admission is not a ground for reversal, it cumbers the case and tends to confusion, for the more the court is led into the intricacies of dramatic craftsmanship, the less likely it is to stand upon the firmer, if more naïve ground of its considered impressions upon its own perusal. We hope that in this class of cases such evidence may in the future be entirely excluded, and the case confined to the actual issues; that is, whether the copyrighted work was original, and whether the defendant copied it."

Hand's objections to expert testimony were long-standing. Three decades earlier he had published an essay in the *Harvard Law Review* objecting to the use of expert testimony on grounds of principle, maintaining, among other things, that experts usurped the jury's role. Hand, who had been trained in philosophy at Harvard, presented his objection in the form of a logical proposition in which he demonstrated that an expert witness inappropriately provided the major premise—that is, the general rule for understanding the particular evidence of the case at hand—which appropriately should be supplied by the

^{*} This essay also appears in Maurizio Borghi and Stavroula Karapapa (eds), Art and the Law: Essays on Artistic Jurisprudence (Leiden: Brill Academic Publishers), forthcoming.

¹ Nichols v Universal 45 F.2d 119 (2nd Cir. 1930).

² Nichols 45 F.2d at 121.

³ Nichols 45 F.2d at 123.

⁴ Learned Hand, "Historical and Practical Considerations Regarding Expert Testimony" (1901) 15 Harv. L. Rev. 40.

jury from their common knowledge. In his essay Hand objected to expert testimony in all kinds of cases, not just copyright matters, but the use of experts in a literary matter such as *Nichols* must have been especially galling to a man who prided himself on his literacy, his taste and his ability to reach sound conclusions in matters of literary dispute. Perhaps one can best appreciate Hand's expression of irritation, however, when one reads through the voluminous record of the District Court trial, three-quarters of which consists of expert testimony. Indeed, the plaintiff's expert alone spent some seven days on the stand and his testimony accounts for over 1,000 pages of the court record. The testimony of Universal's expert, which was presented over the course of another three days, accounts for an additional 200 pages.

The issues in *Nichols* finally came down to the question of substantial similarity in protected expression. For what elements in *Abie's Irish Rose* could the plaintiff, Anne Nichols, claim protection? Was the defendants' movie *The Cohens and Kellys* substantially similar to the plaintiff's play with respect to those elements? But how could such issues be analysed except by an act of literary criticism? Moreover, would not any coherent act of literary criticism necessarily imply some theory as to what a work of literature consists of and how one is composed? Judge Hand was impatient with the use of literary experts at trial, but wasn't he himself acting as a literary critic in formulating his pattern test and issuing his finding for the defendants? To adapt Hand's nicely turned dictum about argument in the witness box or at the bar, I might point out that literary criticism is literary criticism whether from the box or the bench. Indeed, *Nichols v Universal*, as I understand it, is all about literary analysis. Each of the parties, through its designated literary expert, approached the issues from a distinct analytical position, and Hand's decision, too, I shall suggest, was founded on literary analysis. What I shall attempt to explore, then, is how a drama of conflicting literary approaches played itself out in this classic infringement case.

Anne Nichols' play was an American theatrical phenomenon. Produced in 1922 in the context of a period of swelling isolationism, racism and nativism, *Abie's Irish Rose* is a feel-good comedy that celebrates the older progressive idea of America as a melting pot. In plot, it is a sentimental descendant of *Romeo and Juliet*. Abie Levy, a young Jewish man, has fallen in love with and secretly married Rose Mary Murphy, a young Irish girl. Significantly, Abie and Rose Mary met in France where Abie was a soldier and Rose Mary an entertainer of the troops during the Great War. One of the things that the play implies is that now, after the experience of the war, ethnic differences are less important than national identity. Levys and Murphys alike are Americans. Predictably, however, Abie and Rosemary's respective fathers, Solomon and Patrick, object to the marriage on religious and ethnic grounds. There is much comic by-play generated by Abie's attempts to pass Rose Mary off to his father as Rosie Murpheski, a Jewish girl, and further comic by-play when Patrick Murphy arrives from California and discovers that his daughter has married a Jew. In the end, however, when Rose Mary gives birth to twins—a boy named for her father and a girl named for Abie's late mother—the antagonistic fathers are reconciled and the new family is celebrated.

Elaborated with broad Yiddish accents and ethnic comedy of a sort familiar from vaudeville, *Abie's Irish Rose*, which was written, produced and directed by Nichols, received mediocre reviews and some outright hostility from critics who found it silly and crude. Nonetheless, the play elicited a powerful response from audiences, perhaps because its liberal social argument was timely in the post-war period of swelling isolationism, racism and nativism. By 1926, when Nichols initiated her suit against Universal, *Abie* was the longest-running play in Broadway history, and it would remain a Broadway fixture until 1927. Moreover, during the period of its New York run, multiple touring companies carried *Abie* all over the United States and Canada, often for record-breaking engagements.⁷

⁵ On Hand generally, see Gerald Gunther's excellent biography, *Learned Hand: The Man and the Judge* (New York: Knopf, 1994).

⁶The testimony of Moses L. Malevinsky, the plaintiff's expert, runs from pp.183–199 and from pp.201–1,294. The testimony of Harrison R. Steeves, the defendants' expert, runs from pp.1,339–1,555.

⁷ For the text of the play, see Ann Nichols, *Abie's Irish Rose* (New York: Samuel French Inc, 1924). Some information about the performances can be found in a special number of *Variety*, Vol. 89, No.1 (May 20, 1925), which was published to celebrate the play's record-breaking run.

Nichols herself was a canny businesswoman who understood very well how to exploit her success. As her personal papers indicate, Nichols closely followed the details of her business arrangements and was intimately concerned with managing and protecting her literary rights. Under her management, Abie's Irish Rose was twice adapted for the screen, once turned into a novel, and for several years in the 1940s became a weekly radio serial. In 1943, *Time Magazine* published an article on the radio show, noting that Nichols was being paid about \$6,000 a week for the show and that to date she had earned some two and a half million dollars—vastly more in today's money of course—from the various theatrical and cinematic versions of her play.9

In 1925 Universal Pictures attempted to buy the movie rights in Abie's Irish Rose. But, failing to reach an agreement with Nichols, Universal turned in a different direction and bought the rights to another New York play, Aaron Hoffman's Two Blocks Away. This is a story about a benevolent Jewish shoemaker on the Lower East Side who suddenly inherits a fortune and turns into a pretentious monster, moving his family into an elaborate mansion. The mansion is just two blocks from his old neighbourhood, but, socially, it is another universe. Taking on the airs of a great magnate, the former shoemaker rejects his old friends and tries to break up his daughter's romance with an unpretentious young man. But when the former shoemaker learns that his inheritance really belongs to one of his old pals, he has an admirable change of heart in which he renounces his fortune and his airs, reconciles with his friends and accepts his daughter's romantic choice.10



With Hoffman's play as a point of departure, Universal developed Two Blocks Away into a comedy about ethnic conflict, centring the action on the antagonism between a Jew and an Irishman who live with their families in neighbouring apartments. Moreover, Universal linked Hoffman's romantic subplot, the story of the daughter's affection for an unpretentious young man, to the ethnic drama by focusing the

⁸ Nichols' papers are on deposit in the Billy Rose Collection of the New York Public Library. These materials indicate that Nichols frequently went to court over issues related to her plays and that she closely followed professional and amateur performances all over the country.

[&]quot;Radio: So Rich the Rose" Time Magazine, May 3, 1943.

¹⁰ Aaron Hoffman, *Two Blocks Away* (New York: Samuel French Inc, 1925).

Jewish daughter's romantic interest on the Irishman's son, a new character who had not appeared in the play. As in Hoffman's play, the central plot device remains the sudden inheritance and translation to wealth, but the romantic subplot now allows for a sentimental reconciliation between the Jew and the Irishman through their mutual delight in the grandchild that their children have given them. Filled out with ethnic comedy and slapstick gags, Universal dropped the title *Two Blocks Away*, called the movie *The Cohens and Kellys*, and advertised it as "The *Abie's Irish Rose* of the Screen".

Clearly, Universal was seeking to piggyback on the success of *Abie's Irish Rose* by producing a moving picture in the same vein. Anne Nichols, who was very aggressive in such matters and had gone to court on several previous occasions, filed suit. The crucial question, however, was not whether Universal was exploiting the popularity of Nichols' play by producing something of a lookalike, but the more limited and technical issue of whether Universal had infringed Nichols' copyright. It was this issue that led to the battle of experts.

Nichols' expert was Moses L. Malevinsky, the author of *The Science of Playwriting*, a book in which *Abie's Irish Rose* figured prominently as an example of an excellent play. Malevinsky, a prominent attorney, was a partner in the important entertainment law firm of O'Brien, Malevinsky, and Driscoll, a firm amusingly known in Broadway circles as the "kosher sandwich". He was a passionate, if self-tutored, theatre-goer, who had represented Nichols as well as other playwrights in various matters in the past. But, distressed by what seemed to him the subjectivity and unpredictability of infringement suits, he had undertaken to produce a methodical study to show how plays were constructed and make it possible to analyse allegations of plagiarism in an objective manner. Malevinsky's analyses of plays had resulted in the development of an "algebraic formula" that he claimed would make it possible to deal with plagiarism issues on an intellectually sound basis. "Authors and Judges will now understand what a play is really about", he was quoted as saying in a *New Yorker* profile that appeared shortly before his book was published. Definition of the play is a prominent attorney. The profile that appeared shortly before his book was published.

Malevinsky's testimony at trial was based on the theory expounded in *The Science of Playwriting*. This starts from the premise that the essence of life is emotion. Every human activity is either directly or indirectly driven by emotion. Therefore, as he puts it in the book, "Emotion is life. Life is emotion." Since drama is about life, it follows that drama, too, "is" emotion and that such elements as characters, plot, setting and theme are subsidiary to passion. A well-made play will be dominated by a particular emotion, the play's "basic emotion", as Malevinsky terms it. This will be dramatically realised in the play's chief character and played out through other dramatic elements such as action, incident and conflict.

We can note that insofar as he posited a single element—emotion—as the font of drama, Malevinsky was proposing an essentialist theory in the tradition of Aristotle's *Poetics*. This, we recall, declared "plot" to be the "soul" of tragedy, specifying other elements such as character and spectacle as subsidiary. In effect Malevinsky substituted "emotion" for Aristotle's "plot" as the "soul" of drama. This was a move that perhaps reflected the contemporary influence of Freudian theory with its emphasis on the scientific analysis of the irrational component in human behaviour. Just as Freud had proposed a methodical, scientific understanding of human emotional life, so Malevinsky was proposing a methodical, scientific understanding of the representation of life in drama. Malevinsky's title, *The Science of Playwriting*, was a polemical claim: drama was as much a proper subject for the rigor of scientific analysis as human behaviour itself.¹⁵

¹¹ M.L. Malevinsky, *The Science of Playwriting* (New York: Brentano's, 1925). Some information about Malevinsky can be found in an obituary published in the "Talk of the Town" section of *The New Yorker*, October 29, 1932, pp.10–11. Malevinsky was also the subject of "Making the Grade in Gotham," an extensive and informative article in the *Dallas Morning News*, December 22, 1929.

^{12 &}quot;Talk of the Town" The New Yorker, July 11, 1925, p.4.

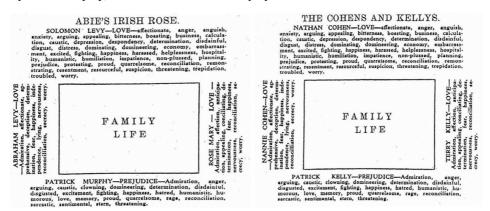
¹³ Malevinsky, *The Science of Playwriting* (1925), p.50.

^{14 &}quot;We maintain, therefore, that the first essential, the life and soul, so to speak, of Tragedy is the Plot; and that the Characters come second" *Poetics* 6.1, reprinted in Richard McKeon (ed.), *The Basic Works of Aristotle* (New York: Random House, 1941), p.1461.

¹⁵ In locating Malevinsky's theory in the context of the popular interest in Freudian theory in the 1920s, it may be useful to mention Lilly Bess Campbell who developed a parallel line of thinking during the late 1920s. Campbell's influential *Shakespeare's Tragic Heroes: Slaves of Passion* (Cambridge: Cambridge University Press, 1930) similarly reworked Aristotelian neo-classicism. She proposed that Shakespeare's tragedies are

As Nichols' expert, Malevinsky expounded his formula for determining plagiarism. This consisted of nine lettered elements, but in fact only the first three elements were crucial because, as Malevinsky put it, "A plus B plus C of the Algebraic Formula when paralleled in two plays proves infringement." is the "basic emotion", the underlying passion that drives and defines the play. In the case of *Abie's Irish Rose* and *The Cohens and Kellys*, Malevinsky identified this as "love". "B" is the central character, the figure that "personifies" or gives human embodiment to the basic emotion. Malevinsky identified the central character in both works as the Jewish father. "C" consists of five elements that can be understood as specifying how the basic emotion personified in the central character plays out in the drama. Malevinsky called the first and most important the "crucible" by which he meant the social field or general context in which the basic emotion is played out. He specified this in both works as "family life".

One might normally consider an element such as "context" in relation to setting—Venice and Cyprus in the case of *Othello*, for example, or New York in the case of *Abie's Irish Rose*—but Malevinsky conceived of drama more abstractly as the playing out of passion in a field of social interaction, and thus he avoided the specificity of setting. The other four elements included under "C" are "conflict", "complication", "crisis", and "climax"—all conveniently alliterating with "crucible". These too reflect Malevinsky's abstracted conception of drama as an unfolding field of passion. Thus, Malevinsky understood "conflict" not as a particular struggle such as that between Othello and Iago but more abstractly as the pitting of emotion against emotion. He understood "complication" as the process whereby passions create circumstances that instigate conflict, as for example the way that the Jewish father's love of his religion conflicts with his son's desire to marry an Irish woman in *Abie's Irish Rose*. The "crisis" was the supreme emotional point in the play, and the "climax" was the play's emotional resolution.



Malevinsky was a habitual diagram maker. One interviewer reported that for years he had constructed analytical diagrams of every play he attended, using a printed form of his own design.¹⁷ The centrepiece of his testimony at trial was an exhibit consisting of an elaborate diagram that was probably developed from his printed form. This exhibit consisted of two quadrangles illustrating Malevinsky's analysis of the key parallels between Nichols' play and Universal's movie. One quadrangle represented the scheme of *Abie's Irish Rose*. At the top Malevinsky placed Solomon Levy, the Jewish father, and identified both his basic emotion—love—and a list of 45 subsidiary emotions that the father exhibited in the course of the

concerned with passion rather than action and that each play is to be understood as a psychological study of a particular emotion: *Hamlet* of grief, *Othello* of jealousy, *Lear* of wrath and *Macbeth* of fear. Campbell presented her analysis through the lens of the psychological theories of Shakespeare's time; therefore, her book remains valuable for its work of historical excavation. Malevinsky, on the other hand, presented his theories a-historically, insisting that "emotion is biological and eternal" and therefore that human "character does not change". Malevinsky, *The Science of Playwriting* (1925), p. 270

¹⁶ Malevinsky, *The Science of Playwriting* (1925), p.42.

¹⁷ "Making the Grade" *Dallas Morning News*, December 22, 1929.

play, starting with "affectionate, anger, anguish, anxiety, arguing" and continuing in alphabetical order to "trepidation, troubled, and worry". The second quadrangle represented the scheme of *The Cohens and Kellys*. At the top was again the Jewish father, Nathan Cohen, who embodied, Malevinsky maintained, not only the same basic emotion but precisely the same set of subsidiary emotions. Likewise, the quadrangles represented his analysis of the parallels between the two Irish fathers and the Jewish and Irish lovers. At the centre of each quadrangle was a rectangle standing for the "crucible"—the social field—which in each case he labelled "family life".¹⁸

That Malevinsky chose to represent his findings in the form of a diagram can be understood as related to the claims he was making for his analysis. A schematic diagram, after all, is a highly abstracted representation of relationships. As a formal device such diagrams were popularised in the Enlightenment particularly through Diderot's *Encyclopedia* from which the schematic diagrams familiar in patent law descend. Thus, in introducing his diagram Malevinsky was in effect claiming that his analysis had something like the same precision as the technical specification proffered for a patentable device. His approach, he contended, was strictly scientific, and he insisted that his algebraic formula was able to identify plagiarism with the same precision as a fingerprint could identify an individual.

The elements on which Malevinsky's findings were based were of course all notions pointing to emotions—affection, anger, anguish, anxiety, etc.—and, as the defence was quick to point out, such concepts, presented as abstractions, are not capable of precise specification. Malevinsky's application of his theory thus incorporated a tension between determinate logic, the scheme he proposed, and indeterminate substance, the emotional materials that were the stuff of the play. This tension also manifested itself in Malevinsky's understanding of the difference between the critic and the artist. The critic was a kind of scientist whose dissection revealed the intricate structure of a play's emotional universe. The artist was "instinctive". Plays were made "subconsciously". Theatre people were like children. "The best-hearted and whole-hearted children in the world", Malevinsky said in an interview, but children nonetheless. A I have noted, Anne Nichols was a hard-headed businesswoman who exploited her works with skill and intelligence. Nonetheless, on the witness stand, she presented herself precisely as her expert characterised all artists. She denied that she had ever read Shakespeare or made any kind of study of her craft. "I just write from the heart.... It all comes naturally to me." This, she claimed, was the way all true writers composed. When pressed for concrete particulars about, for example, what she claimed to be original in her play, Nichols deferred to Malevinsky: "He has a theory and I have not."

Universal's expert was less colourful. Harrison R. Steeves, was a Columbia University English professor who had taught drama for many years and who had previous experience as an expert witness in Hollywood cases. Whereas Malevinsky's approach was abstract and theoretical, Steeves' was historical and pragmatic; it depended on an analysis of prior art in order to identify the degree to which Nichols' play incorporated commonplaces and conventions for which she could not claim copyright. Tracing the Jewish-Christian subject of *Abie's Irish Rose* back to the romance between Shylock's daughter and a Christian in Shakespeare's *Merchant of Venice*, Steeves described multiple nineteenth- and twentieth-century American plays demonstrating how they incorporated materials similar to those deployed in Nichols' play. Conflict spurred by parental opposition to ethnic intermarriage was a theatrical commonplace. In the 1870s the conflict was typically between German and Irish families; beginning in the 1890s the emphasis shifted to Irish-Jewish conflicts, in this way following the pattern of American immigration.

On the basis of his analysis, Steeves concluded that *Abie's Irish Rose* and *The Cohens and Kellys*, shared only four elements: the parental opposition, the secret marriage, the separation of the young people from their parents, and the ultimate reconciliation with their parents through the birth of grandchildren.

¹⁸ The quadrangles were introduced as evidence at trial where they appeared as plaintiff's Exhibit 12.

^{19 &}quot;Making the Grade" Dallas Morning News, December 22, 1929.

Nichols Testimony of Anne Nichols, p.100.

²¹ Nichols Testimony of Anne Nichols, p.102

All were merely general ideas and theatrical commonplaces. As for the concrete realisation of these ideas, Steeves pointed out the differences between the play and the movie, noting that the love story was only a subplot in *The Cohens and Kellys*; the principal conflict was between the neighbours—the Irishman and the Jew—rather than between generations as in Nichols' play. Indeed, Steeves explained, the entire romance plot could be removed from *The Cohens and Kellys* and the movie would still make sense. Steeves challenged Malevinsky's methodology, noting that the idea of a play having a "basic emotion" was too vague to serve as the point of departure for analysis and that the key term "crucible" was also vague. Focusing on Malevinsky's diagram, Steeves noted, among other objections, that Malevinsky's analysis completely ignored the actual sequence of events in the two works.

By modern standards of procedure it must seem bizarre that Nichols' attorney also served as her expert witness. Even more bizarre, after Steeves completed his direct testimony, Malevinsky resumed his role as plaintiff's attorney to cross-examine Prof. Steeves. From Malevinsky's point of view in which a drama was seen as the playing out of vivid emotions, concrete particulars such as setting and incident were inconsequential; indeed to Malevinsky mere incident must have seemed dreamlike and fleeting compared to the fundamental reality of driving passion. Thus, Malevinsky attempted to get Steeves to acknowledge that if his analysis of the emotional structure of the two plays were correct, then a conclusion of infringement would follow. But naturally Steeves would not accept Malevinsky's assumptions. Nor would Steeves join Malevinsky in calling dramaturgy a "science". A particularly telling moment came when Malevinsky, committed to the idea of the artist as intuitive genius, asked Steeves whether he really believed that plays might be constructed from rational calculation. "Do you think that any author ever wrote a play with a conscious purpose?" "Of course, I do", Steeves responded. Malevinsky was incredulous. "I am talking about artistic purposes", he insisted:

"Do you think any playwright ever wrote a play logically with a definite idea in his own mind in the very beginning as to where he would start or where he was going to and what he was going to develop in the dramaturgy of the play?"²²

The two men were, of course, at a complete impasse.

Judge Henry W. Goddard, the trial judge, wrote a straight-forward and workmanlike opinion in which he dismissed Malevinsky's presentation saying that the latter's theoretical test for infringement was insufficient to show plagiarism. "Emotions, like mere ideas, are not subject to pre-emption." Following Steeves' testimony about prior art he found that the plot elements and themes that the two works shared were not new. Goddard acknowledged that the authors of *The Cohens and Kellys* might have taken some ideas from *Abie's Irish Rose*, but he dismissed the claim of copyright infringement.

Nichols appealed. Her attorneys pointed out that Goddard's decision attributed similarities between *The Cohens and Kellys* and *Abie's Irish Rose* to commonplaces from prior art but that there was no evidence that Universal had in fact consulted any of the cited works of prior art. The Universal movie was clearly very different from *Two Blocks Away*, the play on which the defendants claimed it was based. If it could be established that Universal had appropriated valuable material from *Abie's Irish Rose* then Universal was guilty of infringement whether or not similar material could be found in prior works. Universal objected that Nichol's whole claim was based on Malevinsky's testimony which was both "unsound literary critique" and contrary to law because it did not take account of the concrete details in the works.²⁴ Moreover, it was grossly inappropriate for Malevinsky, as the complainant's solicitor of record, to "tender himself as a professedly disinterested expert-witness".²⁵

²² Nichols Testimony of Harrison R. Steeves, Cross, pp.1511–1512.

²³ Nichols v Universal 34 F.2d 145, 147 (1929).

²⁴ Brief for the Appellee, p.8, *Nichols* 45 F.2d 119 (1930).

²⁵ Brief for the Appellee, p.71, *Nichols* 45 F.2d 119.

These were the basic claims as the *Abie's Irish Rose* case finally came before the US Court of Appeals for the Second Circuit. Nichols' argument maintained that infringement was essentially an action, a taking, and that it was in this light that the case had to be evaluated. Universal responded that any similarities between the two works were theatrical commonplaces. Learned Hand's colleagues on the Second Circuit panel were convinced that the movie had in fact copied elements of *Abie's Irish Rose*. Hand agreed, remarking in his pre-conference memo that it seemed plain that Universal was attempting to trade on the phenomenal success of the play.²⁶ But at what point would imitation become infringement? How close to the original would an imitator have to come to be termed a plagiarist?

With his characteristic aversion to simplistic absolutes, Hand remarked in a memo that no objective standard for making such a judgment probably could be found. Decisions would have to be made on a case by case basis

"with no better guide than general admonition on the one hand that there are variances which will not exonerate the plagiarist and on the other that it is only the concrete expression which the law protects".²⁷

Malevinsky had claimed that his method could determine plagiarism with the certainty of fingerprinting. When Hand came to work up his memo into a final opinion, he seems to have been thinking about Malevinsky's theory. Would it be possible to propose some kind of framework for infringement analysis? Nothing like Malevinsky's algebraic formula, of course, but nonetheless something to provide practical guidance? Focused on the classic philosophical problem of the relation of the general to the particular, Hand's solution, the pattern test, showed the influence of the pragmatic philosophical style that he had absorbed at Harvard. Upon any work a series of patterns of increasing generality might be imposed; somewhere in the progression from specificity to abstraction, the boundary between protectable expression and unprotected idea would be passed.

Concerned that his rejection of Nichols' claim not be interpreted too broadly, Hand remarked that it certainly could be the case that two plots might correspond closely enough to constitute infringement. Moreover, the same might be true as to characters, independent of the plot, but that the characters would have to go beyond mere stereotypes. As Hand writes:

"If *Twelfth Night* were copyrighted, it is quite possible that a second comer might so closely imitate Sir Toby Belch or Malvolio as to infringe, but it would not be enough that for one of his characters he cast a riotous knight who kept wassail to the discomfort of the household, or a vain and foppish steward who became amorous of his mistress. These would be no more than Shakespeare's 'ideas' in the play, as little capable of monopoly as Einstein's Doctrine of Relativity, or Darwin's theory of the Origin of Species. It follows that the less developed the characters, the less they can be copyrighted; that is the penalty an author must bear for marking them too indistinctly."²⁸

Applying this approach to the *Nichols* case, Hand observed that the only story material common to the play and the movie was "the quarrel between a Jewish and an Irish father, the marriage of their children, the birth of grandchildren and a reconciliation". ²⁹ Universal may well have taken these elements because the extraordinary success of *Abie's Irish Rose* proved their popularity as a formula. Nonetheless, even assuming that the elements were original to Nichols, that Nichols had discovered this dramatic vein, she could not keep it to herself. The subject was too general to protect. Turning from plot to character, Hand noted that the only characters common to the play and the movie were the lovers and the fathers, the four

²⁶ Reported by Gunther, *Learned Hand* (1994), p.324. In addition to Learned Hand, the Second Circuit panel consisted of Judges Thomas W. Swan and Augustus N. Hand.

²⁷ Gunther, *Learned Hand* (1994), p.324

²⁸ Nichols 45 F.2d at 121.

²⁹ Nichols 45 F.2d at 122.

characters represented in Malevinsky's quadrangle diagram. But the lovers were mere abstractions. "They are loving and fertile", Hand reported, "that is really all that can be said of them, and anyone else is quite within his rights if he puts loving and fertile lovers in a play of his own, wherever he gets them". As for the fathers, all that Universal might be said to have taken were abstractions, the stock comic figures of the Jew and the Irishman. Insofar as the fathers were individuated in the two works, they were different. Nichols' Jewish father, Solomon Levy, was an affectionate man who was obsessed with his religion. Universal's Jewish father, Nathan Cohen, was neither warm nor religious but ostentatious and vulgar. And the two Irish fathers, insofar as they were individuated, were also different. Where, then, should one draw the line between what Nichols' copyright protected and what it did not? In theory, the placement of such a line might seem arbitrary. But, in practice, Hand said:

"[W]e have no question on which side of the line this case falls. A comedy based upon conflicts between Irish and Jews, into which the marriage of their children enters, is no more susceptible of copyright than the outline of *Romeo and Juliet*."

Nichols had accused Universal of a wrongful action, infringement. Learned Hand transformed the issue into a comparative analysis of the two works. Then, to conduct his analysis, Hand devised the pattern test which provided a theory within which the matter could be analysed. Let us observe that Hand's notion of imposing a series of patterns of increasing generality strongly implies a visual representation. Hand of course did not decorate his opinion with visual illustrations, but he might well have used an example from a standard drawing manual, one demonstrating, for example, how an abstract geometrical shape such as a rectangle can by stages be transformed into a horse's head. The pattern test incorporates a similar procedure in reverse, transforming concrete literary works into abstractions.

Once Hand's visualisation is made explicit, it becomes evident that the pattern test treats the literary work as a kind of object. As Robert Rotstein has pointed out in an important essay on infringement analysis, Hand's pattern test implicitly draws upon twentieth-century formalist notions of the work of art as a closed, stable and enduring entity.³² One thinks perhaps of Cleanth Brooks' famous comparison of a successful poem to a well-wrought urn.³³ This kind of modernist conception of art still has powerful claims upon us, but it is certainly not the only way one might approach a literary issue. It suppresses the fact that a poem or a play is also an act of communication and that the understanding and significance of any text will change over time. My point here is not to challenge Learned Hand's elegant approach to the issues that *Nichols* raised but simply to observe that his opinion, like those of the opposed experts, necessarily consisted of an act of literary criticism. And, like any act of criticism, Hand's depended on theoretical assumptions.

Hand's pattern test, which tracks the progression from specificity to abstraction, may have been prompted by his response to Malevinsky's approach. Nonetheless, he did not directly address either Malevinsky's theory or Universal's claim that it was grossly inappropriate for Nichols' attorney to present himself as an expert witness. Instead, Hand launched into his denunciation of expert testimony in general. This was, as I have noted, an old theme for Hand who had published an essay on the subject in 1901. But why did he choose this case to revive the issue? Part of the reason surely has to do with the length of the record that the experts and Malevinsky in particular compiled. But part, I suspect, has to do with irritation at Malevinsky's pretentions to having put infringement analysis on a scientific basis. Malevinsky was certainly an irritating character. A *New Yorker* profile of several years earlier remarked that he was completely humourless and "cruel, even to mercilessness", in his seriousness about his theory. Still, Malevinsky is

³⁰ Nichols 45 F.2d at 122.

³¹ Nichols 45 F.2d at 122.

³² Robert H. Rotstein, "Beyond Metaphor: Copyright Infringement and the Fiction of the Work" (1993) 68 Chi.-Kent L. Rev. 725, 759–760.

³³ Cleanth Brooks, *The Well-Wrought Urn: Studies in the Structure of Poetry* (New York: Harcourt Brace, 1947).

³⁴ The New Yorker, July 11, 1925, p.3.

representative of an impulse that recurs in copyright litigation as of course in other areas of life, the desire for a method or algorithm to do away with uncertainty or discretion.

In copyright litigation this impulse sometimes leads to statistical analyses that are similar to Malevinsky's algebraic formula insofar as they claim to reduce literary issues to mathematics. Thus, in the 1980s Professor Edward Condren of UCLA unsuccessfully attempted to prove infringement in an important case involving the television serial *Falcon Crest* by offering a statistical analysis of coincidences in names in the works at issue. This analysis, Condren claimed, mathematically proved that the TV series derived from the plaintiff's novel. The flaw in Condren's analysis was essentially the same as that in Malevinsky's: the material being analysed—names in Condren's case, emotions in Malevinsky's—was just too fluid and subject to contextual inflection to be reduced to a formula. Thus, one of the names that Condren submitted as evidence—"Maggie"—was the name of a principal character in the TV series but the name of a horse in the plaintiff's novel.³⁵

Indeed, the whole history of the use of partisan experts in trials has been bound up with the desire for a scientific and determinate resolution of controverted issues. A few words on this matter are in order. Like the adversarial system of trial itself, the use of partisan experts is an Enlightenment phenomenon that developed in England in the seventeenth and eighteenth centuries. The admissibility of expert testimony is generally traced to *Folkes v Chadd* (1782), a case involving conflicting theories about what had caused the decay of a harbour on the Norfolk coast. In *Folkes*, Lord Mansfield ruled that the issue was a matter of science and that men of science must thus be allowed to testify as to their opinions.³⁶

As for experts testifying in copyright cases, the earliest instance with which I am familiar is *Sayre v Moore* (1785),³⁷ also a Mansfield case. This involved allegations of infringement in connection with nautical charts. Moore, the defendant, called three experts—a former ship's captain, a Navy officer and an astronomer—who testified that the plaintiff's maps were erroneous and dangerous and that the defendant's versions were superior. In his summary of the evidence to the jury, Lord Mansfield remarked on the importance of allowing for improvements and corrections such as those to which the experts had testified, and on the basis of the experts' testimony the case was decided for the defendant. Four years later Moore was again the defendant in a case involving sea charts and again he produced experts and again prevailed. But in *Heather v Moore*, a third case in 1798, John Stevenson—one of the experts who had testified for Moore in the two earlier cases—testified for the plaintiff and on this occasion Moore lost.³⁸

As Tal Golan has discussed, eighteenth-century judges appear to have trusted gentlemen of science such as Stevenson to be impartial. In the nineteenth century, however, the spectacle of disagreeing partisan experts led to growing scepticism about the use of expert witnesses.³⁹ Science was supposed to offer certainty; warring experts provoked frustration and anger. By the end of the nineteenth century, especially in the United States, the reputation of expert testimony was at rock bottom. "There are three kinds of liars: the common liar, the damned liar, and the scientific expert", Judge William Foster said in 1897, speaking on expert testimony to the New Hampshire Medical Society.⁴⁰

Learned Hand's *Harvard Law Review* essay, published four years later in 1901, was thus part of a general reaction against the use of partisan experts. Hand suggested various reforms for cases in which expert testimony was really needed; for example, the use of a single expert or a board of experts called by the court rather than by the parties. But such proposals have never been implemented, at least in the

³⁵ The case and Professor Condren's testimony are discussed by Thomas Mallon, Stolen Words (New York: Ticknor & Fields, 1989), pp.194–235.

³⁶ Folkes v Chadd [1782] 3 Doug K.B. 157. ³⁷ Sayre v Moore [1785] 1 East 361.

³⁸ See the report on *Heather v Moore* in *The Express and Evening Chronicle*, March 1–3, 1798, p.1. I am grateful to Isabella Alexander for this reference.

³⁹ See Tal Golan, Laws of Men and Laws of Nature: The History of Scientific Expert Testimony in England and America (Cambridge, Mass.: Harvard University Press, 2004), pp.4–51.

⁴⁰ Quoted by Golan, Laws of Men and Laws of Nature (2004), p.255.

United States. It is worth noting that when Hand returned to the subject of expert testimony in Nichols v Universal in 1930, he was no longer arguing against experts in every circumstance, but merely in relation to literary cases. In such cases, he wrote, expert testimony "encumbers the case and tends to confusion, for the more the court is led into the intricacies of dramatic craftsmanship"—here Hand was surely invoking Malevinsky's arcane testimony about dramatic structure—"the less likely it is to stand upon the firmer, if more naïve, ground of its considered impressions upon its own perusal". 41

Malevinsky had claimed objectivity for his algebraic formula. Learned Hand made no such claims for the pattern test, which merely provided a framework for examining the particulars of an individual case. A judge would finally have to rely, as Hand put it, on his own "considered impressions". In other words, he would have to rely upon his skill in literary analysis. A sophisticated and talented literary analyst and a superb writer, Learned Hand certainly could rely on his abilities as a critic. Although he never acknowledged it, Hand was assisted, I believe, by the substantial scholarship about antecedents and dramatic commonplaces that Harrison Steeves had provided. My principal point, however, is that in making his decision in *Nichols* he was necessarily acting as a literary critic as well as a judge.

One further point is also, perhaps, in order. We recall that Nichols' complaint approached the issue of infringement as an action and that Hand in effect transformed an allegation about an unlawful action into a comparative analysis of two works. Hand's approach to the question of infringement in Nichols remains the accepted approach to the analysis of infringement issues today. Are two works substantially similar with respect to protected content—expression—or are they only similar at a level of abstraction too high to be protected? This approach inevitably involves comparing literary works as if they were, at least in principle, something like bounded objects, the well-wrought urn of Cleanth Brooks' well-known title.

Judicious critics and literate jurists have always understood that the notion of the literary work as a bounded object is something of a fiction. After all, literary texts of all kinds can also be understood as performances that invoke, adapt and redeploy a multitude of other texts. Infringement analysis has developed various ways to take account of the permeable nature of texts—for example, the doctrine of fair use. Nevertheless, concerned as it is with the ownership, exploitation and exchange of commodities, the copyright tradition cannot readily abandon the concept of the work. The idea of the bounded, discrete literary object—an object caught up in trade—may be a fiction, but it is, I suspect, a necessary fiction. We can no more do without it than we can do without our equally fictional sense of ourselves as discrete and bounded individuals

⁴¹ Nichols 45 F.2d at 122.

What History Teaches Us about US Copyright Law and Statutory Damages

H. Tomás Gómez-Arostegui

Kay Kitagawa & Andy Johnson-Laird IP Faculty Scholar and Associate Professor of Law. Lewis & Clark Law School

© Copyright; Damages; Infringement; Legal history; Statutory interpretation; United States

There has been an explosion of interest in recent years in the origin and history of intellectual property law. This special issue is a testament to that fact. The study of British copyright history in particular has grown remarkably in the last 20 years, with a flurry of activity in the last 10. In the United States, the history of English copyright law remains especially relevant because it continues to play a supporting role in modern doctrinal and normative arguments over the nature and proper scope of US copyright law. In resolving doctrinal queries, US judges, lawyers and scholars continue to refer to court cases and statutes from England from the seventeenth, eighteenth and nineteenth centuries. Indeed, our Supreme Court regularly relies on English antecedents, mostly from the late eighteenth century. But historical work is not easy, and many potholes (some visible, others hidden) await those who undertake it.

The aims of this essay are modest. On the assumption that many readers of this special issue will not be familiar with how US law relies on past legal practices, the first half of this essay describes four principal areas where English and US copyright history remain doctrinally relevant to modern US copyright law. Historical antecedents can directly affect copyright doctrine because judges are required in these instances to consult history in deciding the questions of law presented to them. The second half of the essay then examines an instance where copyright history has been used in recent years by litigants and scholars to elucidate statutory damages. It demonstrates how recent interpretations of an earlier 1909 copyright statute—which have been offered principally to show that statutory damages under current US law cannot be punitive—are misguided. By relying on long-rooted principles from English law and early US law, this section reveals how a fuller historical perspective can and, in this instance, does provide a different answer.

Doctrinal relevance

Copyright history continues to play a vital role in helping to determine copyright doctrine today. There are three areas where it has been most visible—congressional authority to enact copyright laws, jury-trial rights and statutory interpretation—and an emerging fourth area of equitable relief.¹

The relevance of history to the first of these—challenges to congressional authority—stems largely from an analytical method called the First Congress canon.² It arises when litigants question Congress's power under art.I of the Constitution to enact a particular copyright provision, or question whether copyright legislation otherwise violates an article of the Constitution or the Bill of Rights, i.e. the first 10 amendments to the Constitution. The Supreme Court has stated that when this occurs it will be predisposed to find the

^{*} Thanks to Isabella Alexander, Lydia Loren and Joe Miller for their comments on an earlier draft.

¹ State common-law copyrights for sound recordings made before 1972 is a fifth area, but it may soon become moot if Congress elects to federalise those rights. See US Copyright Office, Federal Copyright Protection for Pre-1972 Sound Recordings (Washington, 2011).

² See Michael Bhargava, "The First Congress Canon and the Supreme Court's Use of History" (2006) 94 Cal. L. Rev. 1745.

provision constitutional if the First Congress of the United States, which met from 1789 to 1791, enacted similar legislation. Many members of the First Congress were delegates to the Constitutional Convention, and it was the First Congress that proposed the Bill of Rights. The Court thus presumes that those members were in the best position to judge whether their own enactments were constitutional. This presumption is rebuttable, but it remains very strong and is almost always dispositive. As a consequence, when analysing constitutional challenges to modern US copyright laws, the Court regularly examines the US Copyright Act of 1790 and its antecedents for analogs. It has, for example, done so on copyrightable subject matter, duration and restoration.³

Although jury trials in civil cases are all but obsolete in England, the right to a jury trial remains vitally important in the United States because it is enshrined in the Constitution. The Seventh Amendment provides:

"In Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved."

In a move that undoubtedly frustrates many lawyers in the United States, and that surprises many outside it, the Supreme Court has long relied on an historical inquiry to determine whether litigants have a constitutional right to a jury. What often matters most is whether in 1791—the year the Seventh Amendment became operative—the modern action or remedy in question would have been tried or obtained in England in a court of common law or in a court of equity. Whereas courts of law heard claims with the aid of a jury, the equity courts operated without one. By necessity, then, whenever a question about the jury-trial right arises in a copyright case, we will again find ourselves in the eighteenth century, looking this time at English law and early American law (insofar as it might be probative of English practice). Thus far, the only significant test of jury-trial rights has been on statutory damages, but we may one day see cases analysing whether the right attaches when assessing an infringer's profits or ongoing royalties in lieu of a final injunction.

Statutory interpretation is a third area where legal history plays a role. The Copyright Act of 1976 is of relatively recent vintage, but case law from 100 years ago and more may still shed light on its meaning. For one, Congress cannot be expected to exhaustively legislate every rule of decision, and it has therefore become common and uncontroversial for federal courts to fill the interstices of federal statutes by drawing from the common law. Congress is presumed to expect, and therefore presumed to intend, that courts will consider the decisional backdrop from the time of enactment when reading a statute. Secondly, historical cases are particularly germane insofar as the 1976 Act borrows language from earlier legislation. If Congress elects to use words or phrases that were used in another statute—whether it be a state or federal statute—we are to presume that Congress has also chosen to incorporate any settled judicial construction of that language, unless a contrary direction is evident. What this means for copyright law, of course, is that earlier statutes, and the gloss that courts have put on them, must sometimes be consulted in modern cases. This canon of interpretation loosely forms the subject of the latter part of this essay.

Lastly, a place of emerging relevance concerns equitable relief. For much of the history of our federal courts, remedies were dispensed in different adjudicative systems. In copyright cases, actual damages and penalties were available in courts of law, while injunctions and the disgorgement of infringers' profits were recoverable in courts of equity. Congress adopted this separate system by design in 1789, when it modelled the new federal judiciary of the United States after the courts of England. In the process, the judiciary co-opted the procedures and remedies of the principal English courts. Six decades after the

³ For example, Burrow-Giles Lithographic Co v Sarony 111 U.S. 53, 57 (1884); Eldred v Ashcroft 537 U.S. 186, 213, 219 (2003); Golan v Holder 123 S. Ct. 873, 885–886 and fn.21 (2012).

⁴ U.S. Const. amend.VII.

⁵ Feltner v Columbia Pictures Television Inc 523 U.S. 340, 347–355 (1998).

⁶ Lorillard v Pons 434 U.S. 575, 581 (1978); Capital Traction Co v Hof 174 U.S. 1, 36 (1899)

founding, the Supreme Court declared that the default equitable remedies of the federal courts were those, and only those, recognised by the English Court of Chancery circa 1789. As recently as in 1999, the Court reiterated that the equitable remedies of the federal courts, unless augmented by legislation, remain frozen in the late eighteenth century.8 The rationale underlying the rule was (and remains) a fear over equity running amok and contrary to precedent and statutory authority. Until recently, the rule has been insignificant in copyright cases because the equitable remedies granted have been identical to those granted in 1789, implemented by legislation, or both. But recent Supreme Court case law, which admonishes courts to more rigorously screen requests for final injunctions, has made the rule relevant again. As courts attempt to fashion other equitable remedies in lieu of injunctions—relief that is not expressly granted by copyright legislation—we may soon find courts turning again to eighteenth-century equity case law. 10

Given the important role that copyright history continues to play, it is of course imperative that the history be done properly. Conducting historical research on legal doctrines (sometimes called an "internal" history of the law¹¹) is a difficult task. For one, the pool of potential sources beyond the published materials is vast, particularly with respect to the years before 1850. There are pleadings and orders, manuscript reports, newspaper reports, judges' personal notes and opinions of counsel-all spread across libraries and archives throughout the United States, the United Kingdom and Ireland. 2 Additionally, many earlier legal procedures are entirely unknown to our practicing bar, while others appear vaguely familiar but only deceptively so. The lexicon differs, terms of art abound, and even foreign languages appear. Professor Milsom perhaps sums this up best: "The largest difficulty in legal history is precisely that we look at past evidence in the light of later assumptions, including our own assumptions about the nature and working of law itself."13 Placing oneself in the proper historical context is therefore paramount.

Statutory damages in historical perspective

The importance of historical context is illustrated by recent litigation and scholarship on the purpose of statutory damages in the United States. Statutory damages in peer-to-peer file-sharing lawsuits have garnered attention in recent years because the awards often far exceed the actual damages suffered by the plaintiffs or the profits earned by the defendants. They thus take on a retributive and deterrent character. One jury, for example, recently awarded record companies \$675,000 against a defendant found liable for exchanging 30 songs online.¹⁴ In another case, a jury awarded \$1.92 million (later reduced) for sharing 24 songs.¹⁵ In both lawsuits, counsel for the defendants challenged the awards as excessive and unconstitutional under the substantive due process clause of the Constitution. Those arguments were rejected.

A second argument against these awards—the one discussed here—relies on statutory interpretation. Some litigants and scholars have argued that punitive awards run counter to the objectives of current copyright law or, at the very least, the objectives of past laws. These arguments rely on a number of grounds, but the most important for our purposes is historical and textual. Citing language from the

⁷ Fontain v Ravenel 58 U.S. (17 How.) 369, 384 (1854).

⁸ Grupo Mexicano de Desarrollo SA v Alliance Bond Fund Inc 527 U.S. 308 (1999).

⁹ eBay Inc v MercExchange LLC 547 U.S. 388 (2006).

10 See generally H. Tomás Gómez-Arostegui, "Prospective Compensation in Lieu of a Final Injunction in Patent and Copyright Cases" (2010) 78 Fordham L. Rev. 1661.

¹¹ Michael Lobban, "The Varieties of Legal History" (2012) 5 Clio@Thémis 1.

¹² For English materials, see respectively Percy H. Winfield, The Chief Sources of English Legal History (Cambridge, Mass.: Harvard University Press, 1925); James Oldham, "Law Reporting in the London Newspapers, 1756–1786" (1987) 31 Am. J. Legal Hist. 177; James Oldham, "Eighteenth-Century Judges' Notes: How They Explain, Correct and Enhance the Reports" (1987) 31 Am. J. Legal Hist. 9; J.H. Baker, *The Law's* Two Bodies (Oxford: Oxford University Press, 2001), pp.87–89.

S.F.C. Milsom, A Natural History of the Common Law (New York: Columbia University Press, 2003), p.xvi.

¹⁴ Sony BMG Music Entertainment v Tenenbaum 719 F.3d 67 (1st Cir. 2013); Sony BMG Music Entertainment v Tenenbaum 660 F.3d 487 (1st Cir. 2011).

15 Capitol Records Inc v Thomas-Rasset 692 F.3d 899 (8th Cir. 2012).

Copyright Act of 1909, litigants and commentators have argued that statutory damages were intended to be primarily or exclusively compensatory and that, in either case, they were not to include a punitive purpose or intent. In the next few pages I aim to show how this reliance on the 1909 Act does not take history suitably into account and is thus misplaced.

The argument

The Copyright Act of 1976, as amended, states that a copyright owner may elect to recover, instead of actual damages or a disgorgement of the defendant's profits, an award of statutory damages for each work infringed. The statute provides little guidance on how much should be awarded, other than supplying minimum and maximum boundaries and stating that the award shall be in an amount "the court considers just". The default range for each award is \$750–\$30,000. A finding of innocent infringement lowers the minimum to \$200, while a finding of wilful infringement raises the maximum to \$150,000.

The 1909 Act, both as originally enacted and later amended, also contained statutory damages. The Act stated that a plaintiff could recover "in lieu of actual damages and profits, such damages as to the court shall appear to be just", so long as within a minimum and maximum range of \$250–\$5,000, or in some cases a less onerous range. The statute also included non-binding guidelines for reaching the appropriate award. For example, a court could award \$1 for "every infringing [book] made or sold by or found in the possession of the infringer or his agents or employees". Most important for our purposes, a final proviso proclaimed that all "such damages ... shall not be regarded as a penalty". ¹⁷

Thus far, two lines of argument have emerged that rely on the final proviso. Each reaches a different conclusion. First, defendants have argued that it demonstrates that Congress intended for statutory awards under the 1909 Act to be compensatory and not punitive:

"These statutory damages were not meant to be a penalty completely unrelated to actual damages but an alternate, if imprecise, means of compensation.... In response to concerns that liability could "run up into hundreds and thousands of dollars," the statute explicitly declared statutory damages "shall not be regarded as a penalty" and total statutory damages for a particular infringement were capped. 18 ... Thus, the seminal statutory damages section of the 1909 Act, the foundation for modern copyright law, was never intended to be more than an avenue for fair compensation." 19

Though the 1976 Act differs from the 1909 Act, some defendants have argued that the legislative history indicates Congress did not intend to change the purpose of statutory damages: "In enacting the 1976 Act, Congress reaffirmed the proof-based, compensatory rationale of the 1909 Act with striking clarity." 20

Other litigants have cited this language to argue the exact opposite, namely, that statutory damages awarded under the 1976 Act can be punitive. By their lights, Congress must have signalled that a punitive and deterrent purpose was intended in the 1976 Act because, among other things, the no-penalty language does not appear in it. Take for instance the following argument made by Chief Justice John G. Roberts, Jr, while he was in private practice:

"The Copyright Act of 1976, which eliminated the proviso in Section 25(b) that statutory damages "shall not be regarded as a penalty," ... and established for the first time enhanced damages for willful

¹⁶ 17 U.S.C. s.504(c).

¹⁷ Copyright Act of 1909 s.25(b).

¹⁸ I should note that in 1912 the caps were removed for infringements occurring after the defendant received written notice of the violation. Act of Aug 24, 1912.

Opening Brief for the Defendant-Appellee, pp.51–54, Sony BMG Entertainment v Tenenbaum 2010 WL 5623176 (1st Cir. Dec. 27, 2010).
Opening Brief for the Defendant-Appellee, p.60, Sony BMG Entertainment v Tenenbaum 2010 WL 5623176. See also Motion for Summary Judgment, pp.14–15, Turino v Island Def Jam Music Group 2006 WL 4508027 (C.D. Cal. Aug 10, 2006).

infringement, likewise makes clear that Section 504(c) is intended, in part, to serve a punitive and deterrent function in addition to providing compensation."²¹

As for commentators, they too have interpreted the 1909 Act in a similar fashion. By way of example, it has been posited that an

"important aspect of the 1909 Act [wa]s that Congress expressly conveyed that ... statutory damages were not to be used by courts as a punitive measure". 22

Another commentator has stated that

"the statute specifically provided that statutory damages were 'not [to] be regarded as a penalty," thereby seemingly endowing them exclusively with a compensatory dimension".²³

In fact, almost every scholar to have opined on the matter reads the phrase in the same or similar manner.²⁴ These interpretations are not outlandish. If one looks up "penalty" in any reputable dictionary, the senses all tend to mention punishment. Indeed, our Supreme Court has stated, albeit in a different context, that the "term 'penalty' involves the idea of punishment". 25 There are also older copyright cases that support this reading of the 1909 Act, ²⁶ and many circuits have read a similar provision in the Lanham Act the same way.²⁷ But did Congress truly intend to use the word in this fashion to prohibit punitive awards? The historical context offers strong, if not dispositive, evidence that Congress did not.

Placing "penalty" in the proper context

The word "penalty" was actually a term of art that carried a lot of legal baggage. In the context in which it was used in the 1909 Act, the word was most synonymous with "quasi-criminal", rather than "punitive". By enacting that awards were not to be "regarded as a penalty", Congress sought not to exclude punitive awards but to inform courts that they were not to categorise statutory damages as a quasi-criminal sanction, in order to avoid triggering a number of consequences associated with penal statutes. The word "regard" is actually our first clue that something special was afoot. If Congress had wanted to instruct courts not to impose statutory damages in a punitive way, I suspect it would have said so directly. Using "regard" to achieve that result is needlessly circuitous.

Let us review some important historical principles and the buildup to the 1909 Act. These provide the necessary context for interpreting the statute.

²¹ Brief for the Petitioner, p.33, Feltner v Columbia Pictures Television Inc 1997 WL 710933 (U.S. Nov 13, 1997).

²² Betselot A. Zeleke, "Federal Judges Gone Wild: The Copyright Act of 1976 and Technology, Rejecting the Independent Economic Value Test" (2011) 55 Howard L.J. 247, 253.

Shyamkrishna Balganesh, "The Uneasy Case against Copyright Trolls" (2013) 86 S. Cal. L. Rev. 722, 774–775.

²⁴ E.g. Stephanie Berg, "Remedying the Statutory Damages Remedy for Secondary Copyright Infringement Liability: Balancing Copyright and Innovation in the Digital Age" (2009) 56 J. Copyright Soc'y U.S.A. 265, 293; Alan E. Garfield, "Calibrating Copyright Statutory Damages to Promote Speech" (2010) 38 Fla. St. U. L. Rev. 1, 21; Caitlin McGowan, "Copyright Infringement and Bankruptcy: The Meaning of Willful in Two Statutory Schemes" (2009) 20 Syracuse Sci. & Tech. L. Rep. 51, 62, 67; Jeffrey Stavroff, "Damages in Dissonance: The 'Shocking' Penalty for Illegal Music File-Sharing" (2011) 39 Cap. U. L. Rev. 659, 668. But compare Pamela Samuelson and Tara Wheatland, "Statutory Damages in Copyright Law: A Remedy in Need of Reform" (2009) 51 Wm. & Mary L. Rev. 439, 446-451, qualifying the argument after being apprised by this author of some of the sources cited herein.

²⁵ United States v Chouteau 102 U.S. 603, 611 (1880).

²⁶ E.g. Russell & Stoll Co v Oceanic Electrical Supply Co 80 F.2d 864, 865 (2d Cir. 1936).

²⁷ Cf. 15 U.S.C. s.1117(a) ("Such sum ... shall constitute compensation and not a penalty."). See also, for example, Sands Taylor & Wood v Quaker Oats Co 34 F.3d 1340, 1346-1350 (7th Cir. 1994); Ralph S. Brown, "Civil Remedies for Intellectual Property Invasions: Themes and Variations' (Spring 1992) Law & Contemp. Probs. 45, 74-75, criticising reliance on the word "penalty" in the Lanham Act for some of the same reasons that are discussed here.

Historical principles

Courts sitting in equity could not award a penalty. In England, it was long a maxim that equity courts—meaning principally the equity sides of the Court of Chancery and Court of Exchequer—could not award penalties or forfeitures. In fact, one of the principal grounds of equity jurisdiction was to relieve litigants from penalties and forfeitures in some circumstances. 28 The rule against awarding penalties carried over to the federal courts of the United States when Congress established the federal judiciary in 1789 and adopted, as I have already noted, the procedures and principles of the Court of Chancery as they existed at that time. The Supreme Court applied the principle to copyright cases in Stevens v Gladding, where it held that the penalties provided under the Copyright Act of 1831 for infringement could not be obtained in equity.²⁹

Congress could of course change this equitable rule and expressly enable a court of equity to award penalties.³⁰ But the copyright statutes in effect before the 1909 Act did not do so. This meant that if a plaintiff wanted to recover an award of statutory penalties before 1909, the plaintiff would have to file an action at law. As a matter of practice, this effectively required two separate lawsuits: the first to be filed in equity to obtain prospective relief—that is to say, an injunction—and a second at law to obtain retrospective penalties.³¹ This procedural course was necessary because federal courts continued to maintain separate law and equity dockets until the unification of the two courts in 1938.

Courts sitting in equity could not compel the discovery of facts from a defendant that could lead to an award of penalties at law. Apart from not awarding penalties itself, a court sitting in equity in England would not aid a plaintiff to obtain penalties in a court of law.³² In the context of copyrights, this meant that an equity court could not force a defendant to disclose how many books he had printed, sold or had in his custody unsold. Only if a plaintiff waived the right to recover the statutory penalties at law might a court of equity compel a defendant to answer those types of queries.³³ This rule was also recognised and applied in the United States, including in copyright cases.³⁴

Any statute that imposed a penalty had to be construed strictly. In England, it had long been the rule that penal statutes were strictly construed.35 The same can be said of the United States, though today we more often see this described as a "rule of lenity" applicable to criminal statutes. Thus, in Bolles v Outing Co, a copyright case, the Supreme Court stated:

"The statute, then, being penal, must be construed with such strictness as to carefully safeguard the rights of the defendant and at the same time preserve the obvious intention of the legislature. If the language be plain, it will be construed as it reads, and the words of the statute given their full meaning; if ambiguous, the court will lean more strongly in favor of the defendant than it would if the statute were remedial."36

Consider, for example, the Copyright Act of 1831, which provided a penalty of 50 cents on each infringing "sheet which may be found in [the offender's] possession". The trial court in one case interpreted the statute broadly and counted every sheet that the defendant had published and thus that may have at one time been in the defendant's possession. The Supreme Court reversed on the principle noted above. 38 Forty

```
<sup>28</sup> Richard Francis, Maxims of Equity, 3rd edn (London, 1746), pp.44–52.
  <sup>29</sup> Stevens v Gladding 18 U.S. 447, 454–455 (1854).

<sup>30</sup> Untermeyer v Freund 58 F. 205, 210–211 (2d Cir. 1893).
  <sup>31</sup> E.g. Brady v Daly 83 F. 1007, 1008–1009 (2d Cir. 1897).
  <sup>32</sup> John Mitford, A Treatise on the Pleadings in Suits in the Court of Chancery, 2nd edn (London, 1787), pp.226–227.
33 H. Tomás Gómez-Arostegui, "What History Teaches Us about Copyright Injunctions and the Inadequate-Remedy-at-Law Requirement" (2008) 81 S. Cal. L. Rev. 1197, 1243, 1271–1273.
    <sup>4</sup> United States v Saline Bank of Virginia 26 U.S. (1 Pet.) 100, 104 (1828); Chapman v Ferry 12 F. 693, 694–696 (C.C.D. Or. 1882).
  35 Thomas Wood, An Institute of the Laws of England, 3rd edn (London, 1724), p.9.
   <sup>36</sup> Bolles v Outing Co 175 U.S. 262, 265 (1899)
  <sup>37</sup> Copyright Act of 1831 s.6.
   <sup>38</sup> Backus v Gould 48 U.S. 798, 811–812 (1849).
```

years later, the Court interpreted a similar provision and held that an employee who had nominal custody but not legal possession of sheets was not subject to the penalties.³⁹

Statute of limitations and jurisdiction. Two other consequences stemmed from labelling a remedy a penalty—these arising from statutes. First, the copyright statute in effect before the 1909 Act contained a two-year statute of limitations for penalties and forfeitures, but no statute of limitations for actual damages, disgorgement of profits, or injunctions. 40 Secondly, before 1912, the circuit courts of the United States had original jurisdiction concurrent with district courts over copyrights suits, but a statute provided that district courts had exclusive jurisdiction in actions brought for penalties or forfeitures.⁴¹

The meaning of "penalty"

In 1899, just before the buildup to the 1909 Act, the Supreme Court decided two important cases relating to the statutory-damage provisions of the copyright laws then in force. Each interpreted different statutory provisions with the principal aim being to determine whether the given remedy amounted to a "penalty" subject to one or more of the consequences outlined above.

In Brady v Daly, the Court held that the remedy provided in s.4966 of the Revised Statutes, which covered dramatic compositions, should not be adjudged a penalty. That section stated that any person publicly performing a copyrighted work was liable for "damages ... [of] not less than [\$100] for the first, and [\$50] for every subsequent performance, as to the court shall appear just". ⁴² In holding that the remedy was not a penalty, the Court relied on five factors: (1) the statute used the word "damages" rather than "forfeiture" or "penalty"; (2) the remedy could only be sought by the copyright owner, and not by a common informer in a qui tam action; (3) the award went solely to the copyright owner, and no part of it went to the government; (4) apart from the minimum, the amount of the award was not fixed and could be adjusted upward according to the evidence; and (5) although application of the provision might prove punitive under the circumstances of some cases, the other factors noted above indicated that its chief purpose was remedial.43

In the second case, Bolles v Outing Co, the Court analysed s.4965 of the Revised Statutes, which covered maps and engravings. That section provided that infringers were to

"forfeit to the proprietor all the [infringing] plates ... and every sheet thereof ... and shall further forfeit one dollar for every sheet of the same found in his possession, ... one half thereof to the proprietor and the other half to the use of the United States". 44

The Court had no trouble ruling that this was a penalty, citing only two factors: (1) the amount of the award was fixed and arbitrary; and (2) half the award went to the government. After construing the provision to be a penalty, the Court analysed the remaining parts of the statute according to the rule of lenity described previously.45

This, then, was the background with which Congress was working when it began the process of revising the copyright laws in early 1905.

³⁹ Thornton v Schreiber 124 U.S. 612 (1888). ⁴⁰ U.S. Rev. Stat. ss.4968, 4964, 4970. ⁴¹ U.S. Rev. Stat. ss.629(9), 563(3). 42 U.S. Rev. Stat. s.4966.

⁴³ Brady v Daly 175 U.S. 148, 153–157 (1899)

⁴⁴ U.S. Rev. Stat. s.4965.

⁴⁵ Bolles v Outing Co 175 U.S. 262, 265 (1899).

The 1909 Act

Congress did three things in the 1909 Act to take care of the legal baggage noted above. First, it empowered federal courts sitting in equity to award in a single lawsuit all civil remedies under the Act, including statutory damages. 46 Secondly, Congress tried to parrot the language from s.4966 of the Revised Statutes as much as possible, which Brady deemed remedial, rather than the language of s.4965, which Bolles construed as a penalty. And finally, as a belt-and-suspenders approach, Congress added that the award "shall not be regarded as a penalty." This final proviso was something the Supreme Court had recently acknowledged could be added to statutes when Congress desired that a statutory remedy which by its nature was *imposed* as a penalty should nevertheless not be *construed* as one:

"Congress may enact that such a provision shall not be considered as a penalty or in the nature of one ... and it is the duty of the court to be governed by such statutory direction²⁴⁷

Relatedly, Congress inserted no-penalty language elsewhere in the statute, and did so in a way that sheds further light on this matter. The Act created a compulsory license which allowed in some circumstances the mechanical reproduction of musical compositions in phonographs, player-piano rolls and the like, so long as the manufacturer provided notice of the intended reproduction and paid a statutory royalty of two cents per record or roll. The statute declared that in the case of a failure to provide notice, a court could award in its discretion (and in addition to the royalty) an amount of up to three times the royalty "by way of damages, and not as a penalty". 48 Thus, here also we have Congress declaring that an award that as a matter of fact will have a punitive purpose and effect in many cases, 49 is not as a matter of law to be considered a penalty.

Perhaps not surprisingly, it appears that the persons most interested in adding the final proviso were copyright holders, not potential defendants, because construing the award as a penalty would actually make it more difficult to recover. Some key points from the 1909 Act's legislative history follow:

Nathan Burkan, counsel for the Music Publishers' Association of the United States, noted a. that some provisions of the prior copyright laws were considered a penalty and therefore had to be construed under a rule of lenity. This resulted in a plaintiff having to prove that the defendant had the work in their possession at the time of suit, rather than proving that the defendant had the work in their possession at any time previously:

> "[A]lthough you can prove that an offender has had 100,000 copies of a work and has disposed of every copy, you can not recover a single dollar."50

Burkan wanted to ensure that any new law have no such limitation and that the statutory language be changed.

Alfred Lucking, counsel for the American Directory Publishers Association, was uneasy b. about a draft that contained a fixed, per-copy penalty but no maximum amount for the award. He was concerned that, because these penalties could be large, a court of equity might not enforce them.51

⁴⁶ Copyright Act of 1909 ss.26, 27, 34.

⁴⁷ Helwig v United States 188 U.S. 605, 613, 615–616 (1903), citing, as examples, Act of July 24, 1897 s.32 and Act of Feb. 11, 1846 s.3. See also Newcomb v United States 37 C.C.P.A. 18, 24 (1949), citing Tariff Act of 1930 s.489 ("Even if we regarded them as penal in fact, it is certain that they are not penal in law, because Congress has decreed otherwise.").

⁸ Copyright Act of 1909 ss.1(e), 25(e).

⁴⁹ E.g. Famous Music Corp v Seeco Records Inc 201 F. Supp. 560, 569 (S.D.N.Y. 1961). Cf. Leo Feist Inc v American Music Roll Co 253 F. 860,

¹⁰ E. Fulton Brylawski and Abe Goldman (eds), Legislative History of the 1909 Copyright Act (New Jersey, 1976), Vol.2, pp.243–244.

c. The chairman of the copyright committee of the American Bar Association, Arthur Steuart, also raised concerns about penalties. He noted that any new statutory-damages provision might be construed as

> "penal in character, and therefore an interpretation may be applied to it which will be exceedingly strict and rigid, which will be objectionable for the purpose for which we desire it. We want to make it so that it would not be penal, so that it will only be liquidated damages, so that we can recover on the evidence what the court may decide to be proper."

He praised the language in a draft then under consideration, as it contained language similar to that approved by the Supreme Court in Brady v Daly:

"[W]e have ... used the very words of the old statute as they have been construed by the Supreme Court, in order that we might be sure that under no subsequent construction would that language be held to be penal"52

- Ansley Wilcox, who represented the Consolidated Lithographic Company and other clients d. interested in poster printing, wanted to be more explicit and proposed that the provision expressly state that it was not a penalty. In lieu of actual damages or profits, a plaintiff could "recover, as liquidated damages, and not as a penalty" certain enumerated sums.⁵³
- Earlier drafts described the statutory damages as "liquidated damages" instead of using the e. no-penalty language. The former had apparently been inserted at the suggestion of the Department of Justice. Responding to a question as to why the remedy was described that way, two participants stated that it was done to distinguish the remedy from criminal sanctions. For example, Richard R. Bowker, Vice President of the American (Authors') Copyright League, posited that the phrase was used "to avoid the question of criminality". And Herbert Putnam, the Librarian of Congress, stated that it was done to indicate that the remedy was "something recoverable by the plaintiff, and that is what this section has to deal with; it is not penal in any sense". Eventually, "liquidated damages" was replaced, likely at the suggestion of Arthur Steuart, who had advised that "it would be better to leave that word out".54
- f. Importantly, the drafters expressed the view that statutory awards could have a punitive component. Among other things, there was a consensus, expressed numerous times, that a court deciding where within the range to impose an award should consider the culpability of the defendant⁵⁵—something out of place in a regime of purely compensatory purpose. And in a remark that perhaps sums this up best, a member of an ABA working committee stated:

"You have provided for what the statute says shall not be called penalties, but what amount to penalties to be given in the discretion of the court"56

⁵² Brylawski and Goldman (eds), Legislative History of the 1909 Copyright Act (1976), Vol.4, p.176–177.

⁵³ Brylawski and Goldman (eds), Legislative History of the 1909 Copyright Act (1976), Vol.4, p.176. ⁵⁴ Brylawski and Goldman (eds), Legislative History of the 1909 Copyright Act (1976), Vol.3, pp.232–235, 258.

⁵⁵ Brylawski and Goldman (eds), Legislative History of the 1909 Copyright Act (1976), Vol.1, pp.70–72, 204, 228, 258, Vol.3, pp.228–232, 236, 241, 243–244, 258–259.

56 Brylawski and Goldman (eds), Legislative History of the 1909 Copyright Act (1976), Vol.5, p.31.

The Supreme Court

Notably, the Supreme Court has already rejected, albeit arguably in *obiter dictum*, the argument that the "not regarded as a penalty" language meant that statutory damages under the 1909 Act could not be punitive. In the case at issue, the plaintiff obtained a \$5,000 award despite the fact the defendant had generously admitted that its profits were \$899. The trial judge and the plaintiff's counsel initially agreed that statutory damages—though not regarded as a penalty—were "predicated upon the theory that the damages are in a sense punitive".57 As a consequence, when the case reached the Supreme Court, the defendant argued that the \$5,000 award was punitive and thus amounted to a penalty prohibited by the terms of the statute.⁵⁸ The Court disagreed and affirmed.

Although there is a question as to whether the award was actually punitive.⁵⁹ the Court nevertheless found no conflict between the statute and an award that at least purportedly punished and deterred a defendant:

"The statutory rule, formulated after long experience, not merely compels restitution of profit and reparation for injury but also is designed to discourage wrongful conduct. The discretion of the court is wide enough to permit a resort to statutory damages for such purposes. Even for uninjurious and unprofitable invasions of copyright the court may, if it deems it just, impose a liability within statutory limits to sanction and vindicate the statutory policy."60

The Court's position tracks what it had said earlier as to why the no-penalty proviso was inserted. Speaking of the statutory-damages provision generally, the Court stated:

"The phraseology of the section was adopted to avoid the strictness of construction incident to a law imposing penalties, and to give the owner of a copyright some recompense for injury done him, in a case where the rules of law render difficult or impossible proof of damages or discovery of profits."61

I do not wish to argue that statutory damages under the 1909 Act were the equivalent of punitive damages. Undoubtedly, their purpose, in large part, was to compensate plaintiffs in cases where it would be difficult or impossible to prove actual damages or an infringer's profits. Abundant evidence in the legislative history demonstrates as much. Rather, I contend that historical principles, coupled with the textual context and legislative history, make clear that Congress did not declare that there could be no punitive purpose. By prescribing that the remedy "shall not be regarded as a penalty", Congress was simply stating that courts should not subject these awards to all the defendant-protective consequences normally associated with penal laws. Stated otherwise, although an award might be a penalty in fact, it was not to be regarded as a penalty in law.

Conclusion

In light of how often litigants and scholars engage in historical analysis, it is important to remind ourselves that we must not only be aware of where we are but when we are. Historical context can offer a new perspective on a problem, and sometimes it offers the only correct answer. To be sure, it is not always possible to know which queries present special historical issues that require additional investigation. But

⁵⁷ Stenographic Record of Trial, p.34, FW Woolworth Co v Contemporary Arts Inc (D. Mass. April 26, 1950).

⁵⁸ Brief for the Petitioner, pp.26–28, FW Woolworth Co v Contemporary Arts Inc 1952 WL 82430 (U.S. Oct 1952).

⁵⁹ E.g. Stenographic Record of Trial, pp.114, 119–120, FW Woolworth Co v Contemporary Arts Inc (1950).

⁶⁰ FW Woolworth Co v Contemporary Arts Inc 344 U.S. 228, 233 (1952).

⁶¹ Douglas v Cunningham 294 U.S. 207, 209 (1935) (emphasis added). Treatise authors before and after Douglas, including one author who participated in drafting the legislation, read the proviso similarly: the no-penalty language was added to avoid the baggage noted above. Leon H. Amdur, Copyright Law and Practice (New York, 1936), pp.950-954, 1157-1158; Arthur W. Weil, American Copyright Law (Chicago: Callaghan & Co, 1917), pp.476-477; R.R. Bowker, Copyright, Its History and Its Law (Boston: Houghton Mifflin Company, 1912), pp.265-266.

Making Intellectual Property Law in the Shadow of Law: *International News Service v Associated Press*

Steven Wilf

Anthony J. Smits Professor of Global Commerce, University of Connecticut School of Law and Elizabeth S. and Richard M. Cashin Fellow, Radcliffe Institute for Advanced Studies, Harvard University

^U Copyright; Legal history; News reporting; United States

Introduction

The conventional story is that intellectual property's remarkable expansion occurred through filling lacunae in the existing protection of knowledge. Intellectual property began as a fairly modest enterprise in the United States, the constitutionally mandated fields of copyright and patent. But the introduction of new disruptive technologies, the rise of complex economies and, most importantly, the insistent demands of interest groups seeking to profit from the products of the mind led to the spread of intellectual property law into areas hitherto untouched by legal regulation. The very notion of intellectual property was created to embrace a variety of disparate forms of expression, including a particle zoo of different small, object-specific regimes.¹

In the US version of this narrative, the landmark 1918 Supreme Court case of *International News Service v Associated Press* marks the beginning of the twentieth century's vast enlargement of intellectual property—what Robert Merges calls "a hundred years of solicitude"—with its granting of proprietary rights in news.² The case emerged in the midst of World War I when two rival wire services, International News Service (INS), which was under the control of William Randolph Hearst, and the Associated Press (AP), competed for providing the latest information to readers from the battlefront.³ INS appropriated news stories reported by the AP in its East Coast newspapers and, transmitting news via telegraph, published its own versions without attribution on the West Coast. Writing for the Court, Justice Mahlon Pitney found that AP had a quasi-property right in the news derived from its substantial expenditure of "labor, skill, and money" in its collection. The decision provided AP with the right to bar its direct competitor from distributing news based upon unfair competition law.⁴

Although much has been written about this case, there remains the enduring puzzle of the grounding for a theory of misappropriation.⁵ As was pointed out at the time of the decision, there is no statutory basis

¹ Steven Wilf, "Intellectual Property" in Sally E. Hadden and Alfred L. Brophy (eds), *A Companion to Legal History* (Oxford: Blackwell Publishing, 2013), pp.441–459.

² Robert P. Merges, "One Hundred Years of Solicitude: Intellectual Property Law, 1900–2000" (2000) 88 Cal. L. Rev. 2187.

³ International News Service v Associated Press 248 U.S. 215 (1918) (INS).

⁴ INS 248 U.S. at 238-239.

⁵ Douglas G. Baird, "Common Law Intellectual Property and the Legacy of *International News Service v. Associated Press*" (1983) 50 U. Chi. L. Rev. 411; Douglas G. Baird, "The Story of *INS v. AP*: Property, Natural Monopoly, and the Uneasy Legacy of a Concocted Controversy" in Jane C. Ginsburg and Rochelle Cooper Dreyfuss (eds), Intellectual Property Stories (New York: Foundation Press, 2006); Shyamkrishna Balganesh, "Hot News": The Enduring Myth of Property in News" (2011) 111 Colum. L. Rev. 419; Andrew Beckerman-Rodau, "Ideas and the Public Domain: Revisiting *INS v. AP* in the Internet Act" (2011) 1 N.Y.U. J. Intell. Prop. & Ent. L. 1; Richard A. Epstein, "The Protection of 'Hot News': Putting Balganesh's

for an intellectual property right in news. Even more strikingly, periodicals were covered under the 1909 Copyright Act, and therefore any state cause of action, such as unfair competition, raises the problem of preemption.6

Common law norms, of course, should be trumped by copyright's existing statutory scheme. As Judge Learned Hand stated in *Cheney Bros v Doris Silk Corp*, the next major case to examine similar issues, if INS intended to create a sort of common law copyright for reasons of justice, it would "fragrantly conflict with the scheme which Congress has for more than a century devised to cover the subject-matter". And does a property right—or even a quasi-property right—exist in expression whenever a significant investment has been made? Despite its common law cloaking, this transforms intellectual property into a species of natural right granted whenever labor is allocated to the creation of knowledge.

One way the *INS* case has been conceived is as seeing the Court as expanding trade secret which already stands outside of copyright's framework. A series of earlier tickertape cases may have prompted the Court to extend protection of financial introduction to a broader protection of hot news. Was it an equity case in common law clothes? Pitney, who had extensive experience with equity jurisprudence in New Jersey prior to joining the Court, criticised INS for free riding or "endeavoring to reap where it has not sown". "A court of equity", Pitney wrote, "ought not to hesitate long in characterizing it as unfair competition in business". Did the Supreme Court reconstitute itself as a court of equity? Or might INS be treated as a protection of customary norms within the publishing business community? Under this approach, the Court would have been introducing a tort of unfair competition to prevent wrongful acts by competitors in order to ensure the morality of the marketplace. The focus would be upon the conduct of the parties, not upon the news itself. Is it a common law expansion of trade secret law through its usual mechanisms of constructing legal doctrines through drawing analogies?

Finally, was Pitney's decision quite simply utilitarian? The decision speaks of needing to provide the "added profit necessary as an incentive to effective action in the commercial world". As Judge Ralph Winter has stated:

"INS is not about ethics; it is about the protection of property rights in time-sensitive information so that the information will be made available to the public by profit-seeking entrepreneurs."¹⁰

Was it intended to insulate a business from ruinous competition? The fact that the INS decision was justified in different ways led courts, such as the United States Court of Appeals for the Second Circuit in the 1930s, to doubt whether judges could broadly establish out of whole cloth intellectual property norms without proper deference to the legislature.¹¹

Despite their significant differences, all four of *INS*'s rationales for broadening misappropriation—trade secret, equity, commercial morality and the utilitarian safeguarding of incentives for journalism—presume that there was a remarkable de novo creation of a legal rule. As one commentator has noted, INS is a case of law abhorring a vacuum.¹² In what *The New York Times* called a "sweeping decision", Pitney invented an entire construct for the protection of knowledge in an uninhabited jural space.¹³ Indeed, this case has been seen as a watershed for the invention of the concept of as an overarching claim where courts envisioned

Enduring Myth about International News Service v. Associated Press in Perspective" (2011) 111 Colum. L. Rev. Sidebar 79; Edmund J. Sease, "Misappropriation Is Seventy-Five Years Old: Should We Bury it or Revive it?" (1994) 70 N.D. L. Rev. 781.

⁶Ch. 323, 35 Stat. 1075.

⁷ Cheney Bros v Doris Silk Corp 35 F.2d 279 (1929).

⁸ See, for example, Kiernan v Manhattan Quotation Telegraph Co 50 How. Pr. 194, 196–197, recognising right of property in information when divulged to specific recipient.

Alan R. Breed, Mahlon Pitney: His Life and Career, Political and Judicial, BA senior thesis, Princeton University, 1952, pp.30-31.

¹⁰ National Basketball Association v Motorola 105 F.3d 841, 853 (2nd Cir. 1997).

¹¹ Cheney Bros 35 F.2d 279 (2d Cir. 1929); Baird, "Common Law Intellectual Property and the Legacy of International News Service v. Associated Press" (1983) 50 U. Chi. L. Rev. 411, 418–419.

12 Leo J. Raskind, "The Misappropriation Doctrine as a Competitive Norm of Intellectual Property Law" (1991) 75 Minn. L. Rev. 875, 889.

¹³ The New York Times, December 24, 1918.

a protectable right beyond either positive law established through statutes or individual regimes. Intellectual property as a term first appeared in a federal court case in 1845. ¹⁴ Yet the idea of intellectual property as something greater than its parts has often been identified as emerging from *INS*—where a quasi-property right was summoned into existence out of necessity.

This article argues the opposite. Hot news protection emerged in the shadow of a plethora of legal forms. It begins by describing how news has been a regulated form of knowledge since the beginning of the new republic. It also examines the way the *INS* court was compelled to deal with a dense legal field consisting of the private law of AP—which itself was shaped by corporate and contract law, anti-competition law, a number of proposed statutes, and comparative law operating in other countries. The article then identifies the problem of the difficulties posed by the introduction of a style of pared down news, and its display through electronic bulletin machines. This second form of sharing—beyond the collective agency of AP—raised problems with copyright's definition of publication.

News in the shadow of copyright

Two thick volumes published just four years before the *INS* case by the news service itself were entitled *Law of the Associated Press*. Looking remarkably like a collection of statutes and cases, AP's law book includes of a detailed account of the binding rules on members of the AP with sanctions for the failure to comply. Its bylaws, for example, included agreements to furnish stories to other papers and a non-intercourse provision that barred members from providing or receiving news from non-members.¹⁵ By every definition, AP had created its own legal domain founded upon contractual obligations outlining member duties and a strict set of rules for sharing information.

Private ordering and collective action

How did this private apparatus of law come into being? AP was formed in 1846 by five New York daily newspapers to share the burden of transmitting news from the Mexican American War. As much as contract, telegraph formed the sinews that bound AP together. In 1914, AP first used the Marconi wireless telegraph to cover the America's Cup race off Sandy Hook, New Jersey. It introduced the teletype to directly send news over telegraph wires to printers located in the offices of subscribers.

The reach of the telegraph was even more significant for its coverage of World War I. Four major news wire services—Havas (Paris), Reuters (London), Wolff's (Berlin) and AP (New York)—dominated the dissemination of information at the beginning of the twentieth century. The links and differences among these vast agencies were critical for war coverage. By 1918, AP consisted of 950 daily newspapers and earned \$3,500,000 from its members to support news gathering. Even INS, the smaller of the two entities in this David versus Goliath story, numbered 400 newspapers. ¹⁶

The *INS* court operated in the shadow of concerns about monopoly—and a late-nineteenth-century legacy of antitrust law—as much as copyright law. During the period from 1888 to 1914, AP's bylaws had been challenged in at least a dozen courts as a restraint on trade and therefore a violation of antitrust law.¹⁷ Perhaps the most worrisome of these decisions was the Illinois Supreme Court case of *Inter-Ocean Publishing Co v Associated Press*, which issued an injunction to prevent AP from expelling a member

¹⁴ Justin Hughes, "Copyright and Incomplete Historiographies: Of Piracy, Propertization, and Thomas Jefferson" (2006) 79 S. Cal. L. Rev. 993.

¹⁵ Law of the Associated Press (New York: Associated Press, 1914), Vol.1, pp.592–610; By-laws of the Associated Press of New York (1900). ¹⁶ 248 U.S. 215, 217 (1918); Stephen Shmanske, "News as a Public Good: Cooperative Ownership, Price Commitments, and the Success of Associated Press" (1986) 1 Bus. Hist. Rev. 55.

¹⁷ Victoria Smith Ekstrand, Publishers, Pirates, and the Public Domain: Origins of the Hot News Doctrine and the Legacy of *INS v. AP*, PhD thesis, University of North Carolina, 2003, p.56.

for the violation of its bylaws owing to its operation as a monopoly injurious to the public.¹⁸ As a result, AP moved its corporate offices from Chicago to New York.

AP's collective action reflected the need for newspapers to pool resources to meet the considerable cost of collecting news. Wars—where correspondent access might be variable and where even greater expenditures might be needed to send dispatches—were critical junctures for establishing co-operative networks. Not surprisingly, the history of news services in the United States was punctuated by moves towards co-operation during the Civil War, the Spanish American War and World War I. Free riding posed a special problem because of the challenge it posed to the news service as a whole as it sought to create the terms for information sharing.¹⁹

From this practical necessity of bearing the cost of news-gathering, an ethos of collective membership emerged. AP prided itself on creating a mechanism to share information, and therefore to ensure the accuracy of the news. Melville E. Stone, general manager of AP, described the organisation as

"a national cooperative news-gathering organization owned by the newspapers, and by them alone, selling no news, making no profits, paying no dividend, simply the agent and servant of the newspapers".²⁰

This ideal of the news service as a cooperative entered into the legal arguments raised in the *INS* case. Frederick W. Lehmann, AP's counsel, was Solicitor General under President William Taft. A renowned orator, he concluded with an unclean hands argument. AP was a co-operative while INS under Hearst was the exemplar of an unholy marriage between the press and big business. Moreover, the cause of action in the *INS* case rested upon allegations that INS bribed AP employees and induced them to divulge information. As Lehmann claimed:

"News, as disseminated by the many journals of this country, is powerful to shape public conduct. If its influence is to be on the side of good, rather than on the side of evil, the business must be in clean hands and conducted by honest methods. If it comes to the public from tainted sources and by tainted means, the news itself will not escape contamination."

AP believed its greatest asset was not the news gathered, but the reputation of the association as a whole. Any collective action, however, might be seen as a monopoly. During oral arguments Samuel Untermeyer, a Jewish American lawyer with a strong commitment to antitrust, argued that AP threatened to become a "despotic monopoly". The problem was similar to contemporary debates over patent pooling. On the one hand, collective organisations mobilised resources efficiently and, as AP claimed, might even set standards for quality that benefit consumers. On the other hand, all combinations, to use the nineteenth-century pejorative term, brought anti-competitive costs. In the shadow of the Sherman Act, the US antitrust statute, the question in *INS* was not just the one posed by Justice Pitney—can there be a property right in news, but also can a news wire service be envisioned as a News Trust?

AP's service as a collective enterprise represented both a continuation and a break with a tradition of sharing news. From the time of the new republic, material was taken from one publication and published in other newspapers. In the eighteenth century, articles were simply lifted, often without attribution. Indeed, it was customary for postmasters to allow newspapers to be exchanged with other printers without any

¹⁸ Inter-Ocean Publishing Co v Associated Press 56 N.E. 822 (III. 1900).

¹⁹ 248 U.S. at 2231; Balganesh, "'Hot News'" (2011) 111 Colum. L. Rev. 419, 426.

²⁰ Alex Nelbach, "Poisoned at the Source'? Telegraphic News Services and Big Business in the Nineteenth Century" (2003) 4 Bus. Hist. Rev. 457; Jonathan Silberstein-Loeb, "Exclusivity and Cooperation in the Supply of News: The Example of the Associated Press, 1893–1944" (2012) 24 J. Pol'y Hist. 466; Melville E. Stone, *Fifty Years as a Journalist* (New York: Doubleday, Page & Co, 1921), pp.215–216.

²¹ The New York Times, May 4, 1918.

The New York Times, January 20, 1918

²³ Steven Wilf, "The Making of the Post-War Paradigm in American Intellectual Property Law" (2008) 31 Colum. J. Law & the Arts 191.

charge for postage by local postmasters.²⁴ This informal mechanism of spreading the news was subsidised by the post office and sanctioned by the legislation.

The twin beginnings of copyright in the United States

In 1792, Congress passed a statute to facilitate this exchange by allowing every printer to send a newspaper to any other printer within the United States free of postage.²⁵ Strikingly, then, copyright in the United States had its origins in a pair of twin statutes. The Copyright Act of 1790 protected maps, charts and books while the 1792 newspaper exchange act did just the opposite—promoting appropriation of expression. One statute provided protection for literary texts while the other created incentives for untrammelled distribution. In 1836, Congress, concerned about the cost of subsidising the large-scale shipping of newspapers, offered an express service. Publishers could send in certain post offices condensed digests of news via horse relay, rather than by the ordinary, much slower mail coach. Newspaper publishers embraced this model. Horace Greeley, editor of the New York Tribune, told a British parliamentary commission that he was not concerned about piracy, saying "all the evening journals copy from us and we rather like it". 26 The postal exchange was intended to *promote* the appropriation of news, rather than—as the Supreme Court would find in *INS*—such borrowing is the improper taking of someone else's effort.

The postal exchange system worked because newspaper markets were scattered and local, and assistance could come from a distant newspaper which was not a competitor. The time it would take to deliver the newspapers would ensure that the receiving journal would always publish later than the newspaper originally providing the news. By creating a web of connections that established an interest in news markets across the nation, AP radically altered the conditions which allowed for the postal exchange. It established a system for distributing pooled information, but one closed to outsiders.

Adrift in a sea of law

AP's Stone recognised that a private legal system needed to be bolstered by laws regulating knowledge imposed by the Government. He repeatedly called for copyright in news. In a letter to Lehmann, he argued, "you may go to a theater, witness and enjoy a play, but you are not privileged to shorthand and reproduce it". Stone analogised news to theatrical productions in part because the bedevilling problem of piracy resulted in a Congressional statute criminalising the copying of plays. But, of course, Congress first had to provide copyright protection for dramatic works.

When he first began his crusade for the copyrighting of news, Stone had good reason to believe that there might be legislation extending copyright to news. The idea of copyright for news was addressed remarkably early with the 1863 creation of the Press Association of the Confederate States of America. This organisation required members to share news with other members, often by telegraph. Anxious for news about wartime conditions, independent clubs often used this material without being Press Association members. The director of the organisation, John S. Thrasher, insisted that each story be printed only with a heading that identified copyright protection.²⁸

Over a quarter of a century earlier AP had pressed for copyright protection in news. In 1884, Henry Watterson, a Kentucky journalist, had proposed an "Act for the Relief of the Associated Press", which called for a 24 hour protection for news of more than 100 words sent via the post or telegraph. News, it

²⁴ David M. Henkin, The Postal Age: The Emergence of Modern Communications in Nineteenth-Century America (Chicago: University of Chicago Press, 2006), pp.42–43; Richard B. Kielbowicz, News in the Mail: The Press, Post Office, and Public Information 1700–1860s (New York: Greenwood Press, 1989), pp.141 ff.

Act of Feb. 20, 1792, 1 Stat. 238.

²⁶ Victor Rosewater, *History of Coöperative News-Gathering in the United States* (New York: D. Appleton & Co, 1930), p.279.

²⁷ Melville Stone: MES: His book: A Tribute Souvenir to 25 Years, 1893–1918 (New York: Harper Bros, 1918), pp.73–75. ²⁸ Edward A. Schwarzlose, *The Nation's Newsbrokers* (Evanston: Northwestern University Press, 1989), Vol.I, pp.267–268.

was argued, must be understood as a new subject-matter for copyright. "That which we call 'news' is a modern invention as much as ... the reaping machine. Why has it not the same right to legal recognition of protection as other species of property?" In March 1884, bills to grant copyright in news were introduced in both the Senate and the House of Representatives. The most interesting feature is the remarkably short duration proposed in one bill for the protection of news—a mere eight hours. Discussions were also underway for a 24 hour term.

Other countries already had identified copyright in news, which, suggestively, was called "telegraph copyright". In 1872, Australia, for example, barred publication of any message sent via telegram for 24 hours, including "the substance" of the information, without written authorisation. The date and time of each message was to be printed on the cable with the words "By Submarine Telegraph". This would serve as prima facie evidence of protection. The Cape Colony at the tip of Africa passed a similar statute in 1880, and New Zealand followed suit in 1884. It might be telling that the legal concern with the appropriation of news took place in countries with a vast hinterland where competitive advantage might be gained from telegraphing information across a great distance.

By the early twentieth century, competition among newspapers was increasingly intense. In many major cities, more than one daily operated. Newspaper publishers has proposed that there be some mechanism other than formal copyright registration introduced as evidence of authorship in the 1909 Copyright Act

"to frame a paragraph of the law whereby a publisher could show in some legal way that he had at a certain time on a certain day received this piece of news and could show by cable office records or telegraph office records that that was his news".³³

Such a proposed change in the law amounts to a system of copyright without the formalities of registration which would apply uniquely to newspaper articles. Newspaper publishers would show after the fact, not *ex ante*, that they owned certain writings.

Until the *INS* case provided some measure of relief, Stone failed in his quest to secure protection for news as intellectual property. When Justice Brandeis in his *INS* dissent argued that protection of news must be enacted by the legislature, not by courts, he knew this history of unsuccessful attempts. However, it is important to recall that *INS* operated in a well-populated field of law, including the private law of AP, anti-competition law, failed Congressional legislation and proposals, and law from other countries.

What is a new technology?

INS is usually understood as a case emerging out of one particular new technology: the telegraph. The telegraph was the first electrical communication media in the United States.³⁴ Using electricity to transmit written information, telegraphy had the capacity of "annihilating space and running in advance of time" by creating a "network of nerves of iron wire strung with lightning".³⁵ For most commentators the technological intervention of the telegraph took two forms. First, it was critical for ever so quickly allowing

²⁹ The New York Times, 18 February 1884.

³⁰ S. 1728, 48th Cong. (1884); H.R. 62, 48th Cong. (1884); H.R. 1728, 48th Cong. (1884); H.R. 4160, 48th Cong. (1884); H.R. 5850, 48th Cong. (1884); Robert Brauneis, "The Transformation of Originality in the Progressive-Era Debate over Copyright in News" (2009) 27 Cardozo Arts & Ent. L.J. 321.

³¹ The Telegraphic Messages Copyright Act 1871, 35 Vict., No.414 (Victoria); The Telegram Copyright Act 1872, 35 & 36 Vict., No.10 (South Australia); The Telegram Copyright Act 1872, 36 Vict., No.7 (Western Australia); Lionel Bently, "Copyright and the Victorian Internet: Telegraphic Property Laws in Colonial Australia" (2004) 38 Loy. L.A. L. Rev. 71.

³² Law of the Associated Press (New York, 1914), Vol.1, pp.592–610.

³³ Stenographic Report of Conference on Copyright, May 31–June 2, 1908, p.22, reprinted in E. Fulton Brylawski and Abe Goldman (eds.), Legislative History of the 1909 Copyright Act (Hackensack: F.B. Rothman, 1976).

³⁴ Richard R. John, Network Nation: Inventing American Telecommunications (Cambridge, Mass.: Harvard University Press, 2010), p.1.

³⁵ Jeffrey D. Groves, "Periodicals and Serial Publications" in Scott E. Casper, Jeffrey D. Groves, Stephen W. Nissenbaum, and Michael Winship (eds), A History of the Book in America: The Industrial Book 1840–1880 (Chapel Hill: University of North Carolina Press, 2007), p.240, quoting Greeley's Tribune.

INS to reach West Coast readers with information garnered from East Coast AP sources. But, secondly, while the telegraph generated networks through which information flowed, it also set in place the circumstances for preferential treatment, gatekeeping and even censorship. In 1915, British military censors prevented INS, which under Hearst had a distinctly anti-war stance, from having direct access to news describing military operations in Europe.

The telegraph was but one of a number of new technologies such as steam printing and inexpensive paper production that enabled the expansion of newspapers towards the end of the nineteenth century. New technologies of lithographs and photography enhanced newspapers through adding visual information. Technologies of management provided for an increasingly departmentalised newsroom in ways that echoed forms of factory production. Just as patents were transformed by large corporate laboratories, news (as well as copyright law) was pressed to respond to the advent of economies of scale in information production. Correspondents were stationed where news happened while court reporters drew upon local knowledge. The growth of railroads permitted metropolitan newspapers to extend into surrounding areas.³⁶

Reading as a new technology

Yet perhaps the most remarkable shift was in the technology—or social practice—of reading. The telegraph transformed the prose structure of news stories. Instead of the older method of reporting news in chronological order, stories sent by wire began with the most important facts.³⁷ Brevity was critical in this new environment. The effect of the telegraph on journalism was to create "cabelese", a bare bones form of writing that Hemingway called "a new language". 38 According to the Court, INS misappropriated news from bulletin boards, which underscored the very nature of the new social practice of reading. Competing for the interest of readers, newspapers used light displays, really immense electric bulletin boards, covering the sides of their office buildings with headlines of the latest news. The New York Times employed such a display to show the results of the 1904 election even prior to completing the construction of its new Times Square building.³⁹ A new device, the telegraph bulletin-printer, converted the staccato language of telegram news into a technology of reading which embodied all sorts of problems with existing copyright law: it was ephemeral, unoriginal in its terse headlines, and—as part of a spectacular illuminated, readable city—it certainly published in a fashion to suggest divestive publication. 40

There were many practical reasons why AP did not copyright its dispatches from Europe. Yet, as Samuel Untermeyer, the attorney for INS pointed out, common law had long made a distinction between literary property, protected due to its merit, and news. 41 In the 1880 case of Baker v Selden the Supreme Court already had determined that copyright could not be "applied to a work of so fluctuating and fugitive a form as that of a newspaper".42 Yet the electronic bulletin made news even more ephemeral—and even more fugitive. Brandeis realised this when he wrote in his dissent that copyright is designed to regulate literary property, and that even unpublished works are protected by common law prior to broad circulation:

"The creations, which are recognized as property by the common law are literary, dramatic, musical, and other artistic creations; and these have protection under the copyright statutes."43

Brandeis' language in his dissent is telling. There is statutory protection for both published and unpublished works by statute. Publication is a predicate for federal protection. However, the very nature of the focus

³⁶ Groves, "Periodicals and Serial Publications" in Casper, Groves, Nissenbaum and Winship, A History of the Book in America (2007), p.239.

³⁷ David Hochfelder, *The Telegraph in America 1832–1920* (Baltimore: Johns Hopkins University Press, 2012), pp.86–87.

³⁸ Hochfelder, *The Telegraph in America 1832–1920* (2012), p.73.

³⁹ Darcy Tell, *Times Square Spectacular* (New York: Smithsonian Books, 2007), p.20.

⁴⁰ George L. Campbell and Harry G. Davis, Telegraph Bulletin-Printer, U.S. Patent No. 950,473 (1910).

⁴¹ Brief for the Petitioner, *INS* 248 U.S. 215 (1918).

⁴² Baker v Selden 101 U.S. 99, 105 (1880).

⁴³ INS 248 U.S. at 250.

on registration prior to publication under the 1909 Copyright Act presumes that unpublished works might be left to common law—and state protection—in the absence of a compelling federal interest.⁴⁴ Publication was notoriously difficult to define. Yet surely, Brandeis argued, the printing and wide circulation of newspapers—as well as their immense electronic displays—constitute publication.⁴⁵

Brandeis was not shy about filling legal lacunae. Famously, in his *Harvard Law Review* article coauthored with Samuel Warren, "The Right to Privacy", he called for vesting in individuals a "right to be left alone", a right to protect private facts from broad circulation. ⁴⁶ It was precisely because these private details of one's life were previously unpublished they might be protected under common law. For Brandeis, the legal divide was clearly between published works of literary property protected under copyright and unpublished works—even if they lacked any literary merit and were mere facts expressed in telegraphic in style—which fall under common law. Under the federal system, the common law protection of unpublished works would be within the purview of the states.

INS is a case about too much law, not too little. Even in 1918, intellectual property was a well-endowed system which might be understood within a vast, even ornate doctrinal architecture. For AP, there was a private legal ordering which demanded the support of official law. INS, according to Brandeis' understanding, was clearly able to use news taken from AP because AP had made it public through divestive publication. The problem was how to accommodate a new technology of reading—and, as Brandeis suggested, this might best be dealt with by legislatures. Legal rules—indeed, often overlapping legal rules—already addressed the issue of a property right in news. But, of course, sometimes too much law is as difficult to handle as too little.

⁴⁴ Ch. 323, 35 Stat. 1075.

⁴⁵ Hearings on S. 6330 and H.R. 19853 Before the Committee on Patents, 59th Congress, 1st Sess. 71 (June 1906), stating that publication is an elusive standard with no fixed definition.

⁴⁶ Samuel D. Warren and Louis D. Brandeis, "The Right to Privacy" (1890) Harv. L. Rev. 194.

The Principles of International Intellectual Property Protection: From Paris to Marrakesh

Catherine Seville

Reader in Law, Newnham College, University of Cambridge

Intellectual property; International law; Legal history; TRIPs

On the 125th anniversary of the signing of the Paris Convention for the Protection of Industrial Property (Paris Convention), the then Director General of WIPO, Dr Kamil Idris, spoke with understandable pride:

"The principles enshrined in this landmark treaty are as valid today as they were a century and a quarter ago. The fact that every subsequent treaty relating to industrial property has been inspired by the Paris Convention is testimony to the foresight of the policy-makers at that time and to the enduring relevance of the [intellectual property] system."

This is a brave claim, given the extraordinary development of the intellectual property system at that time. Writing in the inaugural volume of this *Journal*, the current Director of WIPO, Francis Gurry, acknowledged:

"The perception of intellectual property has changed dramatically in the last two decades. Rapid evolution in technology regularly brings new intellectual property issues to the fore. Intellectual property has been acknowledged as integral to the multilateral trading system in the Agreement on Trade-Related Aspects of Intellectual Property Rights (the TRIPS Agreement) of the World Trade Organization, and global challenges raise intellectual property concerns of a fundamental nature. These include questions relating to the use of genetic resources and biotechnology, as well as how the intellectual property system can help find solutions to problems associated with climate change, access to health care, and food security."

This article seeks to revisit those historical principles and to consider whether they can still be expressed in the present international landscape. There is currently much discussion of globalisation and its consequences. Intellectual property and the products it protects travel swiftly and cheaply in international markets, yet the desire for international protection for intellectual property is certainly not new. Many of the issues affecting our contemporary discussions were discussed in the nineteenth century. Then, too, travel conditions, communications technologies and trade were advancing at a great pace—as in our own times.

Before the Paris Convention, the pattern of protection for intellectual property was very patchy. National laws, unsurprisingly, tended to focus their attention on the protection of nationals rather than non-nationals. National patent laws differed greatly before the constitution of the Paris Union. But all allowed foreigners to apply for a patent under the same conditions and formalities as nationals. And once the patent was granted, foreigners—on the whole—were entitled to the same rights and subject to the same obligations

^{1&}quot;WIPO Director General Hails 125th Anniversary of Historic International IP Treaty", available at http://www.wipo.int/pressroom/en/articles/2008/article_0016.html [Accessed October 1, 2013].

² Francis Gurry, "Foreword" (2009) 1 WIPO J. i

as nationals.³ However, the position generally on patents was that the complex requirements of national laws very often created particular burdens for non-nationals, notwithstanding the theoretical availability of protection. Trade marks were protected in almost all countries. The laws were varied, however, and such variances had affected foreigners' attempts to protect their marks. Many countries nevertheless were willing to protect those with industrial or commercial establishments in that state, whether they were nationals or foreigners. This was thought to encourage national trade and industry. The situation was different if the marked goods had been produced in a foreign country. These trade marks were often not protected, unless there was reciprocity between the country where protection was claimed and the country in which the marks originated existed. Only in a few countries was no distinction made between those established at home and abroad so that foreign trade marks were admitted to registration without condition of reciprocity.

The problems caused by a lack of harmonisation were not merely theoretical. The preparations for the International Exposition at Vienna in 1873 sharply exposed the difficulties caused by inadequate patent protection. Foreign inventors were very reluctant to exhibit, because they feared the loss of their ideas and the ability to control their exploitation. A special law was passed to provide foreigners displaying at the Exhibition with temporary protection against infringement of their inventions, trade marks, patterns or models. This law provided the impetus for reform, which led to the Paris Convention within 10 years. The speed of the achievement seems remarkable, at least by contemporary standards. A number of Congresses laid the foundations for the agreement. A brief review of the paths explored by them reveals the challenges of international harmonisation, many of them still familiar. The 1873 Congress of Vienna for Patent Reform affirmed that the natural right of the inventor "should be protected by the laws of all civilized nations". It also laid down seven principles on which an effective and useful patent law should be based. Ladas, on whose seminal work this summary of the history of the Paris Convention is based, notes that at the next Congress, held in 1878, the propositions underlying two of these principles were reversed to their opposites.⁴

This second Congress, the International Congress on Industrial Property, met in Paris on the occasion of the International Exposition held there. As its name indicates, its subject-matter had broadened very considerably beyond patents to cover also trade marks and names, designs and models, and photographs. The amount of time devoted to doctrinal discussion was criticised by some, but a strategy had yet to be determined. One theoretical possibility was a complete union—a single universal law. Delegates contemplated using the model of the Universal Postal Union—laying down principles of uniform legislation on industrial property and using a multipartite convention to create a law common to the parties to it—as was later done for copyright, in the Berne Convention for the Protection of Literary and Artistic Works 1886 (Berne Convention). Philosophically, this was attractive to many delegates, but the difficulty of achieving a single uniform law was soon recognised. Differences between national laws were fundamental and deeply ingrained. National treatment of foreigners was agreed upon, but agreement on many other important questions could not be achieved, in spite of the palpable goodwill towards unification. Nevertheless, several important resolutions at a general level were agreed as desiderata for national legislation, such as the one stating that "the right of the inventor is a right of property that the civil law does not create, but simply regulates". A permanent International Commission was appointed, and an avant-projet—which was, in effect, a detailed universal law—was drafted. But it was thought that getting this accepted would be impossible, and a less ambitious set of proposals—the Projet d'une Union International pour la Protection de la Propriété Industrielle—was worked up.

⁴ Stephen P. Ladas, Patents, Trade Marks and Related Rights: National and International Protection (Cambridge, Mass.: Harvard University Press, 1975), p.60.

³ There was sometimes a requirement that non-resident foreigners should appoint a resident agent or attorney. One notable exception to this general rule of non-discrimination was that in the United States a foreigner could not apply for a *patent caveat*, unless he had resided in the United States one year preceding the filing of the caveat and had made an oath of his intention to become a citizen.

The invitation to a further International Conference in Paris in 1880 suggested that the outcome might be "provisions suitable for incorporation in an international convention", rather than uniform legislation. But a broader mission developed: a union of contracting countries, which set out a number of general principles to secure the protection of industrial property both within a country's borders as well as outside it. The result was a draft convention, much of which remains familiar today—notably the system of Convention priority. This was the convention concluded in Paris in 1883. Thus, the Paris Convention established international standards, requiring countries to apply the same level of protection to nationals of other contracting parties as they applied to their own nationals. The Convention priority system required changes in domestic legislation for several states, and delegates faced criticism at home because of this. However, by signing the Convention, states gave their own nationals the opportunity to benefit from the intellectual property protection offered by other signatory states. This basic but crucial harmonisation addressed a clear problem and was generally welcomed in national presses as offering valuable benefits to those seeking to exploit their industrial property outside their home country. It was a bold, if controversial, first step. Several significant revisions followed.⁵ Concurrent with the 1967 Stockholm revision was the creation of the World Intellectual Property Organisation (WIPO), which took over the administrative functions of the International Bureaux created by the Paris and Berne Conventions.⁶

The Paris Convention, however, did not address the problems of copyright holders. For much of the nineteenth century, the picture, as with industrial property, was fragmented and confused, with many differences in approach and detail. In particular, the treatment of foreign works varied considerably from country to country. Increasing trade in unauthorised reprints led to the demands from publishers and authors for increased protection outside their national territories. In 1858 an international congress was held in Brussels, under the auspices of the Belgian Government to discuss international literary and artistic property. Three hundred delegates attended: some were from states, universities, literary or scientific associations, while others came in their various personal capacities. Following several days of sectional meetings, general meetings discussed the ensuing reports. The first section was responsible for "international questions", and its report was adopted without modification:

"[T]his report was in favour of an international and uniform copyright amongst all civilised nations, to be adopted even when unattended with reciprocity, and of giving foreign authors equal rights with natives, and without requiring the execution of any special formalities beyond those required in the country of original publication."⁷

Another sectional report discussed whether copyright should be perpetual and recommended a term of the author's life plus 50 years. Although there was heated discussion, there was in the end a large majority against perpetual copyright. Nothing came out of the Brussels Congress immediately; it is nevertheless remarkable as a very early initiative towards a system of genuinely international copyright. Considerable obstacles and inertia would have to be overcome before this could be achieved.

By the mid-1870s, many of the most important publishing markets in Europe were governed, at least to some extent, by a considerable network of bilateral treaties. However, there were still no conventions with much of Europe, notably Holland and Russia, and the United States-all substantial markets. In addition, there were significant differences in the content of these bilateral treaties. Without harmonised legal protection, ideally covering a coherent geographic area, individual territories remained vulnerable to smuggled cheap reprints, whatever their particular portfolios of bilateral convention protection. The

⁵ The Paris Convention was concluded on March 20, 1883 and was revised at Brussels on December 14, 1900, at Washington on June 2, 1911, at The Hague on November 6, 1925, at London on June 2, 1934, at Lisbon on October 31, 1958, at Stockholm on July 14, 1967. It was amended on September 28, 1979.

Each of these Conventions set up an International Bureau to carry out administrative tasks. In 1893 these bureaux were united as the United International Bureaux for the Protection of Intellectual Property (best known by its French acronym BIRPI)

Catherine Seville, The Internationalisation of Copyright Law (Cambridge: Cambridge University Press, 2006), p.53.

Paris Exposition of 1878 offered an opportunity to discuss these matters, as it had for industrial property. It became the occasion for an important international literary congress, organised by the *Société des gens de lettres*. A resolution was passed, insisting on the principle that an author's right was a form of property rather than a legal concession. It also insisted that the right was a perpetual right. Note that this view of the nature of literary property was fundamentally different in principle from what was adopted by the 1858 Brussels Congress. The Paris Congress also resulted in the establishment of the International Literary Association (ILA, later expanded to included artists, thus becoming *l'Association littéraire et artistique internationale*, commonly known as ALAI). Its objects included the defence of the principles of literary property in all countries. Annual conferences were held in various European cities, and ILA members continued to press for international copyright laws which were universal in nature. A model law was discussed at the 1882 Rome Congress. At this Congress, a more pragmatic suggestion was put forward for a union of literary property—a model which had been considered by the 1878 Congress on Industrial Property.

In 1883 a conference of interested parties was arranged in Berne, with the Swiss Government undertaking the necessary diplomatic initiatives. A draft convention of 10 articles emerged and was circulated. This required countries to accept the principle of national treatment (on the basis of the place of publication rather than nationality). The aim was only a minimum level of protection. The draft was silent on a number of important matters, including duration of rights. Several recently-concluded bilateral conventions took approaches plainly at odds with the draft, but a further conference was organised nevertheless. Model codification was proposed by the German delegation, again setting principles against pragmatism, as in the industrial property debates. The 1884 draft retained the principle of national treatment, though with the significant change that duration of protection in the country of origin was now to be taken into account. A number of compromises which qualified the reproduction right were made. These were strongly opposed by the French delegates on grounds of principle, but accepted by others as a practical necessity. A *procès-verbalfinal* positioned international codification as an inevitable future state, if not one presently achievable.

A further conference was arranged in 1885, yet again in Berne. The French delegates continued to press for stronger protection for authors and sought to confine the restrictions on reproduction rights to the utmost extent possible. The British delegates lent support to the pragmatists, advocating the principle of national treatment wherever agreement on a uniform rule could not be reached. In the end a choice had to be made between a uniform convention which would in practice exclude the participation of many countries with weak copyright protection and a less rigorous convention which would encourage the adherence of a significant number of countries. The Conference finally adopted a pragmatic approach, but the delegations were not unanimous in this. Nevertheless, given the differences in the legal systems and the outlook of the states involved, the level of agreement achieved was extremely significant. Signed by 10 states in September 1886 the Berne Convention created a "Union for the protection of the rights of authors over their literary and artistic works". The Convention came into force on December 5, 1887. All the signatories except one ratified it. Numa Droz, Switzerland's representative and the president of all four Berne conferences, described the creation of the Union as "a striking affirmation of the universal conscience in favour of copyright". Although this was certainly one consideration underlying the Berne Union, it should be acknowledged that self-interest and pragmatism were also significant drivers for many signatory states.

⁸ Actes de la Conférence réunie à Berne (1885) p.65.

Enduring principles?

From these beginnings, the international intellectual property system has developed prodigiously. The Paris Convention is certainly a landmark treaty and is rightfully considered a cornerstone of the international industrial property system. When it was signed in 1883, it had 11 signatories. It entered into force a year later, with 14 Member States. Still in force, it currently has 175 signatories, including most countries of the world and all European countries. Furthermore, the Paris Convention forms a framework for a number of other treaties. The Berne Convention, too, has endured. It currently has 167 members. With these two treaties as the foundation, intellectual property harmonisation has continued to expand. WIPO now administers 25 treaties, and significant harmonisation has been achieved in a number of fields. This certainly seems to present as a history of success. However, both the degree of expansion and its nature give rise to some concerns. It is important to acknowledge these and to reflect on them. Are the principles enshrined in the Paris and Berne Conventions as durable as is claimed?

WIPO acknowledges the extent to which its work has changed from these early days:

"The impetus that led to the Paris and Berne Conventions—the desire to promote creativity by protecting the works of the mind—has continued to power the work of the Organization, and its predecessor, for some 120 years. But the scope of the protection and the services provided have developed and expanded radically during that time."9

The history of the negotiations towards the first two Conventions certainly shows a powerful concern to protect literary and industrial property. But even in the past, the picture is not one of unalloyed unity and agreement as to the principles underlying that aspiration. Negotiating positions were complex and often reflected a variety of influences, considerations and constraints. These complexities—and often contradictions—recur persistently in discussions concerning the justifications for and protection of intellectual property rights. That said, two strong positions were visible in discussions preceding both the early conventions. Some argued that the rights of inventors and authors were natural rights and that their protection should not—and could not—be compromised. Others saw these forms of property essentially as tools of industrial and economic growth. The impossibility of reconciling these views was to be seen in the disappointment of the French delegates with the text of the Berne Convention as agreed in 1885. It did not offer the high level of protection which France sought, and she endorsed the text only to encourage less enlightened states, as she saw them, to guarantee at least this standard.

The existence of fundamental differences of this nature has inevitable consequences in the level of the harmonisation attempted. Again, this is visible in the two early conventions. In both cases, in the early stages of the debate, there was a body of opinion seeking a single unified law. In neither case was this achieved. The majority took the view that some agreement was better than no agreement. The structures put in place have proved effective and resilient. But in reviewing the "principles" of these agreements, their pragmatic element should not be disregarded. This practicality was doubtless linked to a sense of pressure to secure national interests. The Paris and Berne Conventions arose, at least in part, in response to the concrete problems faced daily by inventors and authors in securing their intellectual property in increasingly international markets. Both Conventions allowed citizens to access intellectual property systems in foreign states, to an extent and with a security not previously available. The standards, though, were minimum standards, and the reluctance of sovereign states to concede control of their national laws was reflected in the treaties agreed. Provision for derogations is common. Neither Switzerland nor the Netherlands protected patents when the Paris Convention was concluded, yet both became founding members of the Union. These patterns persisted when the treaties were revised. The minimum standards increased, but the latitude allowed continued.

⁹ See "WIPO—A Brief History", available at http://www.wipo.int/about-wipo/en/history.html [Accessed November 11, 2013].

These tensions—between the positions founded on idealism and belief in fundamental rights on the one hand and those built on the realities of world trade and politics on the other—have continued to disturb the international intellectual property system. This was seen vividly in the negotiations which were to end in the TRIPS Agreement.

Trade and Intellectual Property: TRIPS and beyond

The WTO's 1994 TRIPS Agreement has had a profound impact on intellectual property law. Before TRIPS, the extent of protection and enforcement of intellectual property rights varied widely around the world, causing tension in trade relations. The TRIPS Agreement attempts to bring intellectual property enforcement under common international rules and, in doing so, to establish minimum levels of protection. The basic principles are those of the General Agreement on Tariffs and Trade (GATT), including national and most-favoured-nation treatments. The main international agreements—the Paris and Berne Conventions—act as a baseline. In a considerable number of areas, where these Conventions are thought to offer inadequate protection, the TRIPS Agreement imposes supplementary obligations.

That deliberately neutral account slides over the turbulence in the history of the TRIPS Agreement, which deserves review in this context. When the date of the Ministerial Conference, held in Punta del Este to launch the Uruguay Round of GATT, was announced, it was far from clear that it would cover intellectual property rights. Most of the developing countries were opposed to the idea, and several industrialised countries were unwilling to take action which might undermine the role of WIPO. However, the United States was adamant that establishing negotiations on trade-related intellectual property rights was a necessary condition for launching the round. Japan was also very keen. Brazil and Argentina, by contrast, opposed the inclusion of intellectual property rights on the agenda.¹⁰

At the Ministerial meeting in September 1986, trade-related intellectual property rights were included in the list of "subjects for negotiation":

"In order to reduce the distortions and impediments to international trade, and taking into account the need to promote effective and adequate protection of intellectual property rights, and to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade, the negotiations shall aim to clarify GATT provisions and elaborate as appropriate new rules and disciplines.

Negotiations shall aim to develop a multilateral framework of principles, rules and disciplines dealing with international trade in counterfeit goods, taking into account work already undertaken in the GATT.

These negotiations shall be without prejudice to other complementary initiatives that may be taken in the World Intellectual Property Organization and elsewhere to deal with these matters." 11

In comparison to the TRIPS Agreement as it was finally concluded, this paragraph represents a very narrow aspiration.

Negotiations began in early 1987, and it was very unclear what might emerge. At that time, the most likely outcome seemed to be perhaps some sort of code, to which a number of contracting parties might subscribe. However, negotiations proceeded on the basis that they were working towards a general agreement. Interestingly, WIPO was given an active role in the negotiations, although some were reluctant to see this happen. Most of the country negotiators were experienced and skilled trade negotiators, very familiar with GATT provisions, but they were quite unfamiliar with intellectual property legislation. A number of delegations submitted draft texts, which were so disparate that fruitful progress seemed unlikely.

¹⁰ This account draws on the excellent work of Daniel Gervais, The TRIPS Agreement: Drafting History and Analysis (London: Sweet & Maxwell, 1998), particularly pp.3-25.

Punta del Este Ministerial Declaration, adopted September 20, 1986.

Eventually, in 1990, a composite text was prepared by the chairman of the TRIPS Negotiating Group (Lars Anell). Including various alternatives in areas of disagreement, this text formed the basis for the negotiations. The gap between developed and developing countries was nevertheless still very significant at this point.

The broad aims were twofold. One was to obtain agreements on various substantive changes in existing conventions, such as the duration and coverage of patent protection. The general agreement on compulsory licensing should be noted here. Patents are regarded as offering a crucial incentive for those working on the frontiers of science. One ground of tension between industrialised countries and developing nations is the extent to which compulsory licensing of patents should be permitted. The TRIPS Agreement attempts to find a point of balance, by permitting compulsory licensing, but only subject to conditions aimed at protecting the legitimate interests of the right holder. The second aim was to do something about the enforcement of intellectual property rights. Existing conventions would often define substantive rights without providing any effective mechanism for enforcing those rights, or even for obtaining a definitive ruling that the rights had been breached. It was thought that linking compliance with intellectual property legislation to trade rights would act to sharpen focus significantly. This lever allowed the GATT negotiators to succeed in obtaining agreement on changes in areas where WIPO had struggled for years to make progress. The fear of unilateral action was also significant and helped to drive through the development of a multilateral agreement, namely, the TRIPS Agreement.

Professor Blakeney has described the Agreement as "probably the most significant development in international intellectual property law this century". 12 It is the broadest and most extensive multilateral agreement in the field. Even more significantly, it provides an effective, binding dispute settlement mechanism. However, its "maximalist" approach to standards of intellectual property protection is not welcomed by everyone, and it is also criticised for its "one-size-fits-all" attitude towards signatories. It is argued by some that it unfairly privileges the interests of developed countries, though the response would be that its overall effect is beneficial, in that it encourages development and promotes global trade. Underlying the TRIPS Agreement is a belief that increased technical capacity will foster development. The argument is that strong intellectual property rights will act as incentives to promote innovation and will contribute to the transfer and dissemination of technology.¹³ This is to be done in a balanced manner, within the wider context of social and economic welfare, and there is provision for Member States to "promote the public interest in sectors that are vital to their individual socio-economic development". 14 But there are those who disagree with the basic assumption and argue that this approach introduces high transaction costs, hinders the flow of technology and impacts negatively on the progress of developing countries. These differences in perspective—the rival weightings of economic and social matters—again recall the earlier historical debates on the Paris and Berne Conventions.

In the nineteenth century, the established American publishing firms were absolutely opposed to international copyright. America's reading public was huge and highly literate, and American publishers supplied it with books and magazines filled with the works of Europe's leading writers, without being obliged to pay them anything. The notorious "mammoth" newspapers republished entire novels for a few cents. The first of these, *Brother Jonathon*, took great pride in having been the first to offer Dickens' novels even as they were appearing in Britain in numbers. Copies would arrive in New York on the *Great Western*, and time was so precious that they were thrown onto the docks rather than unloaded. The pages would be torn up and divided amongst several compositors, and an edition would appear that day. Understandably, the American publishers campaigned actively to maintain this position. The arguments are familiar: international copyright would greatly increase the price of books for the American household,

¹² Michael Blakeney, Trade Related Aspects of Intellectual Property Rights: A Concise Guide to the TRIPS Agreement (London: Sweet & Maxwell, 1996), p.v.

¹³ TRIPS Agreement art.7.

¹⁴ TRIPS Agreement art.8.

it would harm American trade, and it was a monopolistic tax on the reading public. On the other side were the arguments that justice to foreign writers demanded they be given protection and that only with such protection would American writers find any encouragement in their home market. The publishers responded that copyright was a matter for each nation:

"It should not be forgotten that *by refusing an international copyright we do not inflict injustice or commit a wrong*. Copyright is not anywhere admitted to be a *natural* right, else it would be wrong to *limit* it, as all nations (including the English) do. If the right of an author, or his assign, in his printed thought were, as is wrongly taken for granted by some, like the right of an owner to real estate, then England and all civilized States have done a gross wrong to the author in limiting that right to a term of years. They might as justly limit the terms of ownership in a house or ship to fourteen or twenty-eight years. It is clear, that Copyright is a *gift*; the duration and content of which, depends upon the giver (the Government) which asserts the right to look to the general interest in deciding for what length of time a copyright shall endure, and who shall participate in this privilege, whether citizens only, or citizens residents, or these and also foreigners, who may be excluded from this, as they are from other privileges, as from voting, owning land &c. This is held, in practice, in England as well as here." 15

It was only until market conditions changed, and the established publishers on the East Coast began to face internal competition from new rivals on the West Coast, that they reserved their position to lobby *for* international copyright.

The United States is not the only state to have changed its tune on international intellectual property initiatives once it reached a phase of development where stronger protection was in its interests. Several developing countries, notably China, India and Brazil, are currently in a similar situation and will need to decide how to respond. Perhaps what would be most helpful here would be to learn from history, rather than, necessarily, to repeat it.

Principles: From opposition, to breadth and balance

Some thought that with the TRIPS Agreement the balance of power in the international intellectual property system had swung away from WIPO, and the WTO would become the new authority. However, the competition seems rather to have stimulated WIPO. An agreement between the two organisations sought to promote co-operation and a mutually supportive relationship. WIPO has acknowledged and faced the fact that discussions about the protection of intellectual property now take place in a very different context from that of the founding conventions. The subject-matter of intellectual property has expanded dramatically, as has its economic significance. Global trade makes huge demands on the intellectual property system. So at the state level, the framework is global, and the conversations may be multilateral, regional or bilateral. Beyond that, global communication allows many more players to speak. Organisations of all kinds and sizes may wish to express views, as may individuals. Wisely, therefore, WIPO has embraced a broad mission

"to promote innovation and creativity for the economic, social and cultural development of all countries, through a balanced and effective international intellectual property system".

This both acknowledges the original impetus for the creation of the organisation—to promote creativity by protecting works of the mind—and adapts it for the conditions which currently prevail. WIPO is tasked with doing a good deal more than it did—as can been seen from its staff of nearly a thousand, which has grown from an initial group of just seven in 1893.

¹⁵ Letter from Harper & Bros, Franklin Square to Senator Edwin D. Morgan, Washington, DC, February 27, 1868 (Morgan Library).

In 2009 the Member States of WIPO, a number approaching 200, adopted nine strategic goals. ¹⁶ One of these is facilitating the use of intellectual property for development. WIPO's Development Agenda is bold and challenging, and its success is as yet unclear.¹⁷ At its simplest, it aims to ensure that development considerations form an integral part of WIPO's work. Forty-five more detailed recommendations were adopted by WIPO Member States at the 2007 General Assembly.18 A cluster of these deals with norm-setting, flexibilities, public policy and the public domain, and they deserve consideration by those interested in the principles of law-making in this area. Although clear in their language and general aims, they are not easily reduced to sound-bites. This should be considered a strength. Engagement with these principles requires effort and sensitivity. To take just one part: norm-setting activities "shall be a participatory process, which takes into consideration the interests and priorities of all WIPO Member States and the viewpoints of other stakeholders". Under this rubric it is possible to acknowledge that right holders will look for more and stronger protection and that less-developed countries are concerned and frustrated by the impact that intellectual property protection has on their access to resources essential for their development. WIPO also looks for wider conversations than what have occurred previously, insisting that developed countries should not be the only voices to be heard when policy is made.

Such principles are not simple to put into action. If progress is slow, there is a possibility that developed countries will simply take their problems elsewhere for resolution. However, the public reaction to the Anti-Counterfeiting Trade Agreement (ACTA) should serve as a warning to think hard before doing so. Negative publicity positioned ACTA as a threat to fundamental rights and a matter of serious public concern, following its negotiation in forums that were perceived to be secret and undemocratic. Notwithstanding a spirited defence by its supporters, the damage to the treaty's reputation was severe, and the European Union and many countries now will not ratify it. The incident underlines not just the breadth of intellectual property's influence, but also the general public awareness of it. Ordinary citizens are now interested in intellectual property law and its effects. A suggestion that freedom of expression, privacy or access to medicines and technology will be impaired by a law is now a matter of general public interest. There is greater awareness of the needs of developing countries and widening support for them. The idea of protecting traditional knowledge and traditional cultural expressions, for example, is perhaps conceptually more appealing to members of the public than protecting large corporations from counterfeiting.

There is now concrete proof that a more nuanced approach can work, in the form of the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled (Marrakesh Treaty), which was signed very recently in June 2013. According to the World Health Organization, there are more than 314 million blind and visually impaired persons in the world, 90 per cent of whom live in developing countries. The World Blind Union estimates that, of the million or so books published each year in the world, less than five per cent are made available in formats accessible to visually impaired persons. The Marrakesh Treaty addresses this "book famine" by requiring signatories to adopt limitation and exceptions to copyright that permit the reproduction, distribution and making available of published works in accessible formats. However, it is clear that the process has been difficult. Although it might be thought that the objective of providing access to books for the blind would be uncontroversial, the interests at stake are such that agreement took four years to achieve. Rights holders were concerned that concessions would result in uncontrolled access to works in a digital environment and that this could be extremely damaging to their interests. Even as the conference began, a list of 37 issues remained to be resolved. The Moroccan Minister of Communication and president of the diplomatic conference described that as "sobering", though the commitment of those involved was reflected in his

^{16 &}quot;WIPO's Strategic Goals", available at http://www.wipo.int/about-wipo/en/goals.html [Accessed November 11, 2013].

¹⁷ Jeremy De Beer and Sara Bannerman, "Foresight into the Future of WIPO's Development Agenda" (2010) 1 WIPO J. 211.

¹⁸ WIPO, "The 45 Adopted Recommendations under the WIPO Development Agenda", available at http://www.wipo.int/ip-development/en/agenda /recommendations.html [Accessed November 11, 2013].

teasing threat that he would close the airport if agreement were not reached. Eventually, however, the objections were overcome.

The desire to promote creativity by protecting the works of the mind remains a fundamental principle. Closing the Marrakesh conference, Director General Francis Gurry was clearly very proud of the significant achievement represented by the Treaty. He emphasised that the problem had been addressed in a way which respected "the architecture of the international copyright system", thus achieving what he (and many other delegates) called "fair balance". 19 Tellingly, he characterised the result as a product of "a good multilateral process", praising this approach as "superior to all others in the legitimacy and universality that it confers on its outcomes". The Marrakesh Treaty would not have been possible without the work of the policy makers behind the Paris and Berne Conventions, and Dr Idris was right to remind us of its significance. Those treaties put in place the foundations for an adequate system of protection for intellectual property in an international environment. In both cases they were seeking to address a problem which required a principled response, the nature of which was often fiercely contested, but which was, in the fullness of time, expressed in a pragmatic solution.

It should be noted that the problems addressed in both treaties were very broadly based, and the solutions were, necessarily, broadly conceived. In his closing speech, Director General Gurry linked the achievements of the Marrakesh Treaty negotiations to the fact that they were dealing with a manageable-sized problem:

"[O]ne condition for success would seem to be the existence of a clearly articulated, specific and manageable problem that needs to be addressed at the international level and around which the member States form a consensus for action."

The unstated implication that a thorough review of copyright law would not be considered a politically practical possibility is a matter of some concern, though entirely understandable. We have seen the same fragmentation into single issues occurring at the EU level, where the number of players is considerably fewer. But we are now at a time of refining and reassessing our system of intellectual property protection to make it fit for a global world. If that work is to be successful, all stakeholders must be persuaded that the proposals represent "fair balance". We must take care to maintain a genuine conversation with them all. That will require very considerable perseverance and patience. But, if we do so successfully, we will be able to progress—in the most thoughtful and intelligent sense of that word.

¹⁹ "Closing Speech by Francis Gurry, Director General, World Intellectual Property Organization", available at http://www.wipo.int/about-wipo/en/dgo/speeches/dg_dc2013_closing.html [Accessed November 11, 2013].

Historical Developments of Industrial Property Laws in Africa

Tshimanga Kongolo^{*}

WIPO Academy, World Intellectual Property Organization (WIPO), Geneva

G Africa; Colonies; Intellectual property; International law; International organisations; Legal history

Introduction

According to scientific evidence, the evolution of modern human species commenced and took place in Africa. Africa is considered to be the root of human life. Consequently, the history of Africa is very old and may be traced back to the human origin. However, this history was rendered complex by two simple reasons: it was first written by outsiders or curious travellers or tourists who knew nothing about Africa before the occupation periods and, likewise, by people who intentionally changed the contents or contexts of the history to satisfy their own interests or ego or to hide human rights abuses of the time.

Before the occupation, most of Africa was largely made up of traditional empires and kingdoms, where customary rules governed relationships between members of the communities as well as between properties. There was harmony within these communities. This overall harmony or order was destroyed by the occupation of outsiders through different forms, namely "exploration", slavery and colonisation.

From a different angle, one may ask whether intellectual property (IP) existed within these traditional communities. During the traditional period, creativity was based on knowledge passed from generation to generation, known as traditional knowledge (TK). IP existed only in the form of TK in its holistic feature. So, IP as categorised today was unknown by traditional communities, but creativity stayed alive.

At the Berlin Conference of 1885, European powers divided up Africa among themselves like a birthday cake without the consent of the inhabitants and with limited knowledge of the land of which they had taken control. The aftermath of the Berlin Conference was that leading European countries of the time, such as France, Great Britain and Portugal, were empowered to administer Africa through colonisation and to establish their own rules.

IP laws were introduced to Africa throughout the colonisation period. As will be stressed in this study, the colonial powers, as a general rule, extended the application of their own IP laws to the colonies in the form of Ordinances or Decrees. Unless otherwise provided, protection of IP rights in the colonies rested primarily on the registration or protection of these rights in the colonial power—for instance, in Great Britain or France. There were, likewise, cases where particular IP laws were adopted for a specific colony.

After the independence of several African countries in the 1960s, it took some time for those countries to adopt their own IP laws. In some countries, particularly the former English colonies, the application of colonial IP laws continued up to the 1990s. The common denominator of those IP laws adopted after independence was that they heavily reflected the colonial IP laws. In other words, the laws were not well adapted to the needs, priorities and situations of African countries. These first laws failed to serve the national interest.

^{*}The views and opinions expressed in this article are personal and should not be interpreted as those of WIPO. The author is grateful to Lise McLeod, Head, WIPO Library, and to Ulrike Fischer, Library and Information Management Officer, WIPO Library, for assisting and making available most of the needed historical intellectual property materials.

In 1962, a group of 12 former French African colonies joined hands and signed an agreement which set up a regional organisation, first known as the Office Africain et Malgache de la Propriété Industrielle (African and Malagasy Industrial Property Office, OAMPI) and from 1977 as the Organisation Africaine de la Propriété Intellectuelle (OAPI) after Madagascar ceased to be a contracting member in December 1976.

In 1976, the former British African colonies combined forces and established the Industrial Property Organization for English-Speaking Africa (ESARIPO), which later became the African Regional Industrial Property Organization (ARIPO) in 1989 before changing its name again in 2004 to African Regional Intellectual Property Organization (ARIPO).

The aim of this study is to highlight the historical evolution of industrial property laws and systems in Africa from the colonial era up to the 1990s. The study is divided into three main sections: (1) industrial property systems in Africa during the colonial era; (2) African industrial property laws after independence until the 1990s; and (3) African countries and the international IP framework's historical connection. A brief conclusion will follow. It should be stressed that this study will not cover the historical developments of copyright laws in Africa, which will be the subject of a separate article.

Industrial property systems in Africa during the colonial era

IP legislation came to Africa along with colonisation. Officially, the colonial period of Africa started in 1885 with the Berlin Conference which empowered European powers of the time, mainly France, Great Britain, Portugal and others to administer Africa and to set up their own rules. Colonial systems were exercised in diverse ways.² As for the legal framework, laws were designed in a way to serve the interests of the colonial powers in the occupied colonies. This was also true in the field of intellectual property in general and industrial property in particular. Industrial property laws extended to the colonies, or enacted on their behalf by the colonial power, had one goal, which was to facilitate commerce or trade between the metropolitan and the colony.

There were several systems of governance of the colonies both in terms of administration and the legal structure. In the area of industrial property, they could be grouped in three categories representing three regimes.

The first regime, called by this author "the extension system", allowed colonial powers to extend merely the application of their own IP laws to the colonies. Under this regime, industrial property laws enacted by the colonial power—namely, laws on patents, trademarks and industrial designs—were extended to the colonies by Ordinance, Decree or Order. These laws were deemed to be the laws of the colonies, unless otherwise specified.

The second regime allowed colonial powers to enact, one may say on behalf of the colonies, IP laws that were applicable only in the colonies. The spirit of these laws in most of the cases did not depart much from the main laws adopted by the colonial power for the metropolitan. They were customised laws aimed to respond to specific interests of the colonial power in the colonies in general or in particular areas such as agriculture, biodiversity and commerce. Under this scenario, the application of these adopted industrial property laws was limited to the territory of the defined colonies.

The third regime was a mixed approach built on "the extension system", but encompassed few exceptions permitting the adoption of specific IP legislation for the colony or a number of colonies in certain fields or circumstances. In other words, the coexistence of the main IP laws and the customised laws were acceptable. Under this regime, some colonial powers opted to regulate patents and industrial designs by

Regional in nature as an organisation, but acting as a national industrial property office for the Member States through a uniform industrial property system.

² See Chinua Achebe, *Things Fall Apart* (New York: Anchor Books, 1994).

extending the main laws on the subject-matter to their colonies while at the same time adopting distinct trademark legislation, enacted specifically for the colony.

In the field of industrial property during the colonial period, the French African colonies³ were governed by the following French laws, as amended: Patent Law of July 5, 1844; Trademark Law of June 28, 1857; and Industrial Design Law of July 14, 1909. The application of these laws was extended to the colonies by Ordinances or Orders. The Patent Law, for instance, was extended to the colonies by an Order issued by the President of the Council of Ministers on October 21, 1848 in conformity with art.51 of the Patent Law of 1844, which explicitly state that Ordinances could be taken to regulate the application of the law in the colonies, with amendments as necessary. Applications for patents were filed with the Office of the Interior. At the end of the day, patents were issued by the French Minister of Agriculture and Commerce, with no substantive examination. The central body for issuing patents, trademarks and industrial designs changed after the establishment of the National Institute of Industrial Property (INPI) on April 19, 1951. All industrial property titles were issued by this French body.

By contrast, the British Colonial Order relied on the "extension system" whereby the Ordinance of December 4, 1903 on patents, designs and trademarks laws, enacted by the metropolitan (1883–1901), were extended to the protectorate, with further amendments as necessary. The same approach was adopted for the Patents and Designs Acts (1907-1932) and Trade Marks (Amendment) Act (1937). The industrial property titles were granted by the UK Patent Office. Registration of patents, trademarks and designs in the United Kingdom was required first before being extended on request to the colony. This may be illustrated as follows:

"Any person to whom it was granted a patent in the United Kingdom, or a person who holds the rights of the patentee from an assignment, or other legal means, may contact the Colonial registrar within three years following the issue of patent in the UK to register the patent in the colony."6

In Nigeria, for example, the Patents Ordinance of 1916 and later the Ordinance of 1925, called "the Registration of United Kingdom Patents Ordinance", remained mutatis mutandis the law of Nigeria up to 1970. So, a patentee in the United Kingdom could, within three years from the grant of a patent in the United Kingdom, apply for the extension of the registration in Nigeria. Thus, the main condition to enjoy further registration in Nigeria or in colonies was to first secure the registration in the United Kingdom. In the field of trademarks, however, the Trademarks Registration Ordinance of 1914 was incorporated as Ch.199 of the Laws of Nigeria of 1958, to allow local registration of trademarks.

Unlike the French and British colonies, Belgian colonies were put in a different situation whereby industrial property laws, including regulations, were adopted by Belgium on behalf of the colony and applicable only in that colony, unless otherwise specified. However, these laws had mutatis mutandis the same flavour as the metropolitan laws on the same subject-matter adopted by Belgium.

To be more concrete, the actual Democratic Republic of Congo, known first as the Congo Free State (1885–1908), was ruled by the King Leopold II of Belgium, who enjoyed absolute control of the territory and considered it his property or private domain.8 During that period, the King enacted two Decrees to regulate patent and trademark activities in the Congo Free State. The Decree on Patents was enacted on October 29, 1886, while the Decree on Trademarks was issued on April 26, 1888.9 The first Decree was followed by an Executive Order on Patents issued by the Administrator General of the Department of

³ The author has intentionally excluded Algeria, Morocco and Tunisia (former French colonies) which had different treatment.

^{4 &}quot;Arreté qui règle dans les colonies, l'application de la loi sur les brevets d'invention du 5 juillet 1844", *La propriété industrielle*, February 1885, p.14.
5 "France, Loi créant un office de la propriété industrielle", *La propriété industrielle*, May 1951, p.82.

⁶ "Gambia, L'ordonnance de 1925 pour l'enregistrement des brevets du Royaume-Uni", La propriété industrielle, April 1927, p.58.

⁷ "Belgique, La loi sur les brevets et suivants", *La propriété industrielle*, March 1885, pp.19–25.

⁸ Numerous human rights abuses were reported during that period.

⁹ "Congo Belge, Décret sur les brevets (du 29 octobre 1886)", *La propriété industrielle*, February 1911, pp.17–20.

Foreign Affairs¹⁰ of Belgium on October 30, 1886. An Executive Order on Trademarks was further adopted by the Administrator General of the Ministry of Foreign Affairs of Belgium on April 27, 1888.

In 1908, because of reported human rights abuses, the administration of Congo was transferred from King Leopold II to the Belgian Government and ceased to be the property or private domain of the King. Congo Free State was renamed Belgian Congo. So, Congo was ruled by Belgium from 1908 to 1960. The Decree on Patents of 1886 and the Decree on Trademarks of 1888, including the Executive Orders, continued to apply in Congo during the Belgian colonial period. To complement the two Decrees, another Decree on Industrial Designs was issued on April 24, 1922 to regulate industrial designs in Congo.

In accordance with art.9 of the Decree on Patents, patents were granted by the Administrator General of the Ministry of Foreign Affairs of Belgium on behalf of the King. Article 1 of the Executive Order on Patents states:

"[A]nyone who wants to obtain a patent shall file an application, to that effect, to the Ministry of Foreign Affairs, either directly or through the Administrator General of Congo (residing in Congo)."

The Administrator General of the Ministry of Foreign Affairs issued an Instruction (Order) Relating to Patents and Trademarks on May 23, 1889. According to art.1, "a patent application in Congo must be lodged with the Governor General, who shall forward it to the Ministry of Foreign Affairs". On receipt of the application by the Ministry of Foreign Affairs, a patent shall be prepared and signed by the Administrator General on behalf of the King. It is then immediately sent to Congo to be remitted to the patentee. Any assignment or transfer of title made in Congo shall be notified to the Ministry of Foreign Affairs through the Governor General.

As regards trademarks:

"[N]o one could claim the exclusive rights (uses) on the mark if the person had not deposited three samples of the mark and a snapshot of the mark to the Ministry of Foreign Affairs."

According to art.5 of the Decree on Trademarks, the Administrator General was responsible for settling all matters relating to the Trademarks Decree, including conditions and formalities for payment of fees, penalties for counterfeiting and other offences related to trademarks. After the registration of the trademark, the Administrator General of the Ministry of Foreign Affairs was requested to send a copy of the report on the registration to the Director of Justice located in Congo. To obtain a registration of a trademark in Congo, the interested party shall deposit or provide three samples of the mark and a snapshot of the mark to the Director of Justice. The latter was obliged to send the mark to the Ministry of Foreign Affairs for record and registration.

Finally, with regard to the Portuguese colonies, the Patent Law of Portugal clearly stated:

"Portuguese patent confers the exclusive right to exploit the invention throughout the Portuguese territory, including all colonies. It is the same with regard to the utility models and industrial designs."

However, the protection resulting from the registration of a trademark was limited to the metropolitan and insular territory. Such protection could be extended to the colonies after completion of the required formalities

¹⁰ Meaning the Ministry of Foreign Affairs.

[&]quot;Portugal, De la protection de la propriété industrielle dans les colonies", *La propriété industrielle*, April 1946, p.52.

African industrial property laws after independence until the 1990s

Under this section, the historical evolution of the two African regional intellectual property organisations, namely OAPI and ARIPO, will be addressed before illustrating the first national industrial property laws adopted by some African countries after the independence.

OAPI

As discussed above, in the field of industrial property during the colonial period, the French African colonies were governed by extended French laws to the colonies by Ordinance. These laws ceased to apply, in principle, to those colonies when they gained autonomy and independence in the 1960s. Because these countries, to some extent, were left with no industrial property laws, there was a need to fill the gap. There were two options on the table: to allow each country to design its own industrial property laws or to set up a uniform system of protection given that all of them had applied the same French law during the colonial period.

In September 1961, during the Summit of the 12 Heads of States-Members of the African and Malagasy Organization of Economic Cooperation (OAMCE), which took place in Tananarive, Madagascar, a resolution to set up a uniform system of industrial property protection within a common office was adopted. The Government of Madagascar was requested to prepare the draft text. In March 1962, a draft Agreement was submitted to the Summit of the Heads of States held in Bangui, Central African Republic. ¹² The draft text was further discussed by a specialised committee within the OAMCE for that purpose.

On September 13, 1962, the same group of 12 former French African colonies and parties to the OAMCE signed the Agreement Relating to the Creation of an African and Malagasy Office on Industrial Property.
Known as the "Libreville Agreement", the agreement established the Office Africain et Malgache de la Propriété Industrielle (OAMPI)¹⁴ in Libreville, Gabon. OAMPI became operational on January 1, 1964 after the entry into force of the Agreement. Article 24 stated that the Agreement would enter into force two months after two-thirds of the signatories to the Agreement (eight countries) ratified it. The headquarters of the office was located in Yaounde, Cameroon, and the working language was French.

The Libreville Agreement laid down a uniform system of protection of patents, trademarks and industrial designs for the Member States. It constituted the national industrial property law of the contracting states, and the OAMPI served as a national industrial property office for each member in accordance with art.12 of the Paris Convention for the Protection of Industrial Property (Paris Convention). In other words, the Libreville Agreement applied directly to the territory of each Member State the same way as a piece of national legislation by providing a uniform system of protection for all Member States. The OAMPI was tasked with registration and protection with regard to inventions (patents), trademarks and industrial designs on behalf of Member States. The protected subject-matter was deemed to be protected in each Member State. For instance, a registered or valid trademark was, in principle, valid in each of the 12 countries. There was no need for a member to enact any distinct industrial property law.

The Libreville Agreement was composed of the main part (Agreement) and four annexes covering each different subject-matter. Annex I dealt with patents; Annex II trademarks; Annex III industrial designs; and Annex IV (untitled) optional matters.

Although the Libreville Agreement aimed to fill the vacuum, it failed to take into consideration the needs and priorities of the newly independent states. The main reason was that the Agreement was designed

¹² Guillaume Finniss, "La protection de la propriété industrielle dans les Etats membres de l'organisation africaine et malgache de coopération économique (OAMCE)", *La propriété industrielle*, February 1963, pp.30–32.

¹³ The official French title is "Accord relatif à la création d'un office Africain et Malgache de la propriété industrielle".

^{14 &}quot;Office Africain et Malgache de la Propriété Industrielle", La propriété industrielle, April 1963, pp.66–83. Those countries were as follows: Cameroon, Central African Republic, Chad, Congo, Cote d'Ivoire, Dahomey (now Benin), Gabon, Haute-Volta (now Burkina Faso), Madagascar, Mauritania, Niger and Senegal.

with the assistance of the INPI. As a result, the three annexes which formed the legislation on patents, trademarks and industrial designs reproduced *mutatis mutandis* French laws, including Law on Patents of 1844; Law on Trademarks of 1857; and Law on Industrial Designs of 1909 (all of which were supposed to be abolished in the framework of the Libreville Agreement). It is not the aim of this study to scrutinise the three annexes to the Libreville Agreement.

The great innovation provided by the Libreville Agreement was that it built a unique system in the world where 12 countries were governed by one uniform system of protection of patents, trademarks and industrial designs. ¹⁶ According to art.25 of the Libreville Agreement, any African state that is not a signatory to the Agreement but a contracting party to the Paris Convention could adhere to it. Article 26 further stipulated that any contracting state to the Libreville Agreement could denounce it by notification, and the denunciation would take effect on December 31 of the second year following such notification. For example, Madagascar denounced the Agreement in 1974 and ceased to be a contracting member in December 1976.

The Administrative Council of the OAMPI adopted in 1966 the following three regulations: Regulation on Patents, ¹⁷ Regulation on Trademarks ¹⁸ and Regulation on Industrial Designs. ¹⁹ On January 10, 1969, in Abidjan, Cote d'Ivoire, the legislation on the Protection of Appellations of Origin was adopted. ²⁰ This legislation formed a new Annex to the Libreville Agreement.

As mentioned above, Member States felt the need to revise the Libreville Agreement and its Annexes to adapt them to the new realities and to put them in line with the international system. The Libreville Agreement and its Annexes were revised in Bangui, Central African Republic on March 2, 1977, by the Agreement Relating to the Creation of an African Intellectual Property Organization.²¹ The name of the office was changed to the Organisation Africaine de la Propriété Intellectuelle (African Intellectual Property Organization, OAPI). The OAPI Agreement, known as the "Bangui Agreement", entered into force on February 8, 1982.

The Bangui Agreement encompassed the main part of the Agreement and nine Annexes which covered respectively: Patents; Utility Models; Trademarks and Service Marks; Industrial Designs; Trade Names and Protection against Unfair Competition; Appellations of Origin; Copyright and Cultural Heritage; Central Body for Patent Documentation and Information (Documentation Centre); and an untitled annex (Annex IX).

The Bangui Agreement attempted to incorporate, among others, matters not inherited from the colonial laws. ²² The coverage of the subject-matter was extended. The guiding principle set out under the Libreville Agreement, which empowered OAPI to act and grant titles as a national office on behalf of Member States, remained the same. ²³

Some provisions, which were set out under the Libreville Agreement, also remained the same. According to art.2 of the Bangui Agreement, nationals may claim application for their benefit of the provisions of the Paris Convention, the Berne Convention for the Protection of Literary and Artistic Works and/or the

¹⁶ Denis Ekani, "Office Africain et Malgache de la propriété industrielle", *La propriété industrielle*, September 1966, pp.132–134.

19 "Office Africain et Malgache de la propriété industrielle (Règlement sur les dessins ou modèles industriels)", La propriété industrielle, September 1966, pp.218–222.

²¹ The official French title is "Accord relatif à la création d'une Organisation Africaine de la Propriété Intellectuelle".

¹⁵ French Industrial Property Office.

^{17 &}quot;Office Africain et Malgache de la propriété industrielle (Règlement sur les brevets d'invention)", *La propriété industrielle*, July 1966, pp. 173–179.

18 "Office Africain et Malgache de la propriété industrielle (Règlement sur les marques de fabrique ou de commerce)", *La propriété industrielle*, August 1966, pp. 198–201.

²⁰ "Office Africain et Malgache de la propriété industrielle (Convention relative à la protection des appellations d'origine) (Annexe: Loi uniforme sur la protection des appellations d'origine)", *La propriété industrielle*, January 1970, pp.394–396.

²² B. Cazenave, "L'Organisation Africaine de la Propriété Intellectuelle (OAPI) de Libreville à Bangui", *La propriété intellectuelle*, July–August 1989, pp.311–327.

²³ The preamble of the Bangui Agreement provides: "Considering the advantages of establishing a uniform system for the protection of literary, artistic and industrial property, in particular, in the later field, a system for the single deposit of applications for patents, registration of utility models, trademarks, service marks, industrial designs, trade names and appellations of origin, on the one hand, and a common system of protection against unfair competition, on the other hand, in order to facilitate recognition of the rights provided for in the laws of their countries."

Universal Copyright Convention, as well as the agreements, additional acts and closing protocols which have amended or will amend these Conventions, in cases where such provisions are more favourable than those of the present Agreement and its Annexes in protecting intellectual property rights. In the case of discrepancies, the provisions of the international conventions to which the Member States are party and which the International Bureau of the WIPO administer shall prevail over those of the present Agreement and its annexes.²⁴

It is not the purpose of this study to scrutinise each Annex. However, to respond to the needs of curious researchers, only the salient features of the 1977 Bangui Agreement with respect to patents, trademarks and industrial designs will be highlighted without going into detail.

As regards patents, art.1(1) of the Annex I laid down conditions for eligibility for patents. The invention shall be new and be industrially applicable. Articles 2, 3 and 4 defined and specified the scope of each condition for eligibility. The Libreville Agreement did not include inventive step as a condition of patentability. In addition, under the Bangui Agreement, patents are available for both process and product patents, mainly in the field of pharmaceuticals. The protection period under the 1977 Bangui Agreement was reduced from 20 to 10 years. This period could be extended for another five years if the patentee proved that his or her invention was worked on in the territory of one of the Member States at the date of request or that there were legitimate reasons for failing so to work it.²⁵

As for trademarks, the Bangui Agreement defined a mark and extended the protection to service marks as well as collective marks. If the mark was subsequently registered as provided under the Libreville Agreement, the duration of protection was reduced from 20 years with a possibility of indefinite protection to 10 years with indefinite protection upon renewal. Local exploitation of the trademark was required to continue to benefit from protection, particularly during the renewal phase.

Regarding industrial designs, the Bangui Agreement provided a definition of an industrial design. The main condition of eligibility continued to be the novelty of the design. The duration of protection was reduced under the Bangui Agreement from 20 years (5+15) to a maximum of 15 years (5+5+5).

The 1977 Bangui Agreement was revised in February 1999 to meet the requirements of the TRIPS Agreement and to strengthen the development dimension of intellectual property among Member States. ²⁶ The revised agreement has expanded its scope by including within the list of protected items intellectual property categories that were not dealt with under the Bangui Agreement. The 1999 revision has incorporated the protection of layout-designs (topographies) of integrated circuits (Annex IX) and plant varieties (Annex X). In addition, protection against unfair competition has been strengthened and dealt with in the Annex VIII.

The Annexes to the 1999 Bangui Agreement are as follows: (I) Patents; (II) Utility Models; (III) Trademarks and Service Marks; (IV) Industrial Designs; (V) Trade Names; (VI) Geographical Indications; (VII) Copyright; (VIII) Protection against Unfair Competition; (IX) Layout-Designs (Topographies) of Integrated Circuits; and (X) Protection of Plant Varieties. The previous Annex on Appellations of Origin was replaced by the Annex on Geographical Indications.

The 1999 Bangui Agreement and its Annexes constitute the current industrial property law of the Member States of OAPI. It entered into force on February 28, 2002. OAPI is now composed of the following 17 Member States, not all of which are French-speaking countries: Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Comoros, Congo, Cote d'Ivoire, Equatorial Guinea, Gabon, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Senegal and Togo. The working languages are French and English, and the headquarters continue to be in Yaounde, Cameroon.

²⁴ Bangui Agreement art.14.

²⁵ Tshimanga Kongolo, "The African Intellectual Property Organizations—The Necessity of Adopting One Uniform System for All Africa" (2000)

³ J. World Intell. Prop. 265.

Solution of the New OAPI Agreement as Revised in February 1999" (2000) 3 J. World Intell. Prop. 717.

ARIPO

During the colonial times, as stated above, British IP laws were extended, through Ordinance, to its African colonies. All registrations were centralised in Britain, and the registration and granting of IP titles were carried out by the UK Patent Office. Unlike the former French colonies which decided to break with the colonial system in 1962, most of the former British African colonies did not have their own independent national laws on industrial property until the 1980s and some until even the 1990s.

Most of these countries felt the need to adopt new, independent national laws, and it looked ridiculous for independent countries to continue to apply British colonial rules. Contrary to the former French colonies which gave up their sovereignty and established a uniform system of protection of industrial property rights for all Member States, former British African colonies opted, as will be seen later, for the creation of a regional office having the main purpose of harmonising the laws of Member States on the one hand and encouraging member countries to design their own independent IP laws on the other. So, the industrial property system set out allowed the coexistence of the regional and national systems.

It is worthwhile to trace the evolution of the current ARIPO from its beginning and to elaborate on situations that enabled its establishment as a regional organization for the English-speaking African countries. In October 1972, a seminar for English-speaking African countries was organised by WIPO in Nairobi, Kenya.²⁷ Adopted at the end of the seminar was a resolution endorsing the proposal made earlier by the United Nations Economic Commission for Africa (ECA) to organise jointly with WIPO a conference of the Heads of industrial property offices from English-speaking African countries. This conference sought to discuss the harmonisation of their industrial property legislation and to seek ways to establish a central office.

As a follow-up to this resolution, 19 English-speaking African countries²⁸ were invited to participate in the conference on the legislation for the English-speaking African countries in the field of industrial property, which took place in Addis Ababa, Ethiopia from June 4–10, 1974.²⁹ The conference approved a draft agreement on the creation of an industrial property organisation for the English-speaking African countries, which would aim to foster co-operation between these countries. In addition, as a future action, a resolution was adopted to request the creation without delay of this organisation. Also adopted was a resolution requesting WIPO and the ECA to assure the interim secretariat of the Organization until it was instituted. A third resolution was adopted to establish two committees: one on patents and another on trademarks and industrial designs. Finally, it was agreed to convene a Diplomatic Conference to adopt the draft agreement.

Under the auspices of WIPO and the ECA, the two committees held their first sessions in Nairobi, Kenya from October 13–17, 1975. The resolutions adopted by the two committees echoed the resolutions taken in 1974. As a complement to the previous resolutions, the two committees adopted the independent systems of patents and of trademarks and industrial designs so that the systems would be introduced in countries in which they did not yet exist. The committees further adopted a resolution requesting the convening of the Diplomatic Conference to adopt the draft agreement.

²⁷ The participating countries were as follows: Ghana, Kenya, Lesotho, Liberia, Malawi, Nigeria, Tanzania, Uganda and Zambia.

²⁸ The participating countries were as follows: Botswana, Egypt, Ethiopia, Gambia, Ghana, Kenya, Lesotho, Liberia, Libya, Malawi, Mauritius, Nigeria, Sierra Leone, Somalia, Sudan, Swaziland, Tanzania, Uganda and Zambia.

²⁹ "Conférence sur la législation de l'Afrique anglophone en matière de propriété industrielle, première session (4 au 10 juin 1974)", *La propriété industrielle*, August 1974, pp.354–356.

³⁰ OMPI/CEA, "Conférence sur la législation de l'Afrique anglophone en matière de propriété industrielle, premières sessions (13 au 17 octobre 1975)", *La propriété industrielle*, November 1975, pp.335–337. The two committees were Comité des questions de brevets and Comité des questions de marques et de dessins et modèles industriels, premières sessions.

³¹ As stated above, an independent system meant a national industrial property law adopted by a country (which was opposite to the extension system set out by Britain since the colonial period).

This Diplomatic Conference was convened by WIPO and the ECA in Lusaka, Zambia from December 6-9. 1976. The Agreement creating ESARIPO was adopted on December 9, 1976. The Agreement established a regional system of protection of industrial property, which aimed to harmonise and develop national legislation of Member States and foster co-operation in the field of industrial property. The Agreement was signed by the following countries: Ghana, Kenya, Mauritius, Somalia, Uganda and Zambia. The ESARIPO Agreement entered into force on February 15, 1978. The Organization held its first session in Nairobi, Kenya from May 2-5, 1978. 33 The headquarters of the Organization was first located in Nairobi, Kenya until the fifth session of the Council in September 1981, at which the Council transferred the headquarters of ESARIPO to Harare, Zimbabwe. The working language was English.

According to the ESARIPO Agreement, the Organization had, among others, the following mandates:

- To promote the harmonisation and development of legislation on industrial property and related activities to meet the needs of its members and the whole region.
- To encourage the establishment of closer relation between its Members in areas related to industrial property.
- To put in place common services necessary for the coordination, harmonisation and development of activities related to industrial property interesting its Member States.³⁴

It should be underscored that WIPO and the ECA served as the Secretariat of ESARIPO until June 1981. The Protocol on Patents and Industrial Designs within the Framework of ARIPO (Harare Protocol), which was annexed to the ESARIPO Agreement, was adopted at Harare on December 10, 1982. The Protocol, which became effective on April 25, 1984, introduced the regional system whereby ESARIPO would examine applications for patents or registration of industrial designs on behalf of the designated contracting states. Under this system, the granted patents or registered industrial designs would produce their effects, as appropriate, in the designated contracting states. As mentioned above, this system constituted a regional system coexisting with national laws of Member States.

Under the Harare Protocol, an applicant could by filing only one application designate any of the contracting states in which he or she wished the invention or industrial design to be accorded protection. The Protocol required the filing of the application to be made with either one of the contracting states or directly with the ARIPO Office. On receipt of the patent application, the Office carried out the substantive examination to ensure that the invention was patentable in accordance with the Protocol. For industrial design applications, only a formality examination was performed.

On December 12, 1986, the ESARIPO Agreement was revised by the Council to set up the African Regional Industrial Property Organization (ARIPO), which replaced ESARIPO. On the same occasion, the Harare Protocol and its Regulations, which had been in force since April 25, 1984, were amended on December 12, 1986.

To supplement the first Protocol on Patents and Industrial Designs, another Protocol on marks, known as the Banjul Protocol on Marks was adopted at Banjul (Gambia) on November 19, 1993. The Protocol came into force on March 6, 1997. ARIPO was then empowered to register and administer marks on behalf of the contracting states. Regulations for Implementing the Banjul Protocol was adopted by the Administrative Council at Kariba, Zimbabwe on November 24, 1995 and amended on November 28, 1997 and May 26, 1998.

On November 26, 1999, the Protocol on Patents and Industrial Designs within the Framework of ARIPO was revised to include utility models as a subject matter of protection. On August 13, 2004, the Lusaka

³² OMPI/CEA, "Conférence diplomatique pour l'adoption d'un Accord sur la création d'une Organisation de la propriété industrielle de l'Afrique anglophone, Lusaka (6 au 9 décembre 1976)", La propriété industrielle, February 1977, pp.48-49.

[&]quot;Organisation de la propriété industrielle de l'Afrique anglophone, première session, Nairobi (2-5 mai 1978)", La propriété industrielle, July 1978, p.307.

34 D.M. Mills, "Les premières années d'ESARIPO", *La propriété industrielle*, May 1984, pp.197–204.

Agreement was further revised. The major revision was the change of the name of the Organization to African Intellectual Property Organization (ARIPO). ARIPO continues to be governed by the Lusaka Agreement (ARIPO Agreement) and the two Protocols mentioned above. In August 2010, at Swakopmund, Namibia, ARIPO adopted a Protocol on the Protection of Traditional Knowledge and Expressions of Folklore, known as the Swakopmund Protocol.

ARIPO is now composed of the following 18 Member States: Botswana, Gambia, Ghana, Kenya, Lesotho, Liberia, Malawi, Mozambique, Namibia, Rwanda, Sierra Leone, Somalia, Sudan, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe.

Selected African national industrial property laws after independence

This section purports to illustrate the first industrial property laws of a few African countries enacted after independence. The colonial period of most of these countries are covered in the first section. It should be recalled that in the colonial period, the industrial property laws of the former colonial powers, as a rule, were deemed to be *mutatis mutandis* the laws of the colonies, unless otherwise provided. The application of those laws was merely extended to the colonies.

The Democratic Republic of Congo (DRC) adopted its first industrial property law in 1982 (Law No.82001 of January 7, 1982). According to art.173 of this law, prior provisions relating to patents, trademarks and industrial designs are repealed, in particular:

- 1. the Decree of the Sovereign King of October 29, 1886 on Patents, as amended;
- 2. the Decree of the Sovereign King of April 26, 1888 on Trademarks, as amended;
- 3. the Royal Decree of April 24, 1922 on Industrial Designs, as amended.

This means that prior to the enactment of this Law, DRC was still governed by the Belgium colonial rules until 1982 although independence occurred in 1960. This first Congolese law is still valid to date.

Burundi became independent in 1962. Burundi enacted its first Laws on Patents, Trademarks and Industrial Designs on August 20, 1964. These laws repealed the former Belgian colonial laws. From the same perspectives, Rwanda, which gained independence in 1962, enacted its first Laws on Patents, Trademarks and Industrial Designs on February 25, 1963, which repealed the former Belgian colonial laws on the same subject matters.

Nigeria gained independence in 1960. Nigeria enacted its first Patents and Designs Act in 1970, which came into force on December 1, 1971. According to s.31, the Registration of the UK Patents Act, the UK Designs (Protection) Act, the Patent Rights (Limitation) Act 1968 and, in so far as they are in force in Nigeria, the UK Patents Act 1949 and amendments thereof are repealed. The Trademarks Act was enacted in 1965 and came into force in 1967, repealing the Trademarks Registration Ordinance of 1914.

Ghana gained independence in 1957. It adopted its first Patent Law, known as Patents Registration (Amendment) Decree in 1972. This Decree repealed the Patents Registration Ordinances of 1922, 1924, 1932, 1933 and 1935 as revised in 1954. As for trademarks, the first Trademarks Act was adopted in 1965³⁵ and the Regulations in 1970.

Kenya became an independent state in 1963. Kenya adopted its first Patent Act in 1973 and the Trademarks (Amendment) Act in 1965. Prior to the enactment of the Trademarks Act, the Trade Marks Act³⁶ and the Merchandise Marks Act³⁷ were in force.

With regard to the former French African colonies, it should be recalled that the Libreville Agreement, adopted in 1962, is considered to be their first national legislation on industrial property enacted after the independence of these countries.

³⁵ The Merchandise Marks Act was adopted in 1964.

³⁶ Ch.506, No.51 of 1955, No.39 of 1956. ³⁷ Ch.505, No.27 of 1962 (revised edition 1963).

African countries and the international IP framework's historical connection

During the colonial period, African countries had no say at the international stage, as they were colonies and considered to be the extended territories of their colonial powers. One may think that because of this dependency, all the treaties signed, ratified or acceded by the colonial powers applied directly and automatically to the territories of the colonies. One may also assume that the colonies were bound by any conventions or treaties signed or ratified by the colonial power.

France, Belgium, Portugal and Spain signed the Paris Convention on March 10, 1883 and ratified it on June 6, 1884. It entered into force on July 7, 1884. The United Kingdom acceded to the Paris Convention on March 17, 1884, and it became effective on July 7, 1884. What effect did the Paris Convention have in the colonies of these countries? The response to this question could be found in arts 16bis (1)–(2) of the Paris Convention itself (London Act of 1934 and Lisbon Act of 1958). Article 16bis(1) of both the London Act and the Lisbon Act of the Paris Convention set out as follows:

"Any country of the Union may at any time notify by writing to the Government of the Swiss Confederation that this Convention shall apply to all or part of its colonies, protectorates, territories under mandate or any other territories under its authority, or any territories under sovereignty, and the Convention shall apply to all territories named in the notification one month after the communication made by the Government of the Swiss Confederation has been sent to other Members of the Union, unless a later date has been indicated in the notification. Failing this notification, the Convention does not apply to these territories."

As it can be seen, the notification was the condition sine qua non for its extension and application of the Paris Convention to the colonies. This is to say that the treaty, in principle, did not extend automatically to the territories of the colonies unless there was a clear notification from the colonial power to the Swiss Government for that purpose. Thus, three scenarios were possible: treaties extended to all colonies; treaties extended to limited colonies; and treaties not extended to any colony.

Article 16bis(2) of the London Act³⁸ and the Lisbon Act³⁹ of the Paris Convention set out as follows:

"Any country of the Union may at any time notify by writing to the Government of the Swiss Confederation that this Convention shall cease to apply to all or part of the territories which have been the subject of the notification referred to in the preceding paragraph, and the Convention shall cease to apply in the territories named in the notification twelve months after receipt of the notification addressed to the Government of the Swiss Confederation."

Under art. 16bis(2), the colonial power had leeway to denounce the notification and declare that the treaty should cease to be applicable to the colony or colonies at any time.

In line with art. 16bis(1), the Paris Convention was extended to the colonies through notification by the above-mentioned colonial powers. In the case of France, for instance, a notification of the extent of applicability of the ratified or acceded Act of the Paris Convention was always made. When France ratified the Brussels Act (1900) and the Washington Act (1911) of the Paris Convention, it clearly declared through notification that the ratification of the Act included Algeria and colonies. The notification was made when France acceded to the Hague Act (1925) and London Act (1934) of the Paris Convention. With regard to the ratification of the Lisbon Act (1958) of the Paris Convention, it included Guadeloupe, Guyana, Martinique, Reunion, overseas territories and Algerian and Saharan departments.⁴⁰ It should be stressed

^{38 «}Actes adoptés par la conférence diplomatique de Londres (2 juin 1934) (Convention de Paris)", La propriété intellectuelle, June 1934, pp.89–116. ³⁹ "La conférence diplomatique de Lisbonne (6 au 31 octobre 1958) (Convention de Paris)", *La propriété intellectuelle*, November 1958, pp.202–210.

⁴⁰ France ratified the Lisbon Act of the Paris Convention on March 22, 1961, and it entered into force on January 4, 1962. So, before the independence of most of the French colonies in 1960, the London Act was applicable to the colonies as notified by France.

that art. 16 of the London Act and the Lisbon Act of the Paris Convention provided to any country leeway to accede to the Convention.41

After the independence of the former colonies, the key question was whether those treaties signed, ratified or acceded by the former colonial powers and were extended to the colonies were still valid for the newly independent countries, particularly where no opposite notification was made as provided under art. 16bis(2). In other words, what was the legal nature of those treaties which were not willingly ratified or acceded by the independent states? Was it of interest or benefit to the former colonies to continue to apply those treaties after their independence?⁴² Or was it not wise to revisit those treaties signed without their participation? Of course, these questions were not and are not particular to international IP law; they were first dealt with under public international law. It was also true that the former colonies had acquired privileges devoted to Member States during the colonial period due to the extension through notification. So, it was important not to put those countries in unfair situation by completely ignoring their "droits acquis".

What was the best option? The midway alternative was suggested. The newly independent countries were given a transitional period to accept and accede to the previously ratified conventions or treaties or to denounce them. It is not the purpose of this study to make a survey of positions taken by the newly independent African states of the time. Only a few illustrations may be considered. The Republic of Congo (Brazzaville)⁴³ declared, through a notification submitted to the Swiss Confederation on June 26, 1963, applicable to its territory that was, the Paris Convention as ratified by France and extended to Congo. Simultaneously, it declared its accession to the Lisbon Act of the Paris Convention, entered into force on September 2, 1963. 44 Madagascar and Senegal notified the Swiss Government their willingness to continue to be parties to the Paris Union on October 7, 1963 and October 16, 1963, respectively. They subsequently acceded to the Lisbon Act of the Paris Convention, effective December 21, 1963. 45 Cote d'Ivoire notified its willingness to continue to be a party to the Paris Union on August 9, 1963 and acceded to the Lisbon Act of the Paris Convention (effective on October 23, 1963). In September and October 1963, Chad, Central African Republic and Haute-Volta (now Burkina Faso) expressed their determination of continuation and acceded to the Lisbon Act of the Paris Convention, effective November 19, 1963. Likewise, Nigeria acceded to the Paris Convention (Lisbon Act) on July 17, 1963 (effective on September 2, 1963).

After the independence of a large number of African countries in the 1960s, one may wonder about their relationship with BIRPI and the administered treaties. It could be demonstrated through the number of accession of African countries to the BIRPI/WIPO-administered treaties that most of these countries were very receptive to the system set up. From 1963 to 1967, 20 African countries acceded to the Paris Convention. This number is high, and all the 20 members ratified or acceded to the 1967 Stockholm Act of the Paris Convention within the five years of its adoption.

Conclusion

As it has been demonstrated, IP legislation was brought to Africa through colonisation. Evidently, most of the industrial property laws adopted by the colonial powers served their own interests. The extension of application of British, French and Portuguese industrial property laws to their colonies, for instance, aimed to satisfy that goal. In some cases, industrial property laws were enacted on behalf of the colonies

⁴¹ Article 16 of the London Act and the Lisbon Act of the Paris Convention stipulated as follows:

⁽¹⁾ The countries that have not participated in this Convention will be allowed to accede to their request.

⁽²⁾ The membership shall be notified through the diplomatic channel the Government of the Swiss Confederation and the latter to all others.

There was no legal basis to continue to do so.

⁴³ Not to be confused with the Democratic Republic of Congo (Congo Kinshasa).

^{44 &}quot;Déclaration de la continuité et de l'adhésion de la république du Congo (Brazzaville) à la Convention de Paris pour la protection de la propriété industrielle (Actes de Londres et Lisbonne)", La propriété industrielle, August 1963, p.166.

^{5 &}quot;Déclaration d'appartenance à l'Union internationale de Paris pour la protection de la propriété industrielle (Madagascar et Sénégal) et d'adhésion au texte de Lisbonne de la Convention", La propriété industrielle, November 1963, p.235.

and applicable only in those colonies to facilitate commerce or trade of the colonial power. After the independence, those colonies had to adopt new industrial property laws to fill the gap. Former British African colonies took a long time to have their own independent industrial property laws.

At the regional level, the former French African colonies set up OAMPI, which established a uniform system of protection of industrial property rights for the Member States in 1962. In the course of evolution, OAMPI became OAPI. The English-speaking African countries created ESARIPO which established a regional system of protection, to some extent, of industry property rights in 1976. ESARIPO later became ARIPO.

At the international level, colonial powers concluded industrial property treaties, such as the Paris Convention, during the colonial period. To apply a treaty to a colony, a clear notification was required. So, after independence, former colonies had to opt for the continued application of those treaties in their territories or denunciation. Most of the African countries accepted continued application by acceding to these treaties.

This historical study of the industrial property developments in Africa has the merit of bringing to light the reason why African countries were not favourable to the IP system from the independence era up to the late 1990s. IP was considered to be a foreign concept, and the system was seen as serving foreigners at the detriment of nationals. The "extension system" applied during the colonial period could be considered the cause of the unpopularity of the IP system.

Nowadays, however, Africa has changed. African countries have gained a place at the international scene by becoming very active actors.⁴⁶

⁴⁶ Tshimanga Kongolo, African Contributions in Shaping the Worldwide Intellectual Property System (Farnham: Ashgate Publishing, 2013).

Copyright Pioneers

Michael Birnhack

Professor of Law, Buchmann Faculty of Law, Tel Aviv University

© Copyright; Legal history; Mandates; Palestine; Protectorates

Introduction

How did ordinary authors, publishers, copyright owners and users act and interact within a particular copyright setting? The historical view of the everyday life of copyright law—the way the law operated in practice—has by and large gone under the radar of mainstream copyright history. Most current analyses teach us about the intellectual and legal development of the law on a macrohistorical level. Scholars trace legislative debates and enactments, analyse major cases, explore commercial and political interests, and offer explanations as to why and how the law has developed as it has. These are crucial studies. Missing from this picture is the micro-level: the nuanced, fragmented, perhaps messy or mundane, local dealings with copyright.²

Microhistory seeks to learn more about the daily lives of people and analyse events with intense proximity. Introducing microhistory into the study of law may seem at first sight like old news: many studies focus on a single law, one judicial decision or a particular legal dispute. But micro-legal history offers more: it queries not only the law and its direct history, or the particulars of a judicial decision. A microhistorical legal analysis asks about the context of the events surrounding a case, or about a specific person, trying to better figure out the political, social and cultural meanings of the developments, going beyond the inevitably limited contours of the judicial opinion or legislation. Such micro-legal history fits with a socio-legal perspective, which seeks to locate the law within its socio-political context, and to focus on the law in action.

Applying the microhistorical lens to copyright law can yield yet unobserved elements of the big picture, supplementing our understanding of the making and application of the law. For example, the study of ordinary authors who used or perhaps avoided copyright law without reaching a court, thus leaving no judicial trace, may shed light on the daily legal considerations that affect the author's creativity or business. The study of specific events can teach us not only about a gap in the law, but also offer explanations for its occurrence. By exposing the messiness of the law, micro-analysis supplements or challenges the macro picture.

This article offers one variant of microhistory, when applied to the study of copyright law.³ We should pay more attention to the people who engaged with copyright in their everyday life: the less powerful authors and publishers, who were not necessarily involved in a major litigation. More specifically, I wish to draw attention to authors or intermediaries that changed the law in some aspect, but who acted on their own behalf, protecting or promoting their own interests, rather than under an official role or as

^{*} Thanks to Jose Bellido, Alexandre Kedar, and Assaf Likhovski for helpful comments, and to Yuval Kerstein for research assistance.

¹Occasionally, history is called upon to settle contemporary disputes. For this critique, see Kathy Bowrey and Natalie Fowell, "Digging up Fragments and Building IP Franchises" (2009) 31 Sydney L. Rev. 185. Cf. Ronan Deazley, "What's New about the Statute of Anne? Or Six Observations in Search of an Act" in Lionel Bently, Uma Suthersanen and Paul Torremans (eds), *Global Copyright: Three Hundred Years since the Statute of Anne, from 1709 to Cyberspace* (Cheltenham: Edward Elgar Publishing, 2010), p.26.

² See Bowrey and Fowell, "Digging up Fragments and Building IP Franchises" (2009) 31 Sydney L. Rev. 185, 210.

³ Importantly, I do not purport here to offer a microhistory of the kind associated with the Italian microhistory school. See Carlo Ginzburg, "Microhistory: Two or Three Things that I Know about It", translated by John and Anne C. Tedeschi (1993) 20 Critical Inquiry 10.

self-designated activists. These are copyright pioneers.⁴ While they did not necessarily seek a broader change, their engagement with copyright has nevertheless brought such a change.

The discussion proceeds in two steps. First, I outline the theoretical framework of micro-copyright legal history, beginning with microhistory and then adding the legal and copyright layers. Secondly, I illustrate the relevance of such a lens, by two short case studies from Mandate Palestine (1917–1948).

Micro copyright legal history

First layer: Microhistory

Microhistory is a historiographical practice of the last few decades, which seems to lack a clear definition.⁵ The single most obvious characteristic of microhistory is the scale of observation: instead of a grand, all-encompassing perspective, microhistory zooms in and reduces the perspective to single events, particular people or encounters, which were otherwise lost from the macro perspective. The reduction of scale is not a technical breaking-down of a complex story into its components so that it can be studied one piece at a time. Rather, as Giovanni Levi wrote two decades ago:

"For Microhistory reduction of scale is an analytical procedure, which may be applied anywhere independently of the dimensions of the object analysed."⁷

In other words, the unit of analysis is an independent subject matter. Again in Levi's words:

"The Microhistorical approach ... is a procedure which takes the particular as its starting point (a particular which is often highly specific and individual, and would be impossible to describe as a typical case) and proceeds to identify its meaning in the light of its own specific context."8

According to this account, microhistory is in close proximity to ethnographic history, but, as Carlo Ginzburg notes, at least some scholars have diverged intellectually and politically.9 However, as a methodology, microhistory need not be aligned with a particular ideology, but for some suspicion towards macrohistory. Indeed, there is tension between macrohistories and microhistories (microhistorians might say that the tension is between historians, not histories), with the latter accusing the former of holding an essentialist attitude and the former accusing the latter of telling stories which cannot be generalised.

Microhistorians sometimes struggle to explain how their approach differs from a narrative-based analysis. Both microhistory and a narrative analysis leave aside the attempt to tell an authoritative, objective explanation of events—these tasks are left for macrohistorians. Instead, the subject of analysis is an individual or an event, rather than a prominent figure or a definitive event. Whereas narrative is usually applied so as to illustrate a larger point—a case study of a broader phenomenon—microhistory does not claim that the micro represents the macro.¹⁰ If and when it does make such a claim, then the causal connection between the particular case and the larger picture should be explained.¹¹

⁴ The use of "pioneers" builds on the ideal of the Hebrew immigrant to Palestine in the late nineteenth and early twentieth centuries, the Halutz (Hebrew for pioneer). The image of the Halutz was a powerful ideological engine for the construction of a new community. See Boaz Neumann, Land and Desire in Early Zionism (Tel-Aviv: Am Oved, 2009) (Hebrew).

⁵ Jill Lepore, "Historians Who Love Too Much: Reflections on Microhistory and Biography" (2001) 88 J. Am. Hist. 129; Giovanni Levi, "On Microhistory" in Peter Burke (ed.), New Perspectives in Historical Writing (Oxford: Polity Press, 1991), p.93.

⁶ Lara Putnam, "To Study the Fragments/Whole: Microhistory and the Atlantic World" (2006) 39 J. Soc. Hist. 615.

⁷ Levi, "On Microhistory" in Burke (ed.), New Perspectives in Historical Writing (1991), p.95.

⁸ Levi, "On Microhistory" in Burke (ed.), New Perspectives in Historical Writing (1991), p.106.

⁹ Ginzburg, "Microhistory" (1993) 20 Critical Inquiry 10, 21.

¹⁰Levi, "On Microhistory" in Burke (ed.), New Perspectives in Historical Writing (1991), pp.105–106. Some legal historians do argue that microhistory provides a window into a broader set of legal relations. Kara W. Swanson, "Getting a Grip on the Corset: Gender, Sexuality, and Patent Law" (2011) 23 Yale J.L. & Feminism 57, 67.

¹¹ Microhistory also differs from biography. Lepore explains that the biographer seeks to tell a singular life story as the end of the exploration, whereas microhistorians use the individual's story as a means to explain culture. Lepore, "Historians Who Love Too Much" (2001) 88 J. Am. Hist. 129, 133.

By focusing on events or life stories, microhistory enables us to observe yet-unobserved elements of the story. Viewing history "from below", in Sandra Holton's words, draws our attention to elements that were previously lost in the abstract story. 12 Instead of seeking to expose overall structures, microhistory seeks to understand the building blocks, one by one. We may learn something new that challenges the big, macro picture as we knew it.¹³ Microhistory challenges the often authoritarian, top-down historical narrative¹⁴ and its stereotypes, abstractions and generalisations.¹⁵ It questions conventional perceptions.¹⁶

Second layer: Law

Applying microhistory to the study of the law mitigates some of the debates within the yet-unsettled trajectory of microhistory, but at the same time adds new complications. Micro-legal history may be a useful perspective to better understand the circumstances of a specific legal event, providing a thick description that goes beyond the legal text and offering a deeper understanding of the law in action and of the interaction of the law with social and political circumstances. The story may draw our attention to what happened in the back of the legal stage.

Legal history seeks to understand the development of the law: how did the law reach a certain state, how was it applied or what were the causes—material and intellectual—that led to a particular state of the law¹⁷ or, within a socio-legal thread, that seek to understand the role of the law in constructing society and interacting with it. The scale of observation and its subject matter might be as broad as a legal system, or narrower, looking into a particular statute, doctrine or case. The latter, narrower perspective might be an important point on a certain evolving broader scale: a new statute or a precedential case that redirected the law in a particular field.

Accordingly, micro- and macro-legal history are not necessarily mutually exclusive. While they do aim at different goals and employ different perspectives and practices, the two approaches may supplement each other. The micro delves into the details, while the macro tries to see the big picture. Of course, one perspective may disturb the other: the big picture seems tidy and coherent only from a distance. 18

Micro-legal history may overlap with other currents in legal studies, though the goals and the underlying assumptions might differ. Under a lens of legal realism, the law is not self-confined and is often read on the background of social and political circumstances. A legal realist approach would query not only the law in the books, but also the law in action, and especially the gaps between the two. Microhistory, too, is interested in the law in action: how did the law apply in practice? What were the circumstances that led to a certain state of events? The motivation of both the realist (as well as a critical view) and the microhistorical approaches is an instrumental suspicion of the law's façade. Hence, both approaches search for subtle and hidden elements. Indeed, an important thread in legal history is critical. Thus, the microhistorical approach and the realistic approach are not in opposite. However, the difference between the two approaches is the timeframe, with the former looking at contemporary events and the latter looking at past events, with obvious implications for the methodologies applied: the realists go to the field, the

¹² Sandra Stanley Holton, "Challenging Masculinism: Personal History and Microhistory in Feminist Studies of the Women's Suffrage Movement" (2011) 20 Women's Hist. Rev. 829, 837; Putnam, "To Study the Fragments/Whole" (2006) 39 J. Soc. Hist. 615 ("Micro-history is often associated with ... cultural history of those at the margins.").

¹³ Putnam, "To Study the Fragments/Whole" (2006) 39 J. Soc. Hist. 615.

¹⁴ See Tamar Hager, "Compassion and Indifference." The Attitude of the English Legal System toward Ellen Harper and Selina Wadge, Who Killed Their Offspring in the 1870s" (2008) 33 J. Family Hist. 173, 175.

¹⁵ Holton, "Challenging Masculinism" (2011) 20 Women's Hist. Rev. 829, 836.

¹⁶ Avi Rubin, "The Trial of the Prosecutor Hamdi Bey: Inside and Out of the Ottoman Nizamiye Court" (2012) 45 J. Social Hist. 757, 774.

¹⁷ See, e.g. Randall Lesaffer, "Law between Past and Present", pp.6-7, available at http://ssrn.com/abstract=1316256 [Accessed September 27, 2013], describing the study of law in history.

¹⁸ Dworkinians may think of the complementary aspect of the micro and macro in terms of the chain novel and study both single chapters and their interconnections. See Ronald Dworkin, Law's Empire (Cambridge, Mass.: Harvard University Press, 1986), pp.228-229.

historians go to the archives. Moreover, the critical realist approach often identifies gaps in the law. Microhistory strives to explain the gap. 19

Another approach that seeks to better understand the application of the law in practice places the individual story at the centre stage, providing the law with a human face and enabling people to express their interaction with the law in their own voice. Patricia Ewick and Susan Silbey offered "stories from everyday life"²⁰ as a device to understand the development of the law in a bottom-up manner:

"This research provides a view of law emerging from the routine, often discretionary, encounters among professional and nonprofessional actors. It depicts a legal system with numerous actors, involved in diverse projects, employing different legitimating discourses, material resources, and political power, to achieve a wide range of goals."21

This approach fits with a microhistorical legal analysis and guides my current interest in copyright pioneers.

Third layer: Copyright

Applying micro-legal history to copyright law adds more complexities. One immediate issue is that copyright history in itself is a rather young field, though growing fast. Most attention has thus far been devoted to major copyright events, such as the enactment of the 1710 Statute of Anne. 22 the English cases of Millar v Taylor (1768)²³ and Donaldson v Becket (1774).²⁴ the making of the American Constitution and its copyright clause, 25 and landmark US cases, such as Wheaton v Peters (1834). 26 While most of these histories offer a large-scale discussion, tracing the events and the ideas, we do find scholarship that can be characterised as microhistory, focusing on a particular case or legislation.²⁷ In comparison, Macrohistory often focuses on prominent points on the legal timeline.

Microhistory, with its critical variant, calls for exploring more and doing so differently: studying not only legislators, leading jurists, legislation and major cases, but also the everyday life of copyright law. For example, micro-legal history of the kind suggested here will investigate the effect of law on the life of a regular author in the mid-nineteenth century, or it will query the social and commercial norms among authors and publishers in a certain community.28 Micro-legal history wishes to study the cases that have not deserved much attention and see how the law played in the regular, perhaps even mundane, lives of authors and other players. Applying the microhistorical lens to copyright law might solve some mysteries or perhaps tell us something new about authors, publishers, creativity, culture, and ultimately the law.²⁹

¹⁹ Martin Chanock, "Writing South African Legal History: A Prospectus" (1989) 30 J. African Hist. 265, 273.

²⁰ Patricia Ewick and Susan S. Silbey, *The Common Place of Law: Stories from Everyday Life* (Chicago: University of Chicago Press, 1998), p.xi.

²¹ Ewick and Silbey, The Common Place of Law (1998), p.19.

²² E.g. Brad Sherman and Lionel Bently, *The Making of Modern Intellectual Property Law: The British Experience, 1760–1911* (Cambridge: Cambridge University Press, 1999); Ronan Deazley, *On the Origin of the Right to Copy: Charting the Movement of Copyright Law in Eighteenth-Century* Britain (1695-1775) (Oxford: Hart Publishing, 2004).

²³ Millar v Taylor 98 Eng. Rep. 201 (K.B.). For discussion, see Mark Rose, Authors and Owners: The Invention of Copyright (Cambridge, Massachusetts: Harvard University Press, 1993).

²⁴ Donaldson v Becket 1 Eng. Rep. 837, 846 (H.L.). For discussion, see Rose, Authors and Owners (1993).

²⁵ E.g. Bruce W. Bugbee, *Genesis of American Patent and Copyright Law* (Washington: Public Affairs Press, 1967); Lyman Ray Patterson, *Copyright* in Historical Perspective (Nashville: Vanderbilt University Press, 1968); Edward C. Walterscheid, The Nature of the Intellectual Property Clause: A Study in Historical Perspective (Buffalo: W.S. Hein & Co, 2002).

²⁶ Wheaton v Peters 33 U.S. 591, 658–662 (1834). For discussion, see Patterson, Copyright in Historical Perspective (1968).

²⁷ See, for example, an excellent collection of studies on a microhistorical level, though of prominent cases: Jane C. Ginsburg and Rochelle Cooper Dreyfuss (eds), Intellectual Property Stories (New York: Foundation Press, 2006).

E.g. Michael Birnhack, Colonial Copyright: Intellectual Property in Mandate Palestine (Oxford: Oxford University Press, 2012), pp.145-161. ²⁹ An important thread in critical copyright law pointed to the image of the romantic author, and the way it was utilised to achieve political gains, and then shape the law. See Martha Woodmansee, "The Genius and the Copyright: Economic and Legal Conditions of the Emergence of the Author" (1984) 17 Eighteenth-Century Stud. 425; Peter Jaszi, "Toward a Theory of Copyright: The Metamorphosis of 'Authorship'" [1991] Duke L.J. 455. A microhistorical legal perspective might teach us if the romantic author had, for example, particular religious or political views that may offer a richer understanding of the author as a legal figure.

Copyright pioneers

Applying a microhistorical lens to the study of copyright law draws our attention, inter alia, to the people who changed the course of the law in some way. Some are well-known figures, such as legislators, judges or authors who were politically or legally active in promoting copyright. Within this category we may include well-known authors who have deserved scholarly attention, such as Noah Webster, who advocated a federal copyright law in the United States³⁰; Charles Dickens, who enforced his copyright law wherever he could³¹; Victor Hugo who promoted an international legal arrangement for copyright law (resulting, posthumously, in the Berne Convention for the Protection of Literary and Artistic Works)³²; or Mark Twain, who advocated reform in American copyright in the early twentieth century.³³ They and others were *copyright activists* and well aware of their role. Another sub-category of copyright pioneers are prominent jurists, such as Justice Joseph Story, who is credited for introducing fair use into copyright law,³⁴ or prominent legislators, such as Lord Macaulay, who played an important role in the Parliamentary debates about the extension of copyright law in the 1840s and entered the pantheon of copyright history for his eloquent speeches.³⁵

Here, I wish to shed some light on players who did not have an official role and who were not particularly famous, but nevertheless left a mark on the law. To be able to tell their stories, we need to go beyond the official legal texts and try to reconstruct the story of copyright's everyday life when it was challenged or redirected to new avenues. This is not a pure microhistorical analysis, \grave{a} la the Italian school. Rather, it is a socio-legal variant, which reduces the scale of observation and applies it to the law with a realist-critical approach.

Colonial copyright in Mandate Palestine

To illustrate the proposed analytical framework of micro-copyright legal history, I provide two examples, taken from the history of copyright law in Mandate Palestine.³⁷ These are necessarily concise, for space limitations. During this period, Palestine was under the British rule, per a Mandate of the League of Nations. In 1924, the British replaced the Ottoman Copyright Act with their law, composed of the Imperial Copyright Act 1911 and a local Copyright Ordinance that dealt with criminal aspects of copyright and customs.³⁸ This was part of the Empire's copyright policy in the late nineteenth and early twentieth centuries.³⁹

Elsewhere, I told the history of copyright law in Mandate Palestine within a framework of Colonial Copyright, namely, copyright in its imperial-colonial context as a legal transplant imposed from the centre

³⁰ See Irah Donner, "The Copyright Clause of the U.S. Constitution: Why Did the Framers Include It with Unanimous Approval?" (1992) 36 Am. J. Legal Hist. 361, 371; Richard J. Moss, *Noah Webster* (Boston: Twayne Publishers, 1984).

³¹ For example, Dickens was the first to bring a copyright lawsuit in South Africa. See *Dickens v Eastern Province Herald* (1861) 4 Searle 33, and discussion in Graham Glover, "Maybe the Courts Are Not Such a 'Bleak House' After All? Or 'Please, Sir, I Want Some More Copyright'" (2002) 119 S. African L.J. 63.

³² See, e.g. Christopher May, "The Pre-history and Establishment of the WIPO" (2009) 1 WIPO J. 16, 17.

³³ Siva Vaidhyanathan, Coppyrights and Copywrongs: The Rise of Intellectual Property in How It Threatens Creativity (New York: New York University Press, 2001), pp.35, 69–80.

³⁴ Folsom v Marsh 9 F. Cas. (No.4,901) 342 (C.C.D. Mass 1841).

³⁵ Thomas Babington Macaulay, "A Speech Delivered in the House of Commons on the 5th of February 1841" in *The Miscellaneous Writings and Speeches of Lord Macaulay*, Vol.IV (Gutenberg Project, EBook #2170) ("The principle of copyright is this. It is a tax on readers for the purpose of giving a bounty to writers.").

³⁶ See fn.3 above.

³⁷ Birnhack, *Colonial Copyright* (2012).

³⁸ See Copyright Act 1911 (Extension to Palestine) Order (1924) 114 Official Gazette 643, extending the Copyright Act 1911 (1 & 2 Geo. 5 c.46); Copyright Ordinance (1924) 114 Official Gazette 623. For an outline, see Michael D. Birnhack, "Mandatory Copyright: From Pre-Palestine to Israel, 1910–2007" in Uma Suthersanen and Ysolde Gendreau (eds), A Shifting Empire: 100 Years of the Copyright Act 1911 (Cheltenham: Edward Elgar, 2013), pp.84, 90–94.

³⁹ See Lionel Bently, "The 'Extraordinary Multiplicity' of Intellectual Property Laws in the British Colonies in the Nineteenth Century" (2011) 12 Theoretical Inquiries L. 161.

onto the periphery, from London onto its colonies. 40 Colonial Copyright did not pay much attention to the local needs. It was meant to serve first and foremost the coloniser's interests. Within such a context, those who paved the way for the law were the Empire's officials: the clerks in the Colonial Office in London, the Attorney General in Jerusalem and local judges in the British courts in Palestine.⁴¹

Legal transplantation is a process, rather than a one-time event. 42 To better understand the development of the law we should not limit the discussion to legislative enactments or major cases, but explore how the law was applied. In this context, Michele Graziadei advocated that scholars should

"unearth what lies beyond the macro level of 'the law,' to highlight the micro dimensions of individual interactions which are implicated in the transplant. Analysis of the features of the process whereby an individual is prompted to take action leading to a transplant is as important as a reflection on the intrinsic quality of the law that is at stake, or the fit between that law and the local context". 43

Copyright pioneers are exactly such individuals.

The daily application of the law, especially a new law, necessarily involved interpretation and adjustment, challenging and extending the law to new domains. This is where copyright pioneers enter the picture. They carried the law out of the British books and applied it in their daily lives. Their dealing with copyright was self-interested: they tried to figure out how to work their way through the law. They served as de facto intermediaries, or in the words of Gregory Shaffer, "points of entry for the circulation of transnational legal norms".44

An illustrated Hagada

The imperial legal web extended copyright law throughout the British Empire. This web partially overlapped with the emerging international copyright web, through the Berne Convention and a series of additional bilateral agreements. But there were holes in the imperial and international networks. One of these, regarding the copyright relationship between Mandate Palestine and the United States, was spotted by our first copyright pioneer.

The United States was not a member of the Berne Convention until 1989, and hence the copyright relationship between Britain and the United States required a special arrangement. This was achieved by a proclamation of the American President and a British Order-in-Council in 1915.⁴⁵ Although the US-Britain copyright relationship extended to Crown colonies, it did not extend to British protectorates or, later, to mandates (Tanganyika and Palestine). Thus, works published in the United States were not protected in Palestine, and vice versa.

Nahum Liphshitz was a well-known publisher in Jerusalem. Born in Russia in 1895, he immigrated to Palestine in 1920 and, two years later, established the first modern press in the region, *HaMadpis* (Hebrew: the Printer). 46 He served as the chair of the local Manufacturers Association and vice-chair of the national Association. As a publisher, he specialised in unique editions of the Bible and other religious texts. In 1930, Liphshitz published the *Illustrated Hagada*, First Jerusalem Edition. The Hagada is the traditional prayer book read by Jews at the festive Passover dinner. Liphshitz's *Hagada* provided the traditional

⁴⁰ Birnhack, Colonial Copyright (2012).

⁴¹ Birnhack, *Colonial Copyright* (2012), pp.92–102, discussing the legislative process of copyright law in Palestine.

⁴² See David Nelken, "Towards a Sociology of Legal Adaptation" in David Nelken and Johannes Feest (eds), *Adapting Legal Cultures* (Oxford: Hart Publishing, 2001), p.16; Gunther Teubner, "Legal Irritants: Good Faith in British Law or How Unifying Law Ends Up in New Divergences" (1988) 61 Mod. L. Rev. 11.

Michele Graziadei, "Legal Transplants and the Frontiers of Legal Knowledge" (2009) 10 Theoretical Inquiries L. 723, 730.

⁴⁴ Gregory Shaffer, "Transnational Legal Process and State Change: Opportunities and Constraints" (2012) 37 Law & Soc. Inquiry 229, 254. 45 Order-in-Council, under the Copyright Act 1911 (1 & 2 Geo. 5 c.46), Regulating Copyright Relations with the United States of America 1915, 3 Laws of Palestine 2509 (Drayton).

⁶ The biographical data was provided by Liphshitz's grandson, Amos Hausnner.

Hebrew text alongside an original English translation, musical arrangements and illustrations.⁴⁷ Because his market was the Jewish community in the United States, he sought copyright registration with the Library of Congress. To his surprise, the request was denied: the American registrar explained to Liphshitz's lawyer, Dr Ellie Cohen, that the authors were citizens of Palestine, and no copyright relationship had been established between the United States and Palestine. The Library of Congress returned the registration fee of \$2, but retained the copy for the Library.⁴⁸

Cohen was unwilling to accept this answer. He wrote to the Chief Secretary of the Government of Palestine, complaining that the Americans were wrong and that under a Public Notice dating 1929, the Copyright Act was extended to the United States. He asked the Chief Secretary to take steps for the protection of Palestinian works in the United States. The Government replied positively. It approached the Colonial Office in London, which then consulted the Board of Trade and then wrote to the Foreign Office, which turned to the British Representatives in Washington, who turned to the US government. The process took time, as the British realised that the same legal gap applied to citizens of other territories. This was a substantial gap. It meant that works written and published by non-British authors in various British territories were not protected in the United States. The result of the bureaucratic effort was the establishment of a copyright relationship between the United States and *all* British protectorates and mandates. In August 1933 the British-US Order-in-Council was extended to Palestine, 2 accompanied by an American Presidential Proclamation.

The last to know about all of these developments was Liphshitz himself. In January 1934, he called upon the American Economic Committee for Palestine and asked for their assistance. The Committee wrote to the Political Department of the Jewish Agency, asking it to pull strings, as well as to the Government itself.⁵⁴ The reply referred to the 1933 establishment of such a copyright relationship.⁵⁵

Thus, one *Hagada* caused the President of the United States to allow copyright to works of authors from British mandates and protectorates. This was quite a remarkable achievement, unintended (by Liphshitz) and almost inadvertent. This episode illuminates the British neglect of the colonies until then: when the British enacted copyright laws for their colonies, they were concerned about British authors and publishers. The colonised authors were simply not on the British agenda. A macrohistorical perspective would easily miss this point. The micro perspective enabled us to see the process of legal transplantation: the difficulties in absorbing a foreign law, and the informal, bottom-up mechanisms that were needed to facilitate it.

A relentless agent in Palestine

The second copyright pioneer we encounter in Mandate Palestine did not change the law, but he was the first to use it, by bringing the first copyright lawsuits to court. This is Meir Kovalsky, who served as the local agent of the Performing Rights Society (PRS) in Palestine from 1930 to 1949.

⁴⁷ The translation was by Julian Meltzer; the music by Solomon Rosowsky, and the illustrations by Arieh Al-Hanani.

⁴⁸ Acting Registrar of Copyrights, Library of Congress, to Dr Elli Cohen (August 1, 1930) Central Zionist Archive (CZA) 525/5504.

⁴⁹ Cohen to Chief Secretary (25 August 1930) CZA 525/5504.

⁵⁰ Acting Chief Secretary to Cohen (5 September 1930) CZA 525/5504.

⁵¹ Officer Administering the Government to the Secretary of State, Despatch 818 (September 12, 1930) Israel State Archive (ISA) M32/2 doc.23; Secretary of State to High Commissioner (August 25, 1931) ISA M32/2 doc.48, enclosing the letter of the Colonial Office to the Foreign Office; Colonial Office to Board of Trade (October 31, 1930) National Archives (NA) CO 323/1098/20 doc. 2; Board of Trade to Colonial Office (November 7, 1930) NA CO 323/1098/20 doc.3; Board of Trade to Colonial Office (December 10, 1930) NA CO 323/1098/20 doc.5.

⁵² Copyright (United States of America) Order 1915 (Extension to Palestine) Order 1933, 405 Palestine Gazette 1767.

⁵³ Proclamation by the President of the United States of America, Copyright—Palestine (Excluding Trans-Jordan) (November 28, 1933), reprinted in 405 Palestine Gazette 1767.

⁵⁴ American Economic Committee for Palestine to The Jewish Agency (January 26, 1934, February 8, 1934, November 21, 1935) CZA 525/5504; American Economic Committee for Palestine to Chief Secretary (November 25, 1935) ISA M32/2 doc.122.

⁵⁵Chief Secretary to American Economic Committee for Palestine (December 5, 1935) ISA M32/2 doc.124. In 1950 Liphshitz had another encounter with an American President: he personally handed to President Eisenhower a copy of an illustrated Bible he printed.

Kovalsky was a well-known figure in the musical circles during the Mandate. He was born in 1873 in Kherson, Ukraine and immigrated to Palestine in 1904.56 After an unsuccessful rural settlement attempt, he returned to Jaffa, where he taught music. Later he moved to Jerusalem, taught music and imported sheet music. In 1909 he established and managed a small band. During World War I he was the conductor and manager of an Ottoman army band. In 1914 he opened a first shop for musical instruments in Jerusalem.⁵⁷ He expanded his business to Tel-Aviv (1923) and Haifa (1931). Kovalsky became the local agent of the German (GEMA), Austrian and Italian performing rights societies, but he did not do much for a while.

In 1929, when the British PRS formed a cartel with the other European societies, Kovalsky was eager to become its agent in Palestine. By then, the British copyright legislation was in place, but it has not yet been brought to the courts, nor was any other indication for its use found. Kovalsky sensed the commercial opportunity and had the advantage of representing the other European societies, and he figured out the political situation in which the British were to stay for some time in Palestine. However, when the PRS Board met in October 1929, they had the information that GEMA was not that satisfied with Kovalsky and that he has never initiated any lawsuit in court.58 Kalman Friedenberg, Kovalsky's lawyer, wrote to the PRS in November, citing the 1911 Copyright Act and adding that

"not a single case under this Act was brought before the Court as yet and piracy continues unabated, the Act remaining a dead letter".59

But then, Kovalsky and Friedenberg proved that they were the right men for the job. They quickly initiated a lawsuit on behalf of GEMA.

The first copyright case litigated in a court of law in Palestine was about the public performance of modern adaptations of classical music. Kovalsky and Friedenberg brought criminal charges against the owners of the Zion Theatre in Jerusalem, who performed the music alongside silent movies. They chose the unusual criminal path, an option permitted under the law at the time, as it enabled them to skip the thorny issue of ownership. The musical adaptations at stake were owned by GMEA, while Kovalsky only had the power to collect royalties. As a licensee, he could not sue for the alleged copyright infringement. Criminal prosecution, on the other hand, did not require proving who owned the copyright, only that it was publicly performed without the owners' authorisation. The judgment was quick: copyright was infringed, and the Theatre was fined.⁶⁰

Immediately after winning the case, Kovalsky formally offered his services to the PRS.⁶¹ In April 1930 the Cartel transferred the Palestine business to the PRS, which then decided to appoint Kovalsky as its agent. The agency contract was signed in August 1930. It gave Kovalsky a commission of 50 per cent of all royalties he managed to collect. This was to cover all his expenses, legal costs included. This scheme assured that Kovalsky had a strong incentive to collect as much as possible, but also that he had an incentive to minimise his costs.

During the 1930s, Kovalsky was the most dominant copyright player in Palestine. He demanded that cafes and cinemas pay royalties; on occasion he initiated lawsuits to enforce the copyright. 62 He preferred to avoid litigation, as he was often frustrated with the judicial pace, and he tried to minimise costs. In the mid-1930s, however, he devised a new strategy:

⁵⁶ The biographical data was provided by Kovalsky's great-grandchild, Nitzan (Meir) Zeira, who is a musical producer and publisher.

⁵⁷ Jehoash Hirshberg, *Music in the Jewish Community of Palestine 1880–1948: A Social History* (Oxford: Oxford University Press, 1995), pp.113, 116.
58 Minutes of PRS Board (October 24, 1929), Box A209, Palestine 1, PRS Archive (PRSA).

⁵⁹ Friedenberg to PRS (November 11, 1929) PRSA.

⁶⁰ File 1844/29 Attorney General (by Mr K. Friedenberg) v Guth & Peretz (January 9, 1930).

⁶¹ Kovalsky to PRS (January 9, 1930) PRSA.

⁶² See Birnhack, Colonial Copyright (2012), Ch.7.

"The only way of pressing upon infringing parties is through frequent attacks, i.e.: action after action against the same infringing party (to a certain extent) without waiting for judgments of pending cases "63

In other words, a few years into running his business, Kovalsky became a repeat player, using litigation as an instrument to advance his goals. As far as he was concerned, litigation itself was the means to gain power vis-à-vis the reluctant users.

Closely examining the way Kovalsky developed his business further teaches that he built a small learning network; he and his local lawyers were copyright autodidacts. Kovalsky used the law and familiarised the local users (at least some of them) with the idea of copyright. Serving as an intermediary between the foreign, emerging global law and the local scene, he translated the abstract law into daily practice.

Conclusion

The brief microhistorical analysis offered here enabled us to decipher two small copyright mysteries, the first being about the establishment of copyright relationship between Palestine and the United States and the second being about the activation of the imperial law in one corner of its Empire. Importantly, neither the legislation nor case law reveals anything about these events.

Nahum Liphshitz and Meir Kovalsky are but two copyright pioneers. The first effected an international legal change as a result of his private interest to protect a book he published. The second, Kovalsky, was not interested in changing the law; he did not lobby for a new law and, of course, had no official capacity, but he nevertheless activated the law.

The local engagement with copyright law supplemented the formal, British legal transplant. It introduced the content into the statutory framework. The legal framework was British; the local content provided the context. Copyright law in Palestine was the British law, with a local spin. A micro-copyright legal history enables us to closely observe and evaluate this process. It allows us to realise that, behind the factual observation that the British law was applied in Palestine, there were some hurdles and gaps, and there were local intermediaries who translated the foreign concept into daily practice. It further enables us to realise that the local needs were different from the foreign interests and that, behind the law, there were people, trying to make a living, and works of authorship.

⁶³ Kovalsky to PRS (December 12, 1935) Box A326, PRSA.

The Story of Singapore's Intellectual Property Journey: 1965–2013

Ng-Loy Wee Loon*

Professor of Law, Faculty of Law, National University of Singapore

Intellectual property; Legal history; Singapore

Introduction

When Singapore became an independent nation in 1965, her GNI per capita of US\$529 was mainly derived from a colonial economy that was highly dependent on entrepôt trade and the British Army. This Third World economy did not have a very good physical infrastructure, much less a strong intellectual property (IP) infrastructure. Today, the scene is very different. Singapore's GNI per capita of US\$47,210 qualifies her as a highly industrialised country with a First World economy. On the IP front, her legal regime of protection is "TRIPS-plus", providing stronger protection than is required by the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement).

This article tracks the historical evolution of the IP laws of Singapore, through the following three stages of her economic development: (i) 1965–1989 (towards an industrialised economy); (ii) 1990–1999 (towards a globalised economy); and (iii) 2000 and beyond (towards a knowledge-based economy).

1965–1989: Towards an industrialised economy

In his memoirs, From Third World to First: The Singapore Story, 1965–2000, Lee Kuan Yew, the country's founding Prime Minister, gave a glimpse of the bleak economic landscape in Singapore at the start of its nationhood: a small island with no natural resources apart from her deep-water harbour and whose only valuable asset was her two million people (described by Mr Lee as "hardworking, thrifty, eager to learn")¹; the end of her entrepôt trade (as her immediate neighbour and former political partner, Malaysia, worked to bypass Singapore and deal directly with its trading partners through its own ports); the loss of a vast hinterland and domestic market to absorb Singapore-made goods (also as a result of her political fallout with Malaysia); and the impending withdrawal of the British Army and, with it, the loss of some 20 per cent to GDP and over 70,000 jobs in direct and support services. Unemployment in Singapore then was high (at 14 per cent) and rising.

The strategy was to embark on an industrialisation programme that was export-oriented. Foreign investors were actively wooed to develop their manufacturing operations in Singapore for export to world markets—both in low-technology, labour-intensive industries (e.g. textile, garment and toy factories were set up by Hong Kong and Taiwanese businesses) and in higher-technology industries. The electronics sector began during these early years with American multinational corporations (MNCs) setting up in Singapore: Texas Instruments in 1968, National Semiconductor in 1969, Hewlett-Packard in 1970 etc. From the outset, the political leaders were not suspicious of MNCs; they did not believe that MNCs would exploit Singapore. In the words of Mr Lee:

^{*} This article is an adaptation of the chapter on Singapore written by this author and first published in Paul Goldstein and Joseph Straus (eds), Intellectual Property in Asia: Law, Economics, History and Politics (Berlin: Springer, 2009).

Lee Kuan Yew, From Third World to First: The Singapore Story, 1965–2000 (New York: HarperCollins Publishers, 2000), p.24.

"If MNCs could give our workers employment and teach them technical and engineering skills and management knowhow, we should bring in the MNCs."2

By the late 1970s, Singapore had solved its unemployment problem. In fact, its economic planning succeeded so well that it was facing a new problem: a tight labour market and upward pressure on wages, which made Singapore a less attractive place for MNCs relative to the emerging low-cost countries in the region. The 1980s, therefore, saw Singapore embark on what the Government called the "Second Industrial Revolution",3 wherein her investment policy shifted toward promoting higher value-added and skills-intensive activities such as engineering design and computer services.

During the first phase of industrial revolution in Singapore from 1965 to the late 1970s, IP barely featured. This is hardly surprising, given that, apart from trademarks, IP was not really an issue in low-technology manufacturing industries—except phonograms, a case to which I will return shortly. Further, the MNCs who brought in the higher technology had not begun to see the value of IP and seemed satisfied, if they thought about IP at all, with the existing system of IP protection. Inherited from the British, this system comprised the following:

- copyright protection under the UK Copyright Act 1911, a piece of imperial legislation decreed by King George V for "His Majesty's dominions", modified by the Copyright Act 1914 for application to Singapore, and supplemented by the Copyright (Gramophone Records and Government Broadcasting) Act 1968;
- patent protection under the Registration of UK Patent Act 1937, for UK patents which had been re-registered with the Registry of Patents in Singapore, supplemented by the Patents (Compulsory Licensing) Act 1969;
- design protection under the Registration of UK Designs Act 1938, for UK-registered designs (without any need of re-registration in Singapore);
- trademark protection under the Trade Marks Act 1939 (almost identical to the UK Trade Marks Act 1938), for trademarks registered with the Registry of Trade Marks in Singapore;
- trademark protection in an action for passing off, for unregistered trademarks; and
- common law action for breach of confidence to protect trade secrets.

Of the above laws, only two were enacted after independence: the Copyright (Gramophone Records and Government Broadcasting) Act 1968 and the Patents (Compulsory Licensing) Act 1969. The purpose of the second is self-evident. The first deserves special mention because the parliamentary debates generated during the enactment of this Act provide insight into the attitude of the policy makers towards IP at that time.

The Copyright (Gramophone Records and Government Broadcasting) Act 1968 was introduced into Parliament with two specific aims. First, it was to deal with the increase in the importation and sale of pirated records of copyrighted musical works. This problem, according to the Minister of Law and National Development at that time, threatened the livelihood of local artists, composers and musicians, as well as the subsistence of three newly established sound recording companies in the Jurong Industrial Park. The proposed law therefore imposed penalties (fine and/or imprisonment) for the manufacture or commercial exploitation of pirated gramophone records. The second purpose of the Act was to exempt Government broadcasting from infringement of copyright in musical works and gramophone records, in order to stop payment of royalties to the Performing Rights Society (PRS) and International Federation of Phonographic Industry (IFPI). Under colonial rule, the Governor of Singapore had issued a directive to make the payments to these UK-based organisations. The new political leaders of Singapore did not agree that such payments

² Lee, From Third World to First (2000), p.76.

³ References to this "Second Industrial Revolution" as the aim for the 1980s may be found in speeches made during Parliament sittings. E.g. Debate on the President's Address, Hansard, Vol.63, col.82 (February 17, 1981); Budget Debates, Hansard, Vol.39, col.1134 (March 19, 1980)

were due, since broadcasting in Singapore was a non-profit activity undertaken by the Government and had an educational component. The exemption proposed by the new bill would dispense with further payments to PRS and IPFI, thereby keeping the cost of broadcasting as low as possible for the benefit of the people.

In the course of persuading his colleagues to accept the proposed law, the Minister assured them that, although Singapore had attended many international conferences on the protection of copyright, designs and patents:

"[W]e are not a member of international conventions and we have no intention of becoming a signatory to these conventions. The reason, I repeat, is that these conventions are for the benefit of the developed countries who refuse to share their knowledge with us. It is for this reason that a Bill of this nature was not passed before. I have mentioned that three industries have been set up in Jurong producing musical records and it is for the protection of these industries that this Bill is introduced."

This denunciation of IP, one might say, epitomises the attitude of a Third World country towards IP. (Indeed, even the United States, in its early days as a net importer of copyright works, did not exactly give priority to the protection of foreigners' works under its copyright law (the 1790 Act), thereby allowing piracy in the United States of books by British authors such as Charles Dickens.) The Minister's speech is also interesting for another reason: it demonstrates how focused policy makers in Singapore can be and how willing they can be to toughen up IP laws in order to achieve a particular economic goal—in this case, the survival of the three sound recording companies in the Jurong Industrial Park.

The change in Singapore's attitude towards IP started in the mid-1980s, corresponding to the shift in the country's focus towards higher-technology industries such as the software industry. By March 1985, the Minister of Trade and Industry spoke in Parliament of the importance of having stronger, better copyright laws if Singapore wanted to "foster an environment of creativity, and to encourage the development of our software industry". A revamp of copyright law was proposed in 1986. When introducing this new law in Parliament, the Minister of Law also repeated the need for Singapore to update its copyright law to keep abreast of developments in the field of computer science, sound and video recording, cable television, satellite broadcasting and photocopying. Some emphasis was given to the software industry—the need to provide the legal framework necessary for the development of a strong software industry in Singapore, so that major international computer companies and software houses planning to set up software development centres in Singapore could be assured that their products would be adequately protected.

There was another reason for Singapore's decision during 1985–1986 to improve its copyright law. The 1980s was the era when developed countries started linking international trade with IP protection. In particular, the United States had passed the Trade and Tariff Act in 1984, tying the trading benefits of the Generalised System of Preferences (GSP) granted to developing countries, to their respect and protection of US IP. The United States exerted pressure on Singapore to enact a new copyright law before the completion of the US GSP Review at the end of January 1987, or face the consequences of losing her GSP status, that is, higher cost for Singapore goods imported into the United States because of the tariffs payable on these imports, making them less competitive vis-à-vis imports from other developing countries. In fact, Singapore was promised a better GSP package if the timing and quality of her new copyright law satisfied the United States. The US influence on the enactment of the Copyright Act is not groundless speculation. The Minister of Law himself candidly acknowledged this, when he introduced the Copyright Bill in Parliament in 1986:

⁴ The Second Reading of the Copyright (Gramophone Records and Government Broadcasting) Bill, Hansard, Vol.28, col.823 (November 23, 1968).

⁵ Budget Debates in Parliament, *Hansard*, Vol.45, col.1709 (March 29, 1985).

⁶ The Second Reading of the Copyright Bill, *Hansard*, Vol.48, cols 11–12 (May 5, 1986).

"Beyond our own requirements, I should also mention that in recent years one significant source of friction with our trading partners, particularly the United States, has been the inadequacy of our existing copyright laws.... I hope that the introduction of this Bill will remove one contentious issue and so improve our relations with these partners."

But the Minister also emphasized that this external consideration coincided with Singapore's national interest in updating its copyright law (e.g. the growth of the software industry, development of Singapore as an information centre and greater incentives to foreign investors to come to Singapore). His message was for Singapore to focus not on the "stick", but on the "carrots" of having a modern copyright law. As events would show later, this proved to be the right attitude to adopt.

Parliament passed the Copyright Act on January 26, 1987, meeting the deadline set by the United States. The Copyright Act 1987 is still the governing copyright legislation today. By and large, it embodies the standards of copyright protection found in developed countries; it is modelled on Australia's copyright law, but there are also British and American influences. At the same time, there are home-grown provisions catering to Singapore's particular needs. For example, a provision was crafted to allow parallel imports into the market so that the public in Singapore would not be denied the opportunity to purchase lower-priced but legitimate editions of books originating from some other country. As for the *raison d'être* of the new law, the Copyright Act 1987 expressly gave protection to computer programs as a type of literary work. Regulations were also immediately enacted to extend copyright protection to American works. As quid pro quo, the United States accorded Singapore an enhanced GSP package.

Barely six months after Singapore started enjoying an enhanced GSP package, the United States informed Singapore that it would be "graduated" from its GSP status in 1989. While stung by the United States' decision, ¹² Singapore's stoical response was to "not cry over split milk" but

"to work hard to make good by being more competitive, by diversifying our markets, by moving into more sophisticated products, where the GSP makes less difference". 13

After all, the domestic conditions in Singapore alone justified the promulgation of a stronger copyright regime.

1990-1999: Towards a globalised economy

The late 1980s saw intensifying competition from neighbouring developing countries. By 1992, for example, China had become the largest recipient of foreign direct investment (FDI) in Asia, exceeding ASEAN's share in total. To meet these challenges, Singapore's economic planning for the 1990s included strategies to promote the service sector together with manufacturing, to deepen the technology base and to create an "external" economy through globalisation.

The idea behind the strategy to deepen the technology base in Singapore was to move Singapore up the value chain in manufacturing, especially in emerging fields such as biotechnology, and to attract research and development (R&D) activities. The policy makers firmly believed that a solid IP infrastructure, particularly a sound patent system, was needed to achieve this goal.¹⁴ The patent regime in Singapore

⁷ The Second Reading of the Copyright Bill, *Hansard*, Vol.48, col.12 (1986).

⁸ The Third Reading of the Copyright Bill, *Hansard*, Vol.48, col.986 (January 26, 1987).

⁹ A classic example would be s.35, which provides the "fair dealing" defence for the purpose of "research or private study". (But note the amendment to this provision in 1998 and 2005: see further below, fnn.23 and 34.)

¹⁰ Copyright Act 1987 s.25(2).

¹¹ Copyright (International Protection) Regulations 1987.

¹² See the outery of some of the Members of Parliament at what they perceived to be a "breach of faith" by the United States during a Parliamentary sitting in 1988: *Hansard*, Vol.50, cols 589–600 (February 25, 1988).

¹³ This response was given by the Minister of Trade and Industry in Parliament: *Hansard*, Vol.50, col.1444 (March 25, 1988).

¹⁴ See, for example, the speech of the Minister of Law during the second reading of the new patent law on March 21, 1994: "[W]e live in a global economy where trade is driven by desire, potential for profit, which in turn is determined by the element of competitiveness. Inventions and innovations

dated back to the registration of the UK Patent Act 1937, a piece of colonial legislation which set up a system of re-registering a patent granted in the United Kingdom. It was a costly, cumbersome and time-consuming process. The Ministry of Law acted, announcing plans in 1990 for the review of this patent registration system. ¹⁵ Singapore became a contracting party to the WIPO Convention in December 1990, and the review of its patent law was done with the advice of WIPO. ¹⁶ In 1994, the Patents Act was passed.

The new Patents Act 1994 (still in force today) is modelled on the UK Patents Act 1977, but a few material differences exist. For example, the Singapore law expressly allows parallel imports, ¹⁷ and there is no prohibition against the patenting of animal or plant varieties or essentially biological processes for the production of animals or plants (other than microbiological processes or their products thereof). This prohibition was considered and specifically rejected by the Select Committee set up to scrutinise the Patents Bill. The Select Committee took the view that allowing patents on varieties of plant and animal (non-human species) was necessary in order to encourage research into horticulture, agriculture and biotechnology. ¹⁸ The difficult moral and ethical issues involved in such research did not appear to faze the policy makers. However, it would not be fair to say that Singapore's utilitarian approach to IP completely ignores morality and ethics. In fact, the new Patents Act has a provision prohibiting the patenting of an invention the publication or exploitation of which would generally be expected to encourage offensive, immoral or anti-social behaviour. ¹⁹ Thus, any attempt to patent human beings and the related biological processes could be resolved by reference to this *ordre public* provision.

For Singapore and her plans to globalise in the 1990s, the conclusion of the General Agreement on Tariffs and Trade negotiations could not have been more timely. Singapore was all poised to enter the World Trade Organization (WTO) on January 1, 1995, and to implement the minimum standards of IP protection recognised by the international community as set out in the TRIPS Agreement. The following are the more significant revisions made to her IP laws between 1995 and 2000 to comply with the TRIPS obligations²⁰:

- Patent law: the prohibition on the patenting of certain matters (e.g. mathematical methods, computer programmes) was removed; the scope of the provisions allowing compulsory licensing and government use was narrowed.
- Trademark law: a new Trade Marks Act 1998 and a Geographical Indications Act 1998 were enacted.
- Copyright law: copyright protection was extended to works originating from any WTO or Berne Union member country; a commercial rental right was created for software; performers' rights and border enforcement measures were introduced.
- Layout-design law: a new Layout Designs of Integrated Circuits Act 1999 was enacted.

There were other changes to Singapore's IP laws during the 1990s, which were not TRIPS-related; rather, they were part of the Government's efforts to adjust the IP laws to meet the needs of the public and the

sharpen this competitive edge. More countries are therefore improving their industrial property systems, particularly their patent systems, to encourage invention and innovation, and to assist in the recoupment of continuing investment costs for development of products and services. The proposed new patent system will create such a favourable climate for innovation, for developing research and innovative capabilities, and advance technological innovation in industry." *Hansard*, Vol.62, col.1445 (March 21, 1994).

¹⁵ See the addenda of the Ministry of Law to the President's Address: *Hansard*, Vol.56, cols 31–32 (June 7, 1990).

See the speech of the Minister of Law during the budget debates in Parliament: *Hansard*, Vol.59, cols 889–890 (March 12, 1992).

¹⁷ Patents Act 1994 s.66(2)(g).

¹⁸ Report of the Select Committee on the Patents Bill, p.vi. (But note the amendments to this provision in 2004 and 2008: see further below, fn.33.)
¹⁹ Patents Act 1994 s.13(3).

²⁰ See art.65(2) of the TRIPS Agreement, which provided a five-year transition period for developing countries, which extended the deadline for implementation of the provisions therein for such countries to 2000. Singapore's status as a developing country is recognised by international agencies such as the World Bank and the Asian Development Bank.

industries in Singapore, and/or to update the laws to keep abreast of the developments of new technology. Four sets of amendments will be mentioned as examples to illustrate this.

First, an amendment to the copyright law was made in 1994 to ensure that copyright owners would not be able to exercise their monopoly to repel parallel imports. It has been mentioned earlier that the Copyright Act 1987 contains a provision specifically aimed at legitimising parallel imports. The provision proved to fall somewhat short of this aim, a shortfall which became apparent in the litigation in *Public Prosecutor v Teoh Ai Nee*. ²¹ Within one year after this case was decided in September 1993, the Government moved to amend the Copyright Act 1987 to plug the identified lacuna. ²²

Secondly, an amendment to the copyright law was made in 1998 to delete a provision that excluded commercial entities from the "fair dealing" defence for the purpose of "research or private study". ²³ The existence of this provision had compelled the Court of Appeal to find, in *Creative Technology Ltd v Aztech Systems Pte Ltd*, ²⁴ that reverse engineering of software (by decompilation) for commercial purposes was prohibited by the Copyright Act 1987. There was no leeway for any consideration of the fairness or otherwise of the activity. The difficulties posed by such a provision to R&D work in Singapore are obvious. About 16 months after the Court of Appeal's judgment was delivered, this provision was repealed. ²⁵

Thirdly, a new Registered Designs Act 2000 was enacted. This discontinued the protection of designs registered in the United Kingdom and put in place a registration system, thereby making it easier for businesses to obtain protection for their product designs in Singapore.

Fourthly, major amendments were made to the copyright law in 1999 to "address the more urgent needs of copyright owners and users of copyright materials in the on-line environment". This set of amendments, inter alia, introduced a "user caching" defence permitting the making of a transient or electronic copy of copyrighted material in the user's computer from an electronic copy of the material made available on a network; introduced civil remedies to protect rights management information; and created certain exemptions from copyright liability for network service providers.

2000 and beyond: Towards a knowledge-based economy

In 1995, with a GNI per capita of US\$24,520, Singapore made it to the World Bank's list of "high income countries". The strategies adopted in the 1990s to move Singapore's manufacturing sector up the value chain bore fruit: for example, chemicals-related products accounted for 17 per cent of this sector in 2001, compared to 8 per cent in 1985, and R&D had grown in traditional areas like electronics but also in new areas like biomedical sciences.²⁷

But countries in the region were also fast catching up. For example, in 1996 when Singapore launched the "Singapore ONE" project to develop a nationwide multimedia broadband network, Malaysia established its "Multimedia Super Corridor" in the same year. To maintain Singapore's competitiveness in this new millennium, the current phase of economic planning is to work towards graduating Singapore into a "knowledge-based, innovation-driven economy". ²⁸ This means, inter alia, moving its manufacturing sector even further up the value chain to become more knowledge- and research-intensive; shifting R&D from

²¹ Public Prosecutor v Teoh Ai Nee (1994) 1 SLR 452.

²² See Copyright (Amendment) Act 1994 (August 25, 1994).

²³ See the repealed s.35(5), providing that, for the purpose of the fair dealing defence for "research or private study", "research' shall not include industrial research or research carried out by corporate entities (not being bodies corporate owned or controlled by the Government), companies, associations or bodies of persons carrying on business".

²⁴ Creative Technology Ltd v Aztech Systems Pte Ltd (1997) 1 SLR 621.

²⁵ See Copyright (Amendment) Act 1998 (February 19, 1998).

²⁶ See Second Reading of the Copyright (Amendment) Bill 1999, *Hansard*, Vol.70, col.2069 (August 17, 1999).

²⁷ Report of the Economic Review Committee (2003), p.23.

²⁸ Report of the Economic Review Committee (2003), p.65.

applied and downstream research to basic and IP-creating research; and promoting the digital media sector.²⁹

It is also important for Singapore to further expand external ties. On the latter, it was observed:

"We [Singapore] will continue to support the World Trade Organisation (WTO) as it remains the foundation for world trade, and protects small countries like Singapore against unfair unilateral trade policies. However, a purely multilateral approach has its limitations. We are therefore supplementing it with bilateral FTAs [free trade agreements] with key trading partners." 30

From the IP perspective, the most significant of all the FTAs Singapore has signed is the one with the United States. The US-Singapore FTA, signed in May 2003, has an IP Chapter mandating the adoption of standards of IP protection which go beyond the minimum standards laid down in the TRIPS Agreement. Some of them even go beyond the standards set out in the other international IP treaties concluded after the TRIPS Agreement, namely, the WIPO Copyright Treaty 1996 (WCT) and the WIPO Performances and Phonograms Treaty 1996 (WPPT). A few examples on copyright and patent will illustrate the "TRIPS-plus" and "WCT/WPPT-plus" nature of the US-Singapore FTA:

- While the TRIPS Agreement leaves the issue of parallel importation (exhaustion of IP rights) to be decided by the individual WTO country, the FTA provides certain restrictions on parallel importation of pharmaceutical products.
- While the TRIPS Agreement's provision on permissible exceptions to the patent monopoly is general in nature, the FTA introduces a specific "Bolar" exception, which allows generic drug manufacturers to conduct tests on a patented drug during the patent term, limited to testing to meet the requirements for marketing approval in the United States and Singapore. In other words, the testing cannot be done for the purpose of meeting the requirements for marketing approval outside the country.
- While the TRIPS Agreement provides for a minimum patent term of 20 years, the FTA requires parties to provide for the extension of this 20-year patent term in two cases: (a) to compensate for unreasonable delays that occur in granting the patent; and (b) with respect to any patented pharmaceutical product, to compensate for unreasonable curtailment of the patent term as a result of the marketing approval process.
- While the TRIPS Agreement provides for a minimum copyright term of "life + 50 years", the FTA extends this duration by an extra 20 years.
- While the WCT/WPPT's provision on anti-circumvention measures is general in nature, the FTA contains very specific provisions which are fashioned very closely after those in the US Digital Millennium Copyright Act of 1998.
- While the WCT/WPPT's provision on enforcement is general in nature, the FTA's provision on enforcement has 21 paragraphs. One of the key provisions here relates to the requirement to criminalize "wilful copyright or related rights piracy on a commercial scale", which includes: (i) significant wilful infringements of copyright or related rights that have no direct or indirect motivation of financial gains; as well as (ii) wilful infringement for purposes of commercial advantage or financial gains. This is targeted at businesses using pirated or

²⁹ The digital media sector is part of the "creative cluster" (arts and culture, design and media) identified by the *Report of the Economic Review Committee* (2003) as one of the three promising growth areas for Singapore in the New Millennium (the other two being healthcare and education). ³⁰ Report of the Economic Review Committee (2003), p.52.

³¹ Other than the US-Singapore FTA, Singapore has signed an FTA or economic partnership agreement with the following: New Zealand (2000), Japan (2002), the European Free Trade Association (2002), Australia (2003), Jordan (2004), Brunei-New Zealand-Chile (2005), India (2005), Korea (2005), Panama (2006), Peru (2008), China (2008) and Costa Rica (2010). There are also ongoing FTA negotiations between Singapore and Canada, Mexico, Pakistan, Ukraine and the countries involved in the proposed Trans-Pacific Partnership Agreement.

unlicensed software and downloading and distribution of copyrighted works on the internet. Previously, such infringing activities attracted civil liability only.

The United States has come under fire for its use of bilateralism to "ratchet up" the level of IP protection around the world.³² In the case of Singapore, it should be pointed out that Singapore was hardly a "victim". Her agreement to the higher level of IP protection under the US-Singapore FTA appears to be within the Government's agenda. This is evident from the concluding remarks made by the Minister for Law during the last set of copyright amendments made in the 1990s:

"Sir, in closing, let me say that this [1999 Amendment] Bill reinforces Singapore's commitment to provide a strong intellectual property rights regime to encourage the growth of a knowledge-based or information economy and to promote e-commerce and creative innovation. As technologies are ever evolving and as new issues surface as a result of the constantly changing environment, I must say that this Bill is by no means the last word on the subject. We will continue to monitor international developments and we may have to propose further refinements to our copyright regime to cope with the technological developments as and when the need arises. We are committed to ensuring that our copyright law will be responsive to the changing needs of industries and we will continue to evolve to take into account new developments."

Even in the case of Singapore's agreement to accept a restriction to allow parallel imports in her patent law where pharmaceutical products are concerned, it should be understood within the wider context of the international debate on access to cheaper medicine in the least developed countries: after all, drug companies have argued that they refrain from selling essential drugs cheaply in these poor countries because they fear that these drugs would leak into the higher-priced markets with pro-parallel importation laws, such as Singapore. To put it in another way, by agreeing to restrict parallel importation of pharmaceutical products, Singapore hopes to play a part in the global search for a solution to the public health crisis in least developed countries.³³

What is also noteworthy is that, when Singapore amended its laws during 2004–2005 to implement the obligations under the US-Singapore FTA, it also introduced reform to ensure that the expansion of IP rights mandated under the FTA would not tilt too much in favour of the IP owners. For example, in the arena of copyright, whilst extending the duration of copyright protection and expanding the scope of copyright protection, Singapore took the step to jettison the British model of "fair dealing", which is a narrower defence tied to specific purposes (research or private study; criticism or review; reporting of current events) in favour of a wider, "open-ended" model that resembles the American "fair use" defence.³⁴

Conclusion

This story of Singapore's IP journey illustrates that the maturing of the IP infrastructure in Singapore has much to do with its Government's firm belief that strong IP is very important—perhaps even necessary—in the plan to achieve the economic goals set for the country. Singapore's actual attainment of these economic goals certainly fuels this belief. It would be very naïve, however, to attribute Singapore's economic

³² E.g. Frederick M. Abbott, "Toward a New Era of Objective Assessment in the Field of TRIPS and Variable Geometry for the Preservation of Multilateralism" (2005) 8 J. Int'l Econ. L. 77; N. Gallus, "Parallel Policies on Pharmaceutical Parallel Trade" (2005) 11 Int'l Trade L. & Reg. 77; Duncan Matthews, "TRIPS Flexibilities and Access to Medicines in Developing Countries: The Problem with Technical Assistance and Free Trade Agreements" (2005) 11 Eur. Intell. Prop. Rev. 420. This author's earlier writings on this subject-matter also contain some tinges of indignation: see Ng-Loy Wee Loon, "The IP Chapter in the US-Singapore FTA" (2004) 17 Sing. Acad. L.J. 24.
³³ For further discussion of this issue, see Ng-Loy Wee Loon, "Parallel Importation of Pharmaceuticals: DOHA vs. Free Trade Agreements" in

³³ For further discussion of this issue, see Ng-Loy Wee Loon, "Parallel Importation of Pharmaceuticals: DOHA vs. Free Trade Agreements" in Christopher Heath and Anselm Kamperman Sanders (eds), *Intellectual Property & Free Trade Agreements* (Oxford: Hart Publishing, 2007). Note also that Singapore made amendments to her patent law in December 2008 to implement the Decision of the WTO General Council of August 30, 2003 on the Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health (art.31bis of the TRIPS Agreement).

³⁴For further discussion of this issue, see Ng-Loy Wee Loon, "Restoring the Balance in IP Law" in Teo Keang Sood (ed.), *Developments in Singapore Law between 2001 and 2005* (Singapore: Singapore Academy of Law, 2006).

135

achievements solely (or even primarily) to a strong IP infrastructure. A case in point is Lucasfilm's announcement in 2004 of its decision to set up a digital animation studio in Singapore. Although it cited commitment to protect IP as a reason for choosing Singapore as its first place of venture outside of the United States, it gave other reasons such as Singapore's education system, cosmopolitan environment and pro-business policies. In short, the IP journey in Singapore is a classic textbook example of the view that strong IP infrastructure is an important factor but certainly not a sufficient factor to pull in FDI.

³⁵ "The Force is with Singapore and Lucas Studio Soon" Straits Times, August 4, 2004.