
Growth of the Internet and the Establishment of Proper Digital Copyright Strategies:

China as a Case Study

BY YIJUN TIAN

George Yijun Tian is a Summer Associate at the Berkman Centre for Internet & Society at Harvard Law School, a Visiting Scholar of University of Washington Law School, and a final year Ph.D. Candidate at University of Technology Sydney (UTS) Law School, Australia. He is also a Postgraduate Research Associate of Baker & McKenzie Cyberspace Law and Policy Center in Australia, and a member of the Australian Computer Society (ACS). George has published a number of journal articles on International Comparative Law, Intellectual Property and Internet Law in Australia, China, United Kingdom and the United States.

The author would like to thank Professor Jane K. Winn for her comments and help with earlier drafts of his research proposal, and thank Professor Ruth Okediji for providing me with many useful materials in the process of paper writing. He is also deeply grateful to Professor Jill McKeough and Michelle Lee for their help with paper proofreading.

Introduction

With the dramatic development of Information Communication Technology (ICT), the Internet is playing an increasingly significant role in our society. The growth of the Internet not only greatly enhances the development of Electronic Commerce (EC) and an Internet economy, but also speeds up the steps of globalization¹ and the formation of the “global village.”² Ever-improving Internet technology changes the traditional rules of distribution and dissemination of information and copyright works,³ and enables users to efficiently access and disseminate online copyright works. However, the technology also facilitates copyright piracy, and brings great challenges to traditional business models and copyright protection systems. The establishment of an effective digital copyright policy has become an important issue that all countries will have to face in the digital age in order to facilitate the resolution of potential Intellectual Property (IP) trade conflicts and to harmonize social development and IP protection.

In order to seek resolution for an effective digital copyright policy, this article will first examine the impact of the development of digital technology on copyright protection and IP trade. It will then briefly review the history of China-United States IP trade conflicts, and try to identify the main reasons why these two countries have been able to successfully avoid potential IP trade wars in recent years. Based on this, the article will provide some suggestions for formulation of a proper digital copyright policy for IP importing nations in order to better coordinate the relation of IP protection and social development, and contribute to the establishment of a more balanced international digital legislative order.

Technology Development vs. Copyright Protection

The history of the fight against copyright piracy can be traced back to China's Song Dynasty (960-1127),⁴ when the earliest use of movable type in printing was invented in 1041.⁵ Over the past few centuries, with the development of printing and reproduction technology, copyright piracy became increasingly easy and widespread. Copyright piracy has only intensified in the Internet age. It is now possible for people to copy substantial amounts of material and nearly instantaneously disseminate them via Internet using only their home computers by a simple click of a mouse.⁶

Widespread copyright piracy has caused huge economic loss to copyright holders, especially producers of digital copyright products. According to a study conducted by International Federation of the Phonographic Industry (IFPI), nearly 40% of physical recordings in the market are illegal, and the value of the pirated market for music had reached \$4.6 billion in 2003.⁷ The Business Software Alliance (BSA) reported that 35% of software in use worldwide was pirated in 2004, representing a loss of nearly US\$33 billion.⁸ In the U.S., as the biggest copyright exporting country in the world,⁹ the value of its software piracy losses was \$6.6 billion in 2004 (ranked the first in the world).¹⁰

In addition, BSA studies indicate that software piracy in developed countries is "not much different from less developed countries".¹¹ For example, in 2002, nearly 25% of computer software used in the U.S. is pirated, costing the U.S. software industry \$1.96 billion, just slightly lower than its total software revenue losses in China in the same year.¹² In 2003, the piracy rate in North America region (23 %) was much lower than that of the Asia/Pacific region (53%), but the losses of software industries in North America had gone beyond \$7.2 billion, just slightly lower than their losses in the Asia/Pacific region (\$ 7.5 billion).¹³ Thus, it is clear that in the digital age, piracy has become a global issue. It is not just a phenomenon for developing countries, but also for developed countries.¹⁴

Responses for Digital Challenges & Potential Trade Wars/ Sanctions

Huge economic loss caused by widespread copyright piracy arguably not only reduces authors' incentives to create new works, but also reduces distributors and publishers' incentives

to make continuous investment in the compilation and distribution of copyright works.¹⁵ In order to update world copyright law in response to challenges presented by digital technology,¹⁶ and in order to apply the regulatory provisions of the Berne Convention to the new digital environment,¹⁷ the World Intellectual Property Organization (WIPO) adopted two related treaties: the WIPO Copyright Treaty (WCT), and the WIPO Performances and Phonograms Treaty (WPPT) in 1996. They are often referred to as the "WIPO Internet Treaties".¹⁸ These treaties extend copyright protection to "authors of literary and artistic works, copyright programmers and to compilations of data",¹⁹ and try to ensure that traditional copyrights (such as reproduction rights) continue to apply in the digital environment.²⁰

Moreover, in recent years, many developed countries have adapted their copyright law and policy to extend stronger copyright protection to copyright works, particularly the U.S.²¹ In 1998, the U.S. Congress passed the *Copyright Term Extension Act (CTEA)*, which extended the term of copyright protection to life of the author plus seventy years.²² In the same year, following the WIPO Internet treaties, the U.S. enacted the *Digital Millennium Copyright Act (DMCA)*.²³ Other digital legislation has also been drafted in order to address copyright challenges of the digital age.²⁴ In addition, the U.S. imposed constant pressure to other countries to strengthen their IP/copyright protection. A typical example may be the implementation of its *Special 301 Provisions*. Each year, the United States Trade Representative (USTR) issues its *Special 301 Report*, and always threatens potential *Special 301* sanctions to certain countries where they believe serious IP problems exist.²⁵ In its 2004 report, after examining "the adequacy and effectiveness of IP protection in approximately 85 countries", USTR put China, Ukraine,²⁶ Brazil,²⁷ Israel, Latvia²⁸ and many other countries into different categories on the Special 301 list.²⁹ Furthermore, not just developing countries, but some developed countries or groups (such as European Union and Israel) have also been put on the U.S. Special 301 watching list.³⁰ Thus, it is clear that intense IP conflicts remain in the digital age, and might even trigger potential IP trade wars in some circumstances.

Change & Unchanged: Three Potential IP Trade Wars between China and the U.S.

An ancient text *I Ching* (also known as the *Book of Change*), which originated thousands of years ago among the courtly

shaman-diviners of ancient China, may give us some inspiration for how to deal with current IP conflicts.³¹ The *I Ching* views “all of the changes” in the world as “an unfolding of the immutable laws and principles of existence”, and believes “by explaining our present situation in terms of the natural laws that have given rise to it, we can know where we are headed and what the future is likely to be.”³² This same principle might also be applicable to the resolution of the problems in the ever-changing Internet world.

Many traditional problems still stay unchanged or unresolved in the digital age. Neither the Internet nor the development of digital technology has changed the conflict between copyright holders and copyright users or weakened the link between trade and IP. Nor have conflicts been resolved between copyright importing and exporting countries in international trade. Nonetheless, these unresolved problems might constitute direct reasons for potential IP trade wars or sanctions. Based on the principle in *I Ching*, in order to cope with such problems and facilitate the resolution of potential IP trade conflicts, we should identify “the natural laws” that have given rise to them. Thus, it is necessary to review the history and examine how other countries have addressed similar issues.

The IP trade war is not a new scenario. In order to push China to strengthen protection for U.S. copyright products and to open China’s IP market, due to constant pressures and lobbying efforts of the U.S. business community, the U.S. put China on the list of *Special 301* “priority foreign countries” (threatened potential IP trade wars) three times between 1991 and 1996.³³

Specifically, the USTR initiated its first *Special 301* action against China in May of 1991. It mainly focused on pushing China to provide stronger protection for foreign copyright works, especially computer software.³⁴ Lengthy negotiations of two countries led to the signing of the *Memorandum of Understanding on Intellectual Property Rights (1992 IP MOU)* in January 1992.³⁵ The U.S.’s second *Special 301* action on China was in June of 1994.³⁶ This time, the USTR was mainly aimed at pressuring China to resolve three problems: (1) the rampant copyright piracy, (2) the ineffective IPR enforcement system, and (3) the limited market access concerning U.S. copyrighted products.³⁷ Again, the trade war was successfully averted by concluding a last-minute agreement: *China-United States Agreement Regarding Intellectual Property Rights (“1995 IP Agreement”)*.³⁸ However, just one year later, the US placed China

on the list of the “Special 301 Priority Foreign Country” for the third time,³⁹ due to dissatisfaction with China’s implementation of the *1995 IP Agreement*. Both countries finally averted the third potential trade war by reaching the *IP Agreement 1996* (hours after a June 17, 1996 deadline).⁴⁰

Reasons for Successfully Avoiding IP Trade Wars

After reviewing the history of China’s economic development and copyright reform over past few years, we find the main reasons why China and the U.S. were able to resolve potential IP conflicts in a relatively peaceful and constructive manner are as follows:

Firstly, with the growth of economic power, China has increased its ability to cope with threatened trade sanctions. China’s economic reform and “Open Door Policy” since 1979 greatly enhanced its economic development. In fact, China has never given up its efforts and attempts to apply its economic powers to respond to external pressures from other countries. For example, when the USTR threatened its second *Special 301* trade sanctions worth \$1.08 billion on Chinese products in 1994, besides condemning the U.S for ignoring China’s diligent efforts on improving its copyright system, China retaliated by threatening its own trade sanctions against the US products.⁴¹ The same thing also happened in 1996. Only thirty minutes after the U.S. initiated the third *Special 301* action against China, the Chinese government issued its own “list of U.S. products that would be subject to 100% tariffs”.⁴² In recent years, China’s economy has boomed. Based on the information provided by China State Council, China’s total value of import and export in 2004 had reached 1.15 trillion US dollars (up 35.7 % over 2003), ranked the third of the world.⁴³ China’s GDP in 2004 was 13.65 trillion RMB (about 1.68 trillion USD, up 9.5% over 2003).⁴⁴ Thus, as Connie Neigel, Editor-in-Chief of 1999-2000 *Law and Contemporary Problems* (Duke Law School) pointed out, China has now become a “greater economic power” and is able to effectively “wield trade weapons against its economic opponents”.⁴⁵ The threatened trade sanctions does not seem an effective avenue for the U.S. to influence China’s copyright policy any more. The U.S. has to consider other relatively peaceful avenues to “keep its impacts on China” and to relieve its loss due to widespread copyright piracy.⁴⁶

Secondly, with the growth of bilateral economic collaboration,

many U.S. companies are starting to hold increasingly positive attitudes toward China. Over the past decade, particularly after China joined the WTO in 2001, the bilateral trade between the U.S. and China has increased dramatically. According to the information provide by the USTR, in 1986, total bilateral trade of the U.S. and China was only \$7.9 billion.⁴⁷ Whereas, in 2003, total bilateral trade was close to top \$170 billion.⁴⁸ Just two years after China joined the WTO, China has become the U.S.'s third largest trading partner and the sixth largest export market.⁴⁹ The USTR also pointed out that the U.S.'s exports to China has "increased nearly ten times faster than its exports to the rest of the world" between 1999 and 2004.⁵⁰ With the growth of bilateral trades, many U.S. companies have changed their attitudes toward China dramatically. These companies were triggers for potential trade wars, and three *Special 301* actions mainly resulted from their endless lobbying and pressures imposed to the U.S. Congress. But now, increasing numbers of U.S. companies have begun to hold optimistic views on U.S.-China trade relations. The USTR, in its *2004 Report to Congress on China's WTO Compliance*, cited the words in a written submission of two U.S. trade associations, and stated: "[i]t has been a good year for American companies in China... We believe China is now substantially in compliance with its [WTO] obligations—a marked improvement over last year."⁵¹

Increased bilateral trade and a dramatic increase in U.S. corporate investment in China have resulted in economic benefits for both countries.⁵² Trade sanctions would not only hurt China, but also hurt the U.S., especially the U.S. companies operating in China. All of these push U.S. companies to play increasingly positive roles in the US Congress/USTR Hearing in terms of facilitating the resolution of potential trade conflicts.

Thirdly, globalization has become a current trend. For China, adoption of an "Open Door Policy" makes the focus of government work more on economic issues. "Maintaining steady and rapid economic development" has been regarded as "an important issue that the Chinese government must successfully handle."⁵³ Two decades of economic reform have transformed China's economy from a strict command economy (planned economy) to a market economy country.⁵⁴ The trend of economic globalization and China's continual economic reform are also gradually pushing the U.S. to adjust its foreign policy towards China. For example, in 1994, the Clinton Government not only approved a renewal of the China's

most-favored-nation (MFN) trade status, but also decided to formally unlink China's MFN from human rights conditions.⁵⁵ Many facts demonstrate that although political conflicts remain intense in certain circumstances, both countries have realized the importance of improving and maintaining a constructive bilateral economic relation.⁵⁶ Improvement of economic relations further enhances improvement of political relations between two countries. Collectively, these factors create an effective foundation for both countries to peacefully resolve potential economic conflicts and avert potential IP trade wars.

Fourthly, in the past decade, China has made remarkable progress in improving its copyright legislation. As part of the WTO accession, China agreed to the *TRIPS* Agreement in 1999,⁵⁷ and then extensively modified its three major IP laws.⁵⁸ The government amended patent law in 2000, and amended both copyright law and trademark law in 2001.⁵⁹ After its accession to the WTO, China did not slow down its steps to improve its copyright protection. Conversely, it started to pay more attention to the enforcement of IPR. In order to facilitate the enforcement of IP laws and TRIPS, China enacted a number of IP related implementation rules and judicial interpretations, such as the Interpretation of the SPC Concerning Several Issues on Application of Law in Hearing Correctly the Civil Copyright Cases, Implementing Regulations of the Copyright Law of the PRC in 2002; Interpretation by the SPC in Handling Criminal Cases of Infringing IP in 2004.⁶⁰ All these legislative efforts seem also to be recognized by the U.S. government. The USTR, in its *2004 Report to Congress*, stated: "China has undertaken substantial efforts in this regard, as it has revised or adopted a wide range of laws, regulations and other measures. While some problems remain, China did a relatively good job of overhauling its legal regime..."⁶¹

Lastly, China's copyright policy has become increasingly positive due to the growth of its domestic copyright industries in recent years. Many data and facts demonstrate that China's copyright industry has experienced remarkable growth. Using the publishing industry as an example, with business steadily up each year China has become an important international center for book publishing. The number of published book categories increased from 92,972 in 1991 to 110,283 in 1996.⁶² In 2002, the number went beyond 178,900 (up by 12% over 2001).⁶³ The growth of China's software industry is even faster. Although Chinese software companies only appeared in the late 1980s, they grew dramatically in the 1990s.⁶⁴ Based on statistics, the

average annual growth rate of whole industry was over 30% between 1992 and 2000 (albeit from a very small base).⁶⁵ Moreover, the International Data Corporation (IDC) estimated China's software market would keep the same annual growth rate (over 30%) between 2000 and 2005.⁶⁶ Many commentators also believe that China has a huge potential market for movie and broadcasting. China's movie industry had generated 4.1 billion yuan RMB (about US \$500 million) revenue in 2004.⁶⁷ It was estimated that this figure would exceed 10 billion (about US\$1.2 billion) by 2007.⁶⁸ As a result, preventing copyright piracy is not only important for protecting foreign copyright holders, but also important for protecting China's indigenous copyright industries. Therefore, the dramatic growth of domestic copyright industries arguably constitutes an important internal reason for China to adopt a positive copyright policy and constantly strengthen its enforcement of copyright laws.

In conclusion, the domestic and international factors discussed above work in harmony to promote the relatively peaceful resolution of potential IP trade disputes between China and the U.S.

Establishment of Proper Copyright Policy/Strategy

I now provide two general principles or suggestions for a nation (especially a copyright importing country) to formulate proper copyright policies in the digital age.

WIPO has incorporated "development" as an integral part of its major missions since 1974.⁶⁹ Thus, when making its copyright policy, the first principle that a nation has to bear in mind may be that it should align copyright and economic development policies in order to make copyright policy more systematic and sustainable. In recent years, it seems that China has started to pay more attention to coordinate its copyright policy with its development policy. The major goals of China's IP laws and policies were summarized by Professor Zheng Chengsi (Director of the IP Center of the Chinese Academy of Social Sciences) in three dimensions: (1) strengthening the protection of IP; (2) increasing the amount of self-owned IP production; (3) accelerating the industrialization of IP production, i.e. facilitating the entry onto the market of domestic IP product as soon as possible.⁷⁰ Thus, it is clear that enhancing the development of domestic copyright industries and IP economy (goals (2)(3)) has become one important component of China's current IP strategy.

A typical example of applying such a strategy may be China's reform of copyright exporting policy in 2004. Before 2004, most domestic movie and sound recording companies in China did not have an export right, and only the administrative department of the State Council had the authorization to approve and issue an export license. Under the new rule, any movie and sound recording company, whose registered capital is no less than 1 million RMB (about US \$123, 000), is eligible to apply for an export license. Administrative departments at the provincial level would also have authorization to approve an export license on movie and sound recording products.⁷¹ The reformed copyright export policy arguably assists domestic copyright industries to explore overseas markets, and it would contribute to the development of domestic copyright industries and China's IP economy in general. A similar approach might also be applicable to other countries (especially copyright importing countries). Governments should try to adopt various preferential policies to enhance the development of domestic copyright industries.

In summary, governments should regard both strengthening IP protection and enhancing the development of domestic IP economy as integral parts of their future economic, political and legal reforms.⁷² They should try to create more business incentives for the public and domestic industries to protect IPR, and try to realize harmony between copyright protection and the development of IP economy.

The second principle that a nation should pay attention to when making its copyright policy is to establish a relationship between copyright policy and technology policy. Over the past few years, western countries have constantly advocated "intellectual property is an important tool in economic, social and cultural development, and it encourages domestic innovation, investment and technology transfer."⁷³ Copyright protections "allow artists to benefit from their creations".⁷⁴ These promises and IP success in western countries made many developing countries believe that "IP" and "technology transfer" are quick routes to modernization.⁷⁵ However, undesirable realities in most developing countries, especially in African countries, broke "the myth of development" that Western countries promised. As Professor Ruth Gana explains:

"Of all the various programs and policy ... none has been as detrimental to the development process in Africa as technology transfer from developed countries... After three decades of experimenting with Western-styled

IP laws and an inordinate emphasis on technology from developed countries as an agent of development, African countries remain mired in the trenches of underdevelopments.⁷⁶

In fact, one of the main reasons for the failure of modernization in most African countries is not “technology transfer” itself, but the inherent problem in current “international IP systems” which were used to facilitate such a “technology transfer”. As Professor Gana further criticized, the current international IP system “enabled owners of intellectual goods in developed countries to control access by developing countries to technology while also exacting from these countries huge transaction costs and licensing fees”.⁷⁷ Obviously, such a system has not struck a good balance between the benefits for advanced IP exporting countries and less developed IP importing countries. Another major reason for the failure of “the myth of development” may be that some developing countries relied too much on IP and technology transfer, and ignored or failed to coordinate its IP policy in line with its technology policy and economic policy. In fact, the IP success in western civilization should be understood “in connection with a series of historical events”.⁷⁸ For example, the U.S.’s current technology advantage seems more owed to its strategic deployment of government’s technological, economic, and defensive policies after the World War II,⁷⁹ rather than its IP policy alone.

As such, copyright law and IP policy cannot not replace technology policy to enhance a nation’s technology development and modernization. A nation should always bear in mind that “IP alone cannot bring about development”,⁸⁰ and should always try to adapt copyright/IP policy in line with its technological, economic, and other development policy.

Establishment of A More Balanced International Digital Legislative Order

Besides the efforts of individual countries, the implementation of national copyright policy requires a good international environment. However, under current economic globalization environment, highly protectionist copyright polices adopted by some countries have greatly influenced independent digital law and policy making in other countries.

As mentioned above, over the past few years, developed copyright exporting countries consistently encouraged or pressured

other countries to enact strong IP laws. A strong IP regime is obviously more in favor of IP exporting countries rather than IP importing countries.⁸¹ However, most developing countries do not have the same economic power as China to cope with threatened trade wars and sanctions from developed countries, and have to follow their own views. In fact, besides developing countries, some developed copyright importing countries were also deeply influenced. For example, the Australia-United States Free Trade Agreement (FTA) concluded in 2004 includes an IPR chapter.⁸² It not only requires Australia to import the US-style ISP safe harbour provisions and anti-circumvention rules in DMCA, but also requires Australia to extend the term of copyright protection for an additional 20 years.⁸³ Although Australia might receive certain concessions in other areas, an extension of copyright protection is clearly more in favor of the US copyright exporters, rather than of Australia’s consumers (since Australia is a copyright importing nation).⁸⁴ In contrast, a more highly protectionist digital legislation can be found in the EU Database Directive (EU Directive),⁸⁵ and this time, even the U.S. (copyright exporting nation) was greatly influenced. The Directive included a “reciprocity protection provision”⁸⁶ which allows EU member states to extend *sui generis* protection to a foreign database only if the foreign country also offers comparable protection to EU databases. Such provision arguably place foreign database producers in a difficult position within the European market,⁸⁷ and forces other countries to pass database laws identical to EU model. Thus, some U.S. commentators have criticized the EU as creating a “dangerous precedent” that industrialized nations with sufficient market power would use reciprocity provisions to “influence the public policy choices of other countries”, and “force *sui generis* IP provisions on other countries”.⁸⁸ In fact, the Directive even directly influenced the process of the U.S. database legislation as it made many U.S. database producers and legislators started to worry about the U.S. Bill’s comparability with *the EU Directive* rather than independently make their own law.⁸⁹

Therefore, it could be concluded that highly protectionist copyright legislation/policies would not only hurt developing countries, but also might harm developed countries. A more balanced international legislative order is important for all nations to independently establish and implement their own copyright laws and policies.

Since it is necessary to establish a more effective international digital legislative order, we turn to the question of how to establish

it. In fact, both WIPO and major international copyright conventions, such as the *Berne Convention*, have provided a good theoretical framework and set up some fundamental principles for establishing an effective international IP legislative order, such as (1) National Treatment Principle,⁹⁰ and (2) Integration of IP and Development Considerations (“Development Principle”).⁹¹ The key problem is the implementation. The establishment of a more balanced digital legislative order requires efforts on the part of all parties.

International organizations such as WIPO should try to balance the conflicts of benefits between different countries in international IP trades, and try to minimize the impacts of protectionist IP policies. They should also try to adopt more effective measures to encourage developing countries to approach international negotiations on IP and development issues, and constantly improve developing countries’ ability to participate in law/policy-making at the international level. For individual countries, they should actively participate in main events in WIPO and other international institutions, and strengthen domestic implementation and enforcement of international IP treaties. When a nation, especially a developed copyright exporting country, makes its copyright and development policy in pursuit of the maximization of domestic benefits, it should always bear in mind its responsibilities as a member of the international community. They should provide a leeway for other countries, especially developing countries, to develop various IP policies that suit their own situations.

The involvement of scholars and non-government organizations (NGOs) is also very important. Quite a few scholars in developed countries have realized that suggestions or policy initiatives on IP reform that they have made are not easily accepted by governments in developed copyright exporting countries (due to many national economic and political reasons). Therefore, they set up a number of NGOs to encourage public copyright users to defend free speech and fair use rights, and fight against overly strong copyright protection regimes, in order to facilitate the legal dissemination of copyright works worldwide. One notable example is “Creative Commons”, an NGO founded by Professor Lawrence Lessig.⁹² On the other hand, they argue that developing countries, such as China, should play a main role in enhancing the establishment of a more effective international IP legislative order.⁹³ Indeed, it is unlikely that copyright exporting countries would play leading roles in reforming current international IP system, which is

now clearly more in favor of them. Thus, developing countries and copyright-exporting countries should take responsibility in the digital age, and work together to contribute to the reform of current IP system. The future IP system should strike a better balance between public users’ affordability and copyright owners’ benefits. It should also strike a better balance of benefits in different countries, in order to enhance innovation, to reduce the cost of international technology transfer, and to facilitate the modernization of developing countries.

Conclusion

In 1756, Voltaire said, “[t]he true conquerors are those who know how to make laws. Their power is stable; the others are torrents which pass.”⁹⁴ In the digital age, the dramatic development of Internet technologies not only brings great challenges to traditional business models and copyright protection systems, but also brings many opportunities for different countries to make digital laws and policy.

It is imperative that international institutions, individual countries, non-government organizations and scholars work collaboratively in order to realize the harmony of IP protection and social development. Only then will a more effective international legislative order be established in the digital age.

Endnotes

¹ See Ruth Gana Okediji, "Copyright and Public Welfare in Global Perspective" in *Indiana Journal of Global Legal Studies*, Vol 7, Issue 1, Fall 1999, at 117-118.

² As one commentator pointed out, "Internet has made real what in the 1970's that visionary of the communications Marshall McLuhan (1911-1980) called the "Global Village"". See <http://www.internetworldstats.com/emarketing.htm>

³Shantanu Rastogi, 'WCT & WPPT Background and Purpose' (2003), available at <<http://www.techlex.org/Library/Summary%20WCT%20WPPT.pdf>>.

⁴ See Tang Guan hong, 'A Comparative Study of Copyright and the public interest in the United Kingdom and China', (2004) 1:2 SCRIPT-ed, [Online] available at <http://www.law.ed.ac.uk/ahrb/script-ed/issue2/china.asp#1949>

⁵ The earliest use of movable type in printing was invented by Bi Sheng in China in 1041 AD. See Wikipedia free encyclopedia, available at http://en.wikipedia.org/wiki/Printing_press (last visited on Feb 20, 2005). Moreover, as one commentator pointed out, "Copyright as a property right became important and therefore began to require protection only after the invention of printing which made mass production of copies for commercial purposes possible." See *Evolution of Copyright System, Intellectual Property Law in China*, Isinolaw Research Center, available at www.isinolaw.com

⁶ Julie Wald, 'Note: Legislating the Golden Rule: Achieving Comparable Protection under the European Union Database Directive' in *25 Fordham International Law Journal* 987, 1007 (2002) at 994-995. See also Sullivan, A. C. (2001) "When the Creative is the Enemy of True: Database Protection in the U.S. and Abroad" in *29 AIPLA Quarterly Journal* 317 at 323-324.

⁷ IACC White Paper, January (2005), available at <http://www.iacc.org/WhitePaper.pdf>

⁸ See *First Annual BSA and IDC Global Software Piracy Study (hereafter 'BSA Study')*(July 2004), available at <http://www.bsa.org/globalstudy/> (last visited June 10, 2005).

⁹ See *IACC White Paper, January (2005)*.

¹⁰ The number was \$ 6.4 billion in 2003, also ranking the first of the world. See 'BSA study'.

¹¹ See Peter K. Yu, 'Four Common Misconceptions about Copyright Piracy' in *26 Loyola of Los Angeles International and Comparative Law Review* 127, Fall 2003 at 139.

¹² Id at 140.

¹³ See 'BSA Study', *supra* note 12.

¹⁴ Also see Peter K. Yu, (2004) at 138.

¹⁵ See Wald, J. (2002) at 994.

¹⁶ Brian Bolinger, 'Comment: Focusing on Infringement: Why Limitations on Decryption Technology are Not the Solution to Policing Copyright' in *52 Case Western Reserve Law Review* 1091, 1092 (2002).

¹⁷ See Mihály Ficsor, (1996), 'Towards a Global Solution: The Digital Agenda of the Berne Protocol and the New Instrument', in *The Future of Copyright in a Digital Environment* edit by P. Bernt Hugenholtz, vol 111 at 37.

¹⁸ Ginsburg, J. C. (2003). 'Book Review: Achieving Balance in International Copyright Law - The WIPO Treaties 1996: The WIPO Copyright Treaty and The WIPO Performances and Phonograms Treaty: Commentary and Legal Analysis. By Jörg Reinbothe and Silke von Lewinski, 2002. at 581' in *26 Columbia Journal of Law & the Arts*, at 201.

¹⁹ See Ruth L. Okediji, 'Development in the Information Age' in *UNCTAD-ICTSD Project on IPRs and Sustainable Development*, (Issue Paper No.9) May 2004 at 1-2.

²⁰ Moreover, in order to strengthen the protection on copyright holders, they provide two types of "technological adjuncts to the rights" by obligating members to provide protections to "effective technological measure" (Art 11 of WCT), and "rights management information (RMI)" (Art 12 of WCT) used by authors in connection with exercise of their rights under the Berne convention or the WIPO Internet Treaties.

²¹ In order to maximize its benefits in international IP trades, the US first argued for "putting intellectual property on the international trade agenda", and directly induced the pass of TRIPS agreement in the WTO conference in 1995. Peter K. Yu, 'The Copyright Divide' in *25 Cardozo Law Review* 331, November, (2003) at 353.

²² On October 7, 1998, the House and Senate passed S. 505, the Copyright Term Extension Act (CTEA). The law extended protection from life of the author plus fifty years to life of the author plus seventy years. For more details, see Association of Research Libraries, 'TIMELINE: A History of Copyright in the United States', available at <http://www.arl.org/info/frn/copy/timeline.html> [last visited March 18, 2005].

²³ Id. 'President Clinton signed the Digital Millennium Copyright Act (DMCA) into law on October 28, 1998 (P.L. 105-304)..

²⁴ Such as, *the Digital Choice and Freedom Act*, See California's 16th Congressional District website, "Section-by-Section Analysis of 'the Digital Choice and Freedom Act of 2002'", available at http://www.house.gov/lofgren/news/2002/021002_detail.htm. And *the Digital Media Consumers' Rights Act (DMCRA)* See H.R. Rep. No. 5544 107th Cong., 2d. Sess. (October 3, 2002). For more

details, see 'Digital Media Consumers' Rights Act Section-by-Section Description' available at <http://www.house.gov/boucher/docs/dmcrasec.htm>; in addition, Hearing on *the DMCRA 2003* had been conducted in the US House of Representatives on May 12 of 2004, see <http://energycommerce.house.gov/108/Hearings/05122004hearing1265/hearing.htm>.

²⁵ Moreover, each year the USTR also issues its WTO Compliance Reports to different countries. Again, Internet piracy and IPR protection become important components in its assessments. See http://www.iipa.com/pdf/PRC_WTO_Compliance_Testimony_for_USCC_020404.pdf

²⁶ Ukraine was put on the Special 301 Report Priority Foreign Country list. That means the US could impose 301 Special Action against it immediately. See http://www.ustr.gov/Document_Library/Reports_Publications/2004/2004_Special_301/Special_301_Report_Priority_Foreign_Country.html, China was on "Section 306 list" in 2004. *Id.*; but China is placed back on "2005 Priority watch list" in 2005. See http://www.ustr.gov/Document_Library/Reports_Publications/2005/2005_Special_301/Section_Index.html [last visited June 12, 2005]

²⁷ Brazil was put on the "Special 301 priority watch list" See http://www.ustr.gov/Document_Library/Reports_Publications/2004/2004_Special_301/Special_301_Priority_Watch_List.html

²⁸ Israel, and Latvia were put in "2004 Special 301 Report Watch List" see http://www.ustr.gov/Document_Library/Reports_Publications/2004/2004_Special_301/2004_Special_301_Report_Watch_List.html

²⁹ USTR, 2004 SPECIAL 301 REPORT at 1, available at http://www.ustr.gov/assets/Document_Library/Reports_Publications/2004/2004_Special_301/asset_upload_file16_5995.pdf [last visited on 2 May 2005]

³⁰ Israel was on "2004 Special 301 Report Watch List"; EU and Brazil were on "2004 Priority Watch List". In 2005, Israel and Brazil are placed on "2005 Priority Watch list", E.U. is on the 2005 Watch List. See http://www.ustr.gov/Document_Library/Reports_Publications/2005/2005_Special_301/Section_Index.html [last visited June 12, 2005]

³¹ In Chinese, "I" includes three meanings: change, simpleness, and the unchangeable.

³² See 'What is the I Ching?' available at <http://www.wholarts.com/psychic/iching.html>

³³ Priority Foreign Countries means 'those pursuing the most onerous or egregious policies that have the greatest adverse impact on U.S. right holders or products, and are subject to accelerated

investigations and possible sanctions'. See http://www.ustr.gov/Document_Library/Reports_Publications/2004/2004_Special_301/Section_Index.html

³⁴ Connie Neigel, 'Piracy in Russia and China: A Different U.S. Reaction' in *63 Law and Contemporary Problems* 179, Autumn (2000) at 193.

³⁵ The 1992 IP MOU was concluded just two hours before U.S. retaliatory measures were to be implemented. See *Id.*

³⁶ Despite China's progress in its implementation of *the 1992 IP MOU*, the U.S. complained it felt frustrated with the China's lack of enforcement of its IP laws and regulations. See *id.* at 194.

³⁷ See 'Identification of Priority Foreign Country and Initiation of Section 302 Investigation', *59 Fed. Reg.* 35,558 (1994), at 35,559.

³⁸ See China-United States: Agreement Regarding Intellectual Property Rights, Feb. 26, 1995, U.S.-P.R.C., *34 I.L.M.* 881 (1995).

³⁹ Neigel, at 195-196.

⁴⁰ See Kathy Chen, *U.S. and China Reach an Agreement, Averting Trade Sanctions by Both Sides*, in *Wall St. J.*, June 18, 1996, at A2. One commentator further pointed out, although the 1996 IP Agreement mainly recounted the 1995 IP Agreement, U.S. officials expressed optimism that 'things will be different this time around'. See Neigel at 196.

⁴¹ See Neigel, *supra* note 36 at 194.

⁴² *Id.* at 195. For more details, see Helene Cooper & Kathy Chen, *U.S. and China Announce Tariff Targets as Both Nations Step Up Trade Rhetoric*, *Wall St. J.*, May 16, 1996, at A3.

⁴³ See, http://www.stats.gov.cn/english/newsandcomingevents/t20050228_402231939.htm [English] or http://www.stats.gov.cn/tjgb/ndtjgb/qgndtjgb/t20050228_402231854.htm [Chinese]

⁴⁴ <http://www.chinability.com/GDP.htm>

⁴⁵ Neigel, at 199.

⁴⁶ *Id.*

⁴⁷ GTW Associates, 'Executive Summary of United States Trade Representative 2003 Report to Congress on China's WTO Compliance', December 11, 2003, available at <http://www.gtwassociates.com/answers/ChinaWTO.htm> [last visited March 6, 2005]

⁴⁸ *Id.*

⁴⁹ Moreover, China has 'risen to the fifth largest export market of the US' in 2004. See *2004 USTR Report to Congress on China's WTO Compliance*, available at http://www.ustr.gov/assets/Document_Library/Reports_Publications/2004/asset_upload_file281_6986.pdf

⁵⁰ The USTR further stated: "U.S. exports to China continued to increase dramatically in 2004, as they have done in every year since China joined the WTO", and "U.S. exports to China totaled \$35 billion for the most recent twelve-month period". Id, at 4.

⁵¹ Id.

⁵² Based on information provided by Government Accountability Office, in the past decade, "U.S. investment and trade with China have increased significantly. At the end of 2002, U.S. companies had total direct investments of \$10.3 billion in China, largely in the manufacturing sector. In addition, U.S. goods exports and services to China grew at an average annual rate of 12 percent since 1993, totaling \$27 billion in 2002". See Government Accountability Office, "World Trade Organization: U.S. Companies' Views on China's Implementation of Its Commitments" in *GAO Report* number GAO-04-508, March 24, 2004, available at <http://www.gao.gov/htext/d04508.html>.

⁵³ See *The Report on the Work of the Government* delivered by Premier Wen Jiabao at the Third Session of the 10th National People's Congress on March 5, 2005, available at <http://www.chinability.com/2005%20government%20work%20report.htm>

⁵⁴ See *2004 USTR Report* at 3. The USTR report states: Now, in China, market forces have played an increasing role in the economic development.

⁵⁵ Patrick H. Hu, "Mickey Mouse" in China: Legal and Cultural Implications in Protecting U.S. Copyrights' in *14 Boston University International Law Journal* 81, Spring (1996) at 84.

⁵⁶ As one commentator pointed out, this decision "signaled the U.S. government's increased emphasis on economic issues rather than political concerns". Id.

⁵⁷ Graham J. Chynoweth, 'Reality Bites: How the Biting Reality of Piracy in China is Working to Strengthen its Copyright Laws' in *2003 Duke Law & Technology Review* 3, February 11, (2003) at 9.

⁵⁸ Id at 10.

⁵⁹ See Jessica Jiong Zhou, Trademark Law & Enforcement in China: A Transnational Perspective, *20 Wis. Int'l L.J.* 415 (2002) at 421.

⁶⁰ See <http://www.chinaiprlaw.com/english/laws/laws.htm> [last visited March 6, 2005]

⁶¹ *2004 USTR Report* at 5.

⁶² Yahong Li, "The Wolf has Come: Are China's Intellectual Property Industries Prepared for the WTO?" in *20 UCLA Pacific Basin Law Journal* 77, Fall (2002) at 89.

⁶³ See 'China Industry Development Report: Publishing Industry in China 2003', available at http://www1.cei.gov.cn/cei_e_report/hy/tscb.htm#

⁶⁴ Li, at 89-90.

⁶⁵ Anna Lee Saxenian, 'Government and Guanxi: The Chinese Software Industry in Transition' in DRC Working Papers No 19, University of California at Berkeley, available at http://www.london.edu/assets/documents/PDF/government_guanxi.pdf#search='china%20Software%20Industry%20to%20the%20Chinese%20Economy

⁶⁶ Id at 14-15. In the 10th Five-Year Plan, the Chinese government anticipates "continued 30% annual growth rates for software and projects sales of US \$20 billion by 2005".

⁶⁷ See People Daily Online, 'Revenue of China's movie market to exceed 10 bln yuan in three years', March 16 of 2005, available at http://english.people.com.cn/200503/16/eng20050316_177098.html

⁶⁸ Id. Some research even predicted, "Chinese movie market had US \$10 to \$15 billion in yearly profits, with a further 5.1% growth each year in the future". See Li, at 90.

⁶⁹ See http://usinfo.state.gov/ei/economic_issues/intellectual_property.html.

⁷⁰ See <http://www.chinaiprlaw.cn/file/200503254440.html> [Chinese]

⁷¹ See <http://www.chinanews.com.cn/n/2004-02-11/26/400625.html> [Chinese]

⁷² Also see <http://www.chinaiprlaw.cn/file/200503254440.html> [Chinese] (Professor Zheng pointed out, although China had obtained remarkable achievement on copyright protection legislation, China still needs to put a lot of efforts on completing its legislation and policy in order to enhance the development of the self-owned IP technology and the industrialization of existing IP production. (Objective (2)(3)).)

⁷³ We disagree with both notions. As noted by the Director General of WIPO in his book entitled "Intellectual Property -- A Power Tool for Economic Growth," <http://usinfo.state.gov/ei/Archive/2005/Apr/15-125293.html>

⁷⁴ Graham J. Chynoweth, 'Reality Bites: How the Biting Reality of Piracy in China is Working to Strengthen its Copyright Laws' in *2003 Duke Law & Technology Review* 3, February 11, (2003) at 5.

⁷⁵ Ruth L. Gana, *The Myth of Development, The Progress of Rights: Human Rights to Intellectual Property and Development*, 18 LAW & POLY 315 (1996).

⁷⁶ Id.

⁷⁷ Id.

⁷⁸ Id. at 342

⁷⁹ Such as deploying defense related research for commercial application, emphasizing applied science, transforming the

reigning ideology that called for a separation of government and scientific endeavor, and dramatically increasing government's support on research and domestic innovation. See Ruth Gana Okediji, 'Copyright and Public Welfare in Global Perspective' in *Indiana Journal of Global Legal Studies*, Vol 7, Issue 1, Fall 1999, at 119, footnote 8.

⁸⁰ See the opinions from different delegations in the WIPO Conference in March 2005, available at http://usinfo.state.gov/ei/economic_issues/intellectual_property.html.

⁸¹ The countries with strong technology power (such as U.S. Japan) would definitely benefit a lot of from IP exports and current stronger IP regime. But for most developing countries, which do not have strong technology power, a strong IP regime would not only increase the cost of technology transfers, but also make them stay in disadvantage situation in the international IP trade. Different countries have different situation. As some sponsors stated in a recent WIPO conference in April 2005, "not all countries will achieve the same benefits from intellectual property at the same time." http://usinfo.state.gov/ei/economic_issues/intellectual_property.html

⁸² See Chapter 17 of Australia-United States Free Trade Agreement, [Online] Available: http://www.dfat.gov.au/trade/negotiations/us_fta/text/index.html

⁸³ Allens Arthur Robinson, 2004, Australia-United States Free Trade Agreement: impacts on IP, communications and technology, [Online] available: <http://www.aar.com.au/pubs/ip/foftafeb04.htm> or <http://www.aar.com.au/pubs/pdf/ip/foftafeb04.pdf>

⁸⁴ As one commentator pointed out, "It cannot be denied that the Australia-United States Free Trade Agreement will be beneficial for many sectors of the Australian economy by improving their access to United States markets for our exports. However it could be considered that through the one-sided intellectual property "reforms", Australia's ICT sector has become a sacrificial lamb for the agricultural and manufacturing sectors. In the main, however, the reforms are unilaterally in favour of copyright owners, and are therefore largely to the advantage of the United States as a net exporter of intellectual property to Australia." See <http://www.ilaw.com.au/public/fraarticle.html>

⁸⁵ Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the Legal Protection of Databases, 1996 O.J. (L 77) 20 (hereinafter 'EU Database Directive'), available at <http://europa.eu.int/ISPO/infosoc/legreg/docs/969ec.html>.

⁸⁶ Charles R. McManis (2001). "Symposium - Information And Electronic Commerce Law: Comparative Perspectives: Database Protection in the Digital Information Age" in 7 *Roger Williams University Law Review* 7at 30.

⁸⁷ Such provision will arguably force foreign database producers to establish or expand operations in the EU. As one commentator pointed out, "if the Draft Treaty is not adopted at future WIPO proceedings or similar legislation is not passed by major database-producing countries like the U.S., non-EU database makers will have a strong economic incentive to ensure that the databases are created in an EU country". See David Mirchin, 'The European Database Directive Sets the Worldwide Agenda' in NFAIS Newsletter, Vol. 39, No. 1, January 1997, at 7-12, available at http://www.nfais.org/publications/white_papers_2.htm >.

⁸⁸ See, McManis, at 35. McManis pointed out, "developing countries lacking sufficient market power to impose legislation through reciprocity provisions will likely be further disadvantaged relative to industrialized nations". McManis further criticized "the EU Database Directive frankly seems designed to favor European database producers at the expense of their customers and non-EU competitors, and to pressure the rest of the world to create comparable protection". Id at 45.

⁸⁹ For example, the American Medical Association (AMA) fears that, if the EU reciprocity provision is enforced in the absence of U.S. legislation, AMA may have little recourse for the appropriation of its efforts in Europe. See McManis, at 24. Moreover, some legal commentators explicitly stated that "...U.S. lawmakers must ensure that a U.S. bill is passed that fulfills the comparable protection standard and is then approved by the European Commission". See Wald, at 1035.

⁹⁰ National Treaty Principle is also one of most important principles in both *the Berne Convention* and *the Paris Convention*. In lieu of reciprocity, it requires member states to "grant to foreigners the same rights as they grant to their own nationals". Yu, at 350. See also Art. II. *Berne Convention for the Protection of Literary and Artistic Works*, Sept. 9, 1886, reprinted in 1 Stephen P. Ladas, *The International Protection of Literary and Artistic Property* 25 (1938), at 1123-34.

⁹¹ As one of important tasks/components of its policy framework, the WIPO called for every country to foster a nation-wide perception of "IP as a powerful tool for economic, social and cultural development", see <http://www.wipo.int/about-wipo/en/dgo/pub487.htm>

⁹² See "Creative Commons" website. Available at <http://creativecommons.org/>.

⁹³ Personal Conversations with professors of 9th Internet Law Program at Harvard Law School, June 22-24, 2005.

⁹⁴ Voltaire, 'Essai sur l'Histoire Generale et sur les Moeurs et l'Esprit des Nation's (1756), Tome 1, Chapter 25, at 390.