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ADVANCING INTELLECTUAL PROPERTY RIGHTS: INFORMATION TECHNOLOGIES AND THE COURSE OF ECONOMIC DEVELOPMENT IN CHINA

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FOREWORD

Over the past several years protection of intellectual property rights (IPR) has been a significant stumbling block in U.S.-China relations. The unauthorized reproduction and distribution of goods such as computer software and movies in China is widespread. Items pirated by Chinese firms are sold not only in China, but exported throughout East and Southeast Asia as well. The Business Software Alliance estimates that losses to American companies from all property rights infringements are worth more than two billion dollars annually.

As required by Special Section 301 of the Omnibus Trade and Competitiveness Act of 1988, the Clinton Administration, like the Bush Administration before it, has demanded that China extend its legal framework and step up enforcement by a particular date, after which sanctions would be imposed if the American demands were not met. China has responded by threatening to raise trade barriers to U.S. imports, a move that would seriously harm large American exporters to China. In each case, to avoid a major disruption in their trade relations, the United States and China have agreed at the eleventh hour to compromise, with China promising to take measures to strengthen its protection of intellectual property rights; in each case, all parties have been concerned about the process, and most parties have been discouraged by the results. This aggressive approach annually sours the entire bilateral relationship, threatening the success of U.S. companies that have no serious IPR issues as well as those that do, and threatening American diplomatic initiatives with China in areas unrelated to the IPR issue.

The contributors to this issue of the *NBR Analysis* suggest an alternative, cooperative approach to effecting change in China's IPR regime. The authors—Michel Oksenberg of Stanford University, Pitman B. Potter of the University of British Columbia Faculty of Law, and William B. Abnett, chief China trade negotiator in the Reagan Administration—assess the conditions that help to nurture respect for intellectual property in China as well as the obstacles to effective IPR protection, and recommend that American corporate executives and policymakers cooperate with Chinese leaders to assist them in developing China's nascent IPR regime. Many Chinese leaders, particularly at the national level, are beginning to understand the need to protect intellectual property rights in order to integrate China into the international economy. Supporters of IPR within the leadership are buttressed by a developing domestic coalition that will have a vital stake in the enforcement of intellectual property rights.

The authors admit that there are many obstacles to the adequate protection of intellectual property in the P.R.C., including: 1) cultural and historical factors that undermine private claims to intellectual property; 2) the recent bureaucratic struggle for authority over property rights protection, which has left some administrative bodies with little inclination to implement IPR-related measures; and 3) the powerful incentives that local government and Communist Party officials

have to disregard intellectual property rights, despite directives from authorities in Beijing to enforce IPR. Given these obstacles, it is not surprising that progress in establishing an effective IPR regime in China has been slow.

The authors recommend a new strategy for U.S. policymakers and the corporate community for resolving the IPR issue. This initiative would 1) recognize the progress that China has made in protecting intellectual property; 2) draw national attention within China to the relationship between intellectual property rights and economic development; 3) reinforce China's natural constituency for IPR protection; and 4) assist the P.R.C. in the development of an effective IPR regime that is supported on the national and local levels and that places greater reliance on private compensatory remedies, as opposed to criminal sanctions, to encourage compliance.

This issue of the *NBR Analysis* grew out of a study of IPR protection in China in preparation for a comprehensive NBR-sponsored program that is bringing together P.R.C. regulatory authorities, Chinese entrepreneurs, and international leaders in the computer industry to promote dialogue about intellectual property concerns in China. The project includes a series of national and regional workshops and other exchanges to support the development of an IPR regime in China conducive to the growth of Chinese entrepreneurship, investment in high-tech industries, and international business involvement in the P.R.C. Stanford University and the University of British Columbia are serving as cooperating institutions. NBR is indebted to Tom Wilson, NBR program coordinator, for administering the project, and to Bruce Acker, Mark Frazier, and Sara Robertson for their editorial assistance.

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Introduction

China represents a potentially vast market for the sale and licensing of intellectual-property-based goods and services, particularly computer software and information technologies. From 1993 to 1995, sales in China of software products increased at an annual rate of 30 percent. Software imports from the United States also rapidly increased, and could significantly reduce the U.S. trade deficit with China over the long term. For now, however, the Chinese market for software is dominated by suppliers of illegally copied products. This widespread disregard for intellectual property rights is an area of great concern for all high-technology firms operating in the Chinese market. It also constitutes a potentially serious obstacle to the development of a vibrant information-technology industry in China. In addition, pirated items manufactured in China, especially computer software, are found in markets throughout East and Southeast Asia. Estimates of losses to American companies due to infringements of intellectual property rights (IPR) of all kinds total well over a billion dollars annually, based on the retail value of the pirated commodities in the United States.

The People's Republic of China (P.R.C.) has made considerable progress over the past 15 years in developing an intellectual property rights regime. Yet many obstacles still exist. The central government, especially the Ministry of Foreign Trade and Economic Cooperation (MOFTEC), has repeatedly entered into agreements that have not been effectively implemented. The major implementing agencies of China's IPR regime all admit that problems remain to be solved, even as they appropriately point to the government's accomplishments in developing important legislation and issuing regulations to protect patents, trademarks, and copyrights.

Many of China's top leaders apparently have concluded that IPR is an essential ingredient of an innovative society. While many Chinese still consider IPR to be a concept designed by developed countries to hinder transfer of advanced technologies and to exploit the developing world,

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increasing numbers believe that IPR facilitates economic development. They believe an effective IPR regime will stimulate foreign investment and a willingness on the part of foreign investors to transfer technology. They also understand that the welfare of Chinese consumers is often harmed by the purchase of counterfeit products. Not only are Chinese being cheated by the lower quality of many counterfeit goods, but in certain areas—such as pharmaceuticals, electronic commodities, and processed foods and beverages—the counterfeit goods pose health and safety hazards. These problems are particularly severe in trademark violations—the marketing of goods under false labels that do not meet the standards of the original manufacturer. Rewarding innovation and imagination also should provide additional incentives to the thousands of recent Chinese émigré scientists and technicians to return home to profit financially from their skills. And entrepreneurial firms in China are also beginning to realize that they have an interest in ensuring that their domestic competitors do not infringe upon their inventions, trademarks, and copyrights. Chinese entrepreneurs, driven by a desire for profits and market share, do not wish to finance the expansion of other firms that illegally appropriate their research and development.

But our primary purpose is not to cite the reasons that the Chinese may wish to improve their IPR regime, to enumerate the accomplishments of the Chinese government in this regard, nor to laud the earnestness of responsible officials in Beijing bureaucracies. Nor is our purpose to review in excruciating detail the inadequacies of Chinese performance. We leave to others the tasks of documenting, monitoring, scolding, and recommending or imposing sanctions against the Chinese government.

Over the long run, providing incentives to Chinese firms and changing the norms (values, beliefs, rules, and structures) that determine Chinese behavior are more effective for eliciting cooperation than the threat and exercise of punishment, although the latter is occasionally necessary in order to make the former credible.

Rather, our purpose is to recommend ways that the public and private sectors in the United States and elsewhere outside of China might better cooperate with the Chinese government and private sector to help overcome the obstacles they confront in improving their IPR regime. Over the long run, providing incentives to Chinese firms and changing the norms (values, beliefs, rules, and structures) that determine Chinese behavior are more effective for eliciting cooperation than the threat and exercise of punishment, although the latter is occasionally necessary in order to make the former credible. Cooperation, however, best proceeds through mutual understanding.

The report begins with broad observations and gradually narrows its focus, concluding with policy recommendations. After briefly introducing the IPR issue in its international context and the evolution of the IPR issue in Sino-American relations, the paper sketches the broader Chinese legal context within which an IPR regime is being created. The paper then outlines cultural and historical factors affecting IPR: the Confucian heritage, the placement of copyright enforcement within the cultural bureaucracy during the Nationalist era (1927–49), and the Maoist legacy—all of which are obstacles to successful implementation of an IPR regime. The following section describes some of the controversies and bureaucratic politics surrounding the drafting of IPR laws (especially the software copyright law) and the subsequent difficulties of implementation. Following the discussion of these controversies, we outline the current institutional arrangements for implementation of China's IPR laws, noting in particular both the strengths and weaknesses of the system. After reporting on American computer industry perceptions of IPR enforcement in China, we summarize our principal conclusions and offer policy recommendations.

Intellectual Property Protection in International Affairs

For obvious reasons, protection of intellectual property has become an important issue in international trade. It is on the agenda of the World Trade Organization. Exports of intellectual property products and services from developed countries have more than tripled during the post-World War II era. Intellectual property is an area in which the United States enjoys almost continuous large trade surpluses. Economists forecast that this trend is likely to continue into the next century. Many American policymakers therefore have concluded that protection of intellectual property rights will be critical for America's continued role as a leading economic and political power.

The importance that the United States attaches to intellectual property protection in the context of international trade is underscored by the Special Section 301 provision of the Omnibus Trade and Competitiveness Act of 1988. A major objective of Special Section 301 is to promote "adequate and effective protection of intellectual property rights" by America's trading partners. Under Special Section 301, the United States Trade Representative (USTR) is required to identify annually those countries that fail to provide adequate and effective protection of intellectual property rights. Such nations may be placed on a "priority watch list" and are encouraged through negotiations to improve their intellectual property rights regime. Nations whose acts, policies, or practices are most egregious may be placed on the "priority foreign country" list of Special Section 301; they must take substantial remedial measures within six to seven months or face the possible imposition of trade sanctions, import duties, and other economic restrictions.

Not only has the IPR issue become critical in Sino-American relations, but the European Union and Japan, for somewhat different reasons, also have concerns about IPR issues in China. Japanese companies have long been reluctant to transfer industrial technologies to China, in part out of fear that they will be disseminated throughout the country without proper licensing arrangements. For similar reasons, the European Union has focused on IPR as a priority issue meriting special developmental assistance.

IPR in Sino-American Relations

The importance that Washington attached to IPR was apparent from the outset of economic relations between the United States and China. In the Agreement on Trade Relations negotiated soon after bilateral relations were normalized in 1979, China committed itself to ensure protection of patents, trademarks, and copyrights. Progress was made on the first two, but by 1988 China still had not passed a copyright law. After passage in 1988 of the U.S. Omnibus Trade Act with its Section 301 provisions, the USTR signaled its intent to designate China a priority foreign country under the Trade Act. Following the May 1989 memorandum of understanding (MOU) between China and the United States, the United States agreed not to designate China a priority foreign country, giving the Chinese time to comply with the Trade Act provisions. However, the USTR did include China on its priority watch list. The USTR remained dissatisfied with the Chinese record, and in 1991 it placed China on the priority foreign country list, primarily because it failed to offer any form of copyright or patent protection to pharmaceuticals and other chemicals. Annual losses suffered by American firms from Chinese patent infringement and industrial piracy in the late 1980s and early 1990s was estimated to be approximately \$400 million. In January 1992, just before trade sanctions were to be implemented on Chinese imports, China and the United States signed a second memorandum of understanding, wherein China agreed among other things to improve its protection of patented pharmaceuticals, chemicals, and copyrighted materials (including computer software).

In mid-1994 the focus of U.S. attention shifted from Chinese law-making to enforcement. The USTR determined that China was not enforcing its intellectual property laws, particularly with respect to copyrightable material such as computer software and CDs, and reassigned China to the Special 301 priority foreign country list. During the next nine months the United States and China negotiated, postured, and threatened each other. Losses to U.S. businesses resulting from China's ineffective protection of intellectual property rights were estimated to be in excess of one billion dollars, and in February 1995 the United States announced the imposition of 100-percent tariffs on \$2 billion dollars worth of Chinese imports. A day before the tariffs were to go into effect, Minister of Foreign Trade and Economic Relations Wu Yi signed a third MOU with the United States and annexed an "action plan" detailing the measures to be taken to enforce and upgrade the protection of intellectual property rights. The MOU and "action plan" committed the two sides to an extraordinary list of measures that were intended to reduce the problem significantly within twelve months.

This sweeping agreement not only entailed obligations to eradicate some of the most egregious violations of IPR, especially at factories known to produce pirated CDs, CD-ROMs, and laser discs, but also committed both sides to undertake a wide range of administrative measures to improve IPR protection. These included American cooperation in training supervisory personnel in the Chinese Customs Service and Chinese efforts to create coordinating bodies at the central, provincial, and municipal levels to enforce the expanding IPR regulatory regime. The agreement also provided rapid access for American inspectors to factories suspected of engaging in violations. The sweeping agreement was widely heralded by the United States, but difficulties and divisions within China over the agreement were soon evident in the reluctance of the Chinese to disseminate widely and give publicity to the MOU throughout the Chinese bureaucracies.

. . . despite extensive negotiations and repeated agreements, IPR issues continued to be a major problem in U.S.-China relations in the first half of 1996. Infringements of computer software copyrights and reproduction of CDs and laser discs were particularly vexing to a number of major companies, ranging from Microsoft to Disney.

In early December 1995, U.S. trade officials again indicated that China had not enforced intellectual property rights to the extent required under the 1995 MOU. A 90-day deadline was set for Chinese compliance, in the absence of which new trade sanctions were threatened. China was then put on notice that it would be subject to sanctions, and on May 15, 1996, the Clinton Administration informed the Chinese government that on June 15, 1996, certain categories of Chinese exports would be subject to punitive tariff rates. The categories, largely in textiles, comprised \$2.3 billion of Chinese exports to the United States, equivalent to the estimated value of losses to American companies from Chinese infringements. The Chinese government contested the claim, stating that it had made good faith efforts to enforce the February 1995 agreement, and threatened retaliation. Once again, however, at the last minute the two sides averted an impasse, as China undertook a long list of actions to halt piracy.

Thus, despite extensive negotiations and repeated agreements, IPR issues continued to be a major problem in U.S.-China relations in the first half of 1996. Infringements of computer software copyrights and reproduction of CDs and laser discs were particularly vexing to a number of major companies, ranging from Microsoft to Disney. And concerns about protecting indus-

trial designs and manufacturing processes discouraged many foreign firms from entering into joint venture arrangements or transferring advanced technologies to China, thereby impeding the development of China's own high-tech industries.

The Legal Climate

Creating an IPR regime in China is an enormous challenge. Allowing piracy is far easier than building legal institutions, especially ones that are integrated into a global system. Moreover, many in China feel that the West, having exploited China in the past, now must compensate China with technologies and information that will remedy its underdevelopment. While many proximate obstacles are amenable to partial remedy, the overall context is not propitious. Three developments would make it so: first, an IPR regime should be nested within a well-established legal system; second, respect for property must be a notion well-engraved not only in law but in the minds of political leaders and citizens alike; third, individual ownership of intellectual property should be recognized and supported.

On all these dimensions, China is lacking. It is still in the early stages of creating a legal system, as that term is understood in the West, enforced by an independent judiciary.¹ Laws governing ownership of material property, such as land and manufacturing equipment, are still being developed. Markets for the purchase, sale, rent, lease, or hire of technology, real estate, capital, and labor are only beginning to be developed. Moreover, most large industrial enterprises are either owned by the state or have extensive and intimate links to supervising ministries, planning and economic commissions, and provincial and/or municipal governments. They are connected formally through these governmental agencies and informally through personal ties with other corporations in the same industrial sphere, with which they are expected to cooperate and share information. Only recently has the process of privatization really gotten under way; only in the past decade have firms been able to retain the bulk of their profits. In short, incentives for state-owned enterprises to retain their technological innovations or intellectual property have only recently begun to outweigh the rewards for sharing and disseminating this information with their sister enterprises, and in some industries this reform has not proceeded very far.

IPR regimes in Western countries, especially in copyright, are among the most sophisticated and, in some cases, among the newest areas of the law. Technological improvements of the past three decades—photocopying, videotaping, digital recording, and, most recently, data transfer over the Internet—have greatly expanded the ease of copying and have introduced new dimensions to the problem. In this changing environment, intellectual property continues to be an evolving and slippery concept. Just a few years ago, for example, most American professors did not recognize they were infringing on intellectual property when they photocopied a chapter from a book for inclusion in a “course reader” for sale to college students.

U.S. policymakers should also be mindful that China is not the only country where violations of intellectual property rights occur. Asian countries have generally trailed in this area; Indonesia, for example, lacks an effective IPR regime. A recent *Wall Street Journal* article noted that while China may be the most severe infringer, its performance is not that much worse than Taiwan or South Korea, where the American government has sought for years to eliminate piracy. The same article noted that by American standards even many West European countries fall far short of the mark.² And in the United States itself, violations of IPR are widespread.

¹ Pitman B. Potter, *Foreign Business Law in China: Past Progress, Future Challenges*, San Francisco: The 1990 Institute, 1995, especially chapter 1. See also Michael Dutton, *Policing and Punishment in China: From Patriarchy to “The People,”* Hong Kong: Cambridge University Press, 1992.

² “Software Theft Extends Well Beyond China,” *Wall Street Journal*, May 20, 1996, p. A1.

Measured in terms of percentage of total goods consumed, the portion of pirated goods used in the United States is low compared to other countries. But measured in terms of total value, the amount of pirated goods used in the United States—especially in video-tapes and computer software—probably is the largest in the world. Knowing this, Chinese officials frequently protest that it is unfair for the United States to single out the P.R.C. for its inadequacies.

. . . the process of developing an effective IPR regime in China will be a protracted one. An important part of the large task now confronting all parties concerned is to foster Chinese institutions that will sustain the rapidly industrializing economy and encourage an innovative society.

This does not mean that China should not be expected to develop an IPR regime. If Chinese leaders wish to provide maximum financial incentives for innovation and make China an integral part of the international economy, they must protect the intellectual property rights of both Chinese citizens and foreigners. But the rest of the world must understand that China is attempting to create institutional arrangements in the absence of a mature legal system, without a well-defined sense of property rights, and with only a newly developed competitive market system. Moreover, IPR is a realm in which Western institutions and practices are evolving rapidly and in which Western performance is far from adequate. Indeed, on many issues no consensus yet exists in the West on how best to handle the challenges presented by technological innovations. The industrial democracies have yet to agree on the “right” or “best” way to protect intellectual property rights in certain complex areas of rapid technological change. For all these reasons, the process of developing an effective IPR regime in China will be a protracted one. An important part of the large task now confronting all parties concerned is to foster Chinese institutions that will sustain the rapidly industrializing economy and encourage an innovative society.

Cultural and Historical Background

The Confucian Tradition

As noted Asian legal scholar William Alford’s insightful book, *To Steal a Book is an Elegant Offense*,³ makes clear, the main intellectual traditions of China do not consider knowledge to be a form of property. Donald Munro, one of America’s leading scholars of Chinese thought, has developed the same point, though from a somewhat different perspective. Munro’s extensive writings highlight five interrelated, central tenets of Confucianism that are germane to our discussion.⁴ First, according to Munro, the dominant strands of Confucian thought do not distinguish between a fact and a value. Rather, all facts—all knowledge—are imbued with either a positive or negative moral value. There is “good knowledge” and “bad knowledge,” the distinction being in the moral quality of the behavior that the knowledge produces. Second, since “good” knowledge is necessary to inculcate morality and create a well-ordered society, the primary task of a teacher, intellec-

³ William Alford, *To Steal a Book is an Elegant Offense*, Stanford, CA: Stanford University Press, 1995.

⁴ See in particular Donald Munro: *The Concept of Man in Early China*, Stanford, CA: Stanford University Press, 1969; *The Concept of Man in Contemporary China*, Ann Arbor, MI: University of Michigan Press, 1977; *Images of Human Nature: A Sung Portrait*, Princeton, NJ: Princeton University Press, 1988; “Egalitarian Ideal and Educational Fact in Communist China,” in John Lindbeck, ed., *The Management of a Revolutionary Society*, Seattle, WA: University of Washington Press, 1971; “The Malleability of Man in Chinese Marxism,” *China Quarterly* (London), Oct-Dec., 1971; “The Man, State and School,” in M. Oksenberg, ed., *China’s Developmental Experience*, Praeger, 1973.

tual, or master—the word for these in classical Chinese (*shī*) is the same—is to engage in moral education. Accordingly, to prevent the dissemination of “good” knowledge is therefore immoral. Third, learning does not entail developing an ability to think critically or acquiring an understanding of underlying scientific principles. Rather, learning involves emulating models. Copying and memorizing have been central features of Chinese pedagogy from time immemorial, and remain so today. Fourth, the intellectual attainments of human beings are due less to their innate attributes than to what their parents, neighbors, teachers, siblings, and friends have implanted in their minds. (This is one reason that relatives and neighbors are held partly responsible for the transgressions of a criminal.) According to this logic, inventions do not arise from the creativity of an individual; they result from society’s cultivation of that individual. For innovators to claim credit and to seek to profit from their creation is selfish and an act of ingratitude. Society, not individuals, is the true source of human innovation. Finally, in Imperial China, the emperor and his agents, as the guardians of morality, had the right—indeed the duty—to propagate and disseminate “good” knowledge and to limit the dissemination of knowledge that would harm the social order. The cultivation of ethical behavior was a central purpose of the traditional Chinese state, which logically required that all knowledge be at the disposal of the state.

Thus, all knowledge throughout the realm belonged to the emperor, or more precisely to the imperial Chinese state. Further, many of the advanced technologies in traditional China were developed under imperial sponsorship. Unless an individual opted out of the system and became a hermit or a monk, he could not retain private knowledge; in theory, the emperor had the right to appropriate it to advance public virtue. In reality, this situation produced a tendency for merchants to hoard commercial knowledge and for private artisans to keep their techniques secret. Merchants and artisans organized guilds to protect their commercial interests.

Clearly—as the efforts of merchants and artisans to protect their knowledge indicates—Confucian views of knowledge and the role of the state were a good deal more varied and sophisticated than this rather simplistic summary. Recent Western scholarship suggests that concepts of property and contract law were more developed than conventional wisdom about the imperial system would have it.⁵ And in the 20th century, Western ideas have had considerable impact on Chinese views of knowledge and property. Nonetheless, the five interrelated tenets noted above constitute a powerful, internally consistent philosophy that continues to influence contemporary Chinese thought. Different cultures do have different views on how knowledge is created, what purposes knowledge should serve, and who has a claim upon it. While those differences have narrowed, they persist to the present day. One of the most dominant strands of political thinking in China today, for example, a direct legacy from traditional China, is the idea that the state is responsible *for* society, rather than accountable to it. As a result, Chinese tend to approach issues of IPR from a different vantage point than their Western counterparts.

In the 20th century, as William Alford notes, Western concepts of intellectual property began to affect Chinese thinking, and with pressure and inducements from the West both the Qing and Republican governments enacted laws protecting IPR. Then, as now, the problems of implementation were enormous. . . .

⁵For important scholarship that challenges previous assertions about the weakness of law in traditional China and about the domination of the artisan classes by the bureaucrats, see Kathryn Bernhardt and Philip C.C. Huang, eds., *Civil Law in Qing and Republican China*, Stanford, CA: Stanford University Press, 1994; William Rowe, *Hankow: Commerce and Society in a Chinese City, 1796–1889*, Stanford, CA: Stanford University Press, 1984; and *Hankow: Conflict and Community in a Chinese City, 1796–1896*, Stanford, CA: Stanford University Press, 1989.

The Republican Era (1911–49)

In the 20th century, as William Alford notes, Western concepts of intellectual property began to affect Chinese thinking, and with pressure and inducements from the West both the Qing and Republican governments enacted laws protecting IPR. Then, as now, the problems of implementation were enormous, reaching their apogee in the warlord era (1911–27) when the central government had no authority over most regions of China. Nonetheless, limited progress was made in the areas of trademark, patent, and copyright law.

Copyright protection was less compatible with the Confucian ideological legacy than trademarks and patents. The Chinese government grasped the significance of trademarks and patents as matters affecting commerce and industry. The bureaucracies established to protect those aspects of IPR were seen as necessary for China's modernity, although trademarks and patents of Chinese firms were more zealously guarded than those of foreigners. Copyrights, however, dealt with the realm of literature and the arts, and were therefore seen as a cultural issue. And when the Kuomintang (KMT), or Nationalist, government began to impose censorship upon the literary and artistic worlds in the 1930s, it used copyright laws to prevent the dissemination of works it deemed harmful to the state and to social order. Since all works had to be registered to obtain a copyright, the process offered a natural vehicle through which the state could deny the right to publish. What started out as an idea imported from the West to protect the rights of writers and artists became an instrument through which the Chinese state limited those rights in accordance with traditional Chinese thought.

Thus, in the Republican era, copyright matters became the responsibility of the cultural institutions of the state, where they have remained ever since. This is a fascinating instance of a value or belief—that knowledge embodies morality or virtue—becoming embedded in a state structure. Moreover, since copyright laws were used to impose KMT censorship, Chinese intellectuals did not become enamored of this Western idea. It was not a concept that had enhanced their rights and served their interests.

The Mao Era (1949–76)

Reflecting Marxist-Leninist notions, the Chinese Communist Party (CCP) did not seek to protect private property. Upon coming to power, the Communists abolished the intellectual property rights regime that the Nationalist government had enacted and placed writers on the state payroll, guaranteeing them a secure salary. There was no great or immediate outcry. At first, most intellectuals considered the new situation to be an improvement. Their livelihood was guaranteed. They received royalties for their publications, but the right to use their publications resided with the state. By the mid-1950s the state had nationalized all publishing houses, film studios, and radio stations. Intellectuals had become fully subject to communist-style censorship, and artistic creativity was suppressed. During the remainder of the Mao era, government policy vacillated. In 1954–55, 1957–58, 1960–61, 1963–65, and 1966–76, the CCP launched various campaigns against writers, artists, and composers.⁶ At other points, as in 1956–57 and 1961–63, brief overtures were made to placate intellectuals and restore their morale, but censorship did not cease. Underlying the CCP's policy toward intellectuals was a debate within the party: were intellectuals part of the bourgeoisie or the working class? And was their product therefore a product of capitalists (and thus the result of exploitation) or a product of the proletariat?

⁶ This tortuous history is carefully traced in Merle Goldman, *Literary Dissent in Communist China*, Cambridge, MA: Harvard University Press, 1967; *China's Intellectuals: Advise and Dissent*, Cambridge, MA: Harvard University Press, 1981; and *Sowing the Seeds of Democracy in China: Political Reform in the Deng Xiaoping Era*, Cambridge, MA: Harvard University Press, 1994. See also Peter Moody, *Opposition and Dissent in Contemporary China*, Stanford, CA: Hoover Institution, 1967.

This debate became particularly sharp in the early 1960s, and then from 1973 to 1976. In the early 1960s, a campaign was waged against those in the party who allegedly sought to protect capitalist legal rights, including copyright. In 1973–76, intellectuals were still suffering from the terror of the Cultural Revolution and its aftermath. Some leaders—especially Zhou Enlai and Deng Xiaoping—considered it important to repair the damages of the Cultural Revolution. However, the champions of the Cultural Revolution, with Mao Zedong’s support, asserted that intellectuals were not proletarians and that protection of their work would be defense of a “bourgeois right.” If the Chinese government protected intellectual property—especially books and works of art and music—and bestowed rights upon intellectuals, it would be embarking on the “capitalist road.” These champions of the Cultural Revolution were not just engaging in rhetoric. Many fervently believed these radical ideas. They enjoyed monopoly control of the media, and the shrillness of their rhetoric belied the existence of moderates in the CCP—followers of Zhou and Deng—who were dismayed by the cruel treatment of intellectuals. The bureaucracies most affected by the Cultural Revolution ideology were the CCP Propaganda Department and the government’s cultural and educational institutions. Indeed, it was in these agencies where the most intense battles, literally and figuratively, were fought from 1966 to 1976. Although Mao’s top cultural advisors lost power following his death in 1976, the cultural bureaucracies today still bear the scars of that era.

Creating an IPR Regime in the Deng Era

At a National Science Conference in the spring of 1978, with encouragement from a wide range of associates and advisors, Deng Xiaoping dramatically announced a new policy course.⁷ In the months that followed, intellectuals were recast as part of the proletariat, and property was no longer classified as a “bourgeois right.” It again became appropriate for intellectuals to enjoy rights derived from their products, since they were part of the working class. Thus the ideological basis was laid for establishment of an intellectual property rights regime. In December 1978 the State Council passed regulations to reward inventions in the P.R.C. The drafting of trademark, patent, and copyright laws soon got under way.

Within a few years, China promulgated an impressive array of laws and regulations regarding intellectual property. The government also began to create the bureaucratic infrastructure to enforce these rules and it joined various international conventions on intellectual property.⁸ China passed the Trademark Law in August 1982 (revised 1993), the Patent Law in March 1984 (revised 1993), the Copyright Law in September 1990, and the Computer Software Regulations in October 1991. In addition, the General Principles of Civil Law, adopted in April 1986, recognized the rights of individuals and legal entities to hold copyrights, patents, and trademarks. This enactment and a subsequent Civil Procedure Law passed in April 1991 enabled Chinese citizens and legal entities, as well as foreigners and foreign enterprises and organizations, to demand in Chinese courts that infringements be halted and that courts award claimants compensation for damages. In the international arena, China was accepted as a member of the Geneva-based World Intellectual Property Organization (WIPO) in April 1980. It joined the Paris Convention for the Protection of Industrial Property in December 1984 and the Berne Conven-

⁷See Richard Suttmeier, *Science, Technology, and China’s Drive for Modernization*, Stanford, CA: Hoover Institution Press, 1980; Denis Fred Simon and Merle Goldman, *Science and Technology in Post-Mao China*, Cambridge, MA: Harvard University Press, 1989, especially pp. 69–198; Denis Fred Simon, “China’s Scientists and Technologists in the Post-Mao Era,” in Merle Goldman, Timothy Cheek, and Carol Lee Hamrin, eds., *China’s Intellectuals and the State*, Cambridge, MA: Harvard University Press, 1987, especially pp. 45–64.

⁸For a summary of China’s intellectual property legislation, see State Science and Technology Commission (SSTC), *China’s Intellectual Property System*, Beijing: SSTC. See also Pitman B. Potter, *Foreign Business Law in China*, *op. cit.*, chapter 4; and Michael N. Schlesinger, “A Sleeping Giant Awakens: The Development of Intellectual Property Law in China,” *Journal of Chinese Law*, vol. 9, no. 1 (Spring 1995), pp. 93–140.

tion for the Protection of Literary and Artistic Works in October 1992. The rapidity of these developments earned widespread praise from the international community, especially from the World Intellectual Property Organization.

Establishing a Copyright Regime

Despite these developments, copyright remained a concern of China's cultural bureaucracy. The CCP Propaganda Department and the government agencies under its supervision, such as the Ministry of Culture, the Ministry of Radio and Television, and the State Press and Publications Administration (SPPA), still supervised writers, composers, artists, filmmakers, and so on.⁹ The Propaganda Department in the Deng era has retained responsibility for preserving China's ideological purity, and therefore is a natural haven for ideologues suspicious of the outside world. To be sure, many in this system are cosmopolitan thinkers who reject the narrow-mindedness of their colleagues. Yet, a primary responsibility of cultural bureaucrats is to ensure that spiritually uplifting arts thrive and that immoral works have no opportunity to be disseminated.

In this sense, the Confucian tradition that was manifest in the Nationalist era remains very much alive today. The Propaganda Department primarily seeks to control and monitor authors and publishers. The State Copyright Administration (SCA), established in 1985, was placed bureaucratically within the State Press and Publications Administration, one of the government agencies supervised by the Propaganda Department. The SCA may have been staffed by people who believed in their task—drafting a copyright law—but the new agency was operating in a broader and not entirely hospitable bureaucratic environment. The Propaganda Department's main responsibility was to buttress the CCP's call for the entire nation to support China's economic development, and, in fairness, it must be noted that many in the Propaganda Department perceived that IPR would serve this cause. The Department was not totally recalcitrant on this issue, and it has done much to disseminate information about IPR. Nonetheless, the drafting of the copyright law in the 1980s became a protracted affair that encountered much opposition.¹⁰

Drafting a copyright law specifically for the protection of computer software became an issue in the late 1980s, at the same time that the drafting and passage of the general copyright law was being hotly contested. A protracted debate was waged in China over the question of which area of intellectual property law should govern software.

Drafting the Software Copyright Law

Drafting a copyright law specifically for the protection of computer software became an issue in the late 1980s, at the same time that the drafting and passage of the general copyright law was being hotly contested. A protracted debate was waged in China over the question of which area of intellectual property law should govern software. Four different options were

⁹ For a succinct account of the censorship system for literature, see Perry Link, *Stubborn Weeds*, London: Blond and Briggs, 1983, pp. 1–28.

¹⁰ Morton David Goldberg and Jesse M. Fecher, "China's Intellectual Property Legislation," in *The China Business Review*, September–October, 1991, pp. 8–11; and Peter A. Schloss, "China's Long Awaited Copyright Law," in *The China Business Review*, September–October, 1990, pp. 24–28.

considered: (1) protection under copyright; (2) under patent; (3) under trademark; and (4) under contract law governing licensing agreements between producer and user. At the outset, according to a participant in the debate, advocates of the contending schools were relatively evenly matched, but gradually the weight shifted toward placing software protection under either copyright or patent law. According to one knowledgeable Chinese official, the drafters believed neither area of law was totally appropriate. In fact, this official explained, software and digital technologies were considered a new category of innovation, deserving a new form of protection incorporating elements of both patent and copyright law. The Chinese regulations to protect computer software were born out of this debate. In the final analysis, its language was a hybrid, drawing upon several areas of law, but primarily relying upon copyright law.

The State Council, the government body that oversees all ministries, had established a “Promotion of Electronic Industries” interagency group in the mid-1980s to coordinate and promote efforts to stimulate this industrial sector. When the State Council decided it needed a law to protect computer software property rights, it assigned the task to the coordinating group. The Ministry of Electronics Industries (MEI) was the lead agency for this working group. The head of MEI at the outset of this effort was Jiang Zemin, now the General Secretary of the CCP. His successor as minister in mid-1985 was Li Tieying. Although we do not know how deeply immersed either Jiang or Li became in the IPR software protection issue, they almost certainly gained at least an initial and superficial impression of the stakes from an MEI perspective. Li would have been more engaged than Jiang since the issue came to a head during Li’s tenure.

The staff office of the interagency working group on electronics industries was situated at MEI. The office invited participants from a large number of agencies: the Institute of Computer Sciences of the Chinese Academy of Sciences, the China Patent Office, the State Copyright Administration, the Ministry of Foreign Economic Relations and Trade (MOFERT, the predecessor of MOFTEC), the China Council for the Promotion of International Trade, academicians from the Institute of Law of the Chinese Academy of Social Sciences (CASS) and People’s University, and Ministries of AeroSpace Industry, Public Security, and Petroleum. The latter three ministries were leading consumers of computer software. Two academicians played particularly influential roles in the drafting process. Zheng Chengsi from CASS concentrated on the study of foreign software IPR protection. Guo Shoukang from People’s University was the first person in Deng-era China to study intellectual property issues and is considered the leading authority on the subject. The two officials who organized the working group activities were Yang Tianxing, director of the Computer Department at MEI, and Ying Ming, at the time the deputy general manager of the China Software Corporation. Zheng, Guo, Yang, and Ying, along with Shen Rengan from the newly formed State Copyright Administration, were the chief drafters of the software copyright regulations that were finally enacted in October 1991. The working group sent delegations to the United States, Japan, and Europe to investigate foreign practices. The Chinese were also heavily influenced by the views of IBM, which sent several delegations to China and held seminars to assist Chinese policymakers on this issue. Most of the deliberations went forward in the absence of a general copyright law, which was finally adopted in September 1990, taking effect in June 1991.

Not only was the substance of the regulations for computer software protection widely debated, but there was also vigorous discussion over which administrative agency should implement the regulations. Ordinarily in China the lead agency for drafting regulations becomes the implementing agency. That was the initial presumption regarding software copyright law and, according to a knowledgeable official, the responsibility was expected to rest with MEI.

The battle over this issue was fought for six years. Officials at MEI sought to place the mission under its jurisdiction. They argued that their ministry was responsible for development of China’s electronics industries, of which computers were a part. They felt that other possible implementing agencies lacked the requisite technical competence. And they felt that, as drafter of the regulations,

their ministry owned the issue. But officials at other ministries and institutes—especially the Petroleum Ministry and the Chinese Academy of Sciences—opposed MEI. As organizations that relied on foreign software, they feared MEI would impede access to the technologies they needed for their missions. They favored assigning responsibility to the State Copyright Administration. Foreign companies and governments also expressed their views in no uncertain terms. They feared that MEI would not protect their intellectual property and would neglect its responsibilities in favor of assisting the development of the domestic software industry, for which it was responsible. It might tolerate infringement in electronics factories under its control and from which it derived profits.

At this point, SCA did not seek responsibility for software protection. It felt it lacked the capacity to undertake the task. At the time, its allotted manpower was only 15 cadres. Further, all its energies were being consumed in the drafting of the copyright law and in launching a nationwide propaganda campaign on copyright matters. For a period in the mid- to late 1980s, the competition therefore was between MEI and the China Patent Office. The matter was complicated further by the merger for a short time of MEI with the Ministry of Machine Building. Once the 1991 copyright law was enacted (and with the software protection regulations more heavily weighted in the copyright than patent direction) the decision was made to place regulations protecting IPR for software under the SCA in the State Press and Publications Administration. At first, the software registration center was placed under MEI, but in June 1995 this was transferred to SCA as well.

Implications

We recite this history because bureaucratic politics in Beijing, as in all capitals, is an on-going process.¹¹ “Losers” in one round of a struggle lie in wait, seeking to right the balance when the opportunity presents itself. Foreigners who intrude onto this bureaucratic landscape often are not fully informed about the domestic actors and their stakes. Foreigners are embraced by those whose views and interests coincide with theirs, and thereby risk the enmity of those Chinese leaders and bureaucracies whom they perhaps unknowingly oppose. In the Chinese bureaucracy, as elsewhere, consensus agreements that offer benefits to all participants—even if unequally distributed—are more likely to elicit compliance.¹² If the arrangements are quite unsatisfactory to the “losers”—if there is no compensation or offset arrangement—they are unlikely to abide by regulations issued by the winners.

[A] brief history of the bureaucratic politics behind China’s copyright and software copyright laws and regulations prompts these conclusions. First, MEI—the ministry in charge of the producing industries—clearly lost out in the negotiations over the location of the administration of software copyrights; as a result, its bureaucrats may not feel as bound by the arrangement as the winners. Second, the winner—the State Copyright Administration—is not housed within a strong and supportive bureaucracy.

¹¹ For analysis of Chinese bureaucratic politics, see Michael Lampton, ed., *Policy Implementation in Post-Mao China*, Berkeley, CA: University of California Press, 1987. See also Kenneth Lieberthal and Michel Oksenberg, *Policy Making in China: Leaders, Structures, and Processes*, Princeton, NJ: Princeton University Press, 1989; and Kenneth Lieberthal and Michael Lampton, *Bureaucracy, Politics, and Decision Making in Post-Mao China*, Berkeley, CA: University of California Press, 1992.

¹² See Susan Shirk, *The Political Logic of Economic Reform in China*, Berkeley, CA: University of California Press, 1993, for an elaboration of this point.

Two other points are worth mentioning. First, the power and interest of a vice premier or state councilor responsible for promoting a particular issue at the Politburo and State Council levels are very important. How effectively a problem is addressed depends upon the stature of the individual and his personal interest in the issue. Typically, vice premiers and state councilors are responsible for many more policy areas than they have either the inclination or energy to track closely. Second, if a weak bureaucracy whose constituencies wield little influence is given responsibility for an issue, its administration is likely to be less effective than if it is lodged in a major revenue-producing bureaucracy whose constituencies wield great clout.

This brief history of the bureaucratic politics behind China's copyright and software copyright laws and regulations prompts these conclusions. First, MEI—the ministry in charge of the producing industries—clearly lost out in the negotiations over the location of the administration of software copyrights; as a result, its bureaucrats may not feel as bound by the arrangement as the winners. Second, the winner—the State Copyright Administration—is not housed within a strong and supportive bureaucracy. The SCA is under the authority of the State Press and Publication Administration, which suffers from not being a ministerial-level agency and not having units below the provincial level to fulfill its responsibilities.¹³ In turn, the State Press and Publication Administration is regulated by the CCP propaganda system, which means software producers are lumped together with novelists, artists, filmmakers, and composers. The same administrators are charged with protecting them all, and these administrators are part of a larger organization where many bureaucrats still view intellectuals with suspicion. And third, the top officials of this system, Ding Guang'en and Li Tieying, have not strongly identified themselves with the copyright issue. Indeed, Li headed MEI when it initially led the drafting group of the software copyright law and expected to be the implementing agency. These factors all contribute to the institutional weakness of the system for copyright protection.

China's IPR Policy Community

The many IPR laws and regulations enacted in the 1980s and 1990s, the linkages established with the outside world, the IPR policies and foreign agreements that China's leaders have adopted, and China's economic development have resulted in the creation of many agencies in Beijing and the provinces responsible for implementation of an IPR regime. Moreover, many public, semi-public, and private agencies have acquired interests in the enforcement or disregard of IPR laws and policies. And several top leaders have special responsibilities for IPR. To varying degrees, the institutional landscape in Beijing is replicated at the provincial and municipal levels. China's IPR policy community constitutes the agencies and individuals with which the outside world must cooperate if ongoing disputes are to be avoided.¹⁴

Fifteen years ago, the Chinese system was more hierarchical and disciplined than it is today. Chinese politics have never been totally monolithic. Even at the height of the Mao era, differences existed among the leaders, and bureaucracies competed for missions and resources. But during the Deng era the system has become even more complex.¹⁵ The number of actors involved in the policy process, many with autonomous sources of revenue and influence, has increased.

¹³ For a description of the SPPA, see Daniel Lynch, *The Market is the Message: The Political Economy of State Control over "Thought Work" in Reformed China*, University of Michigan PhD, 1996.

¹⁴ The concept of "policy community" originated in the study of American politics and was introduced to the study of Chinese politics by Nina Halpern. See her *Economic Specialists and the Making of China's Economic Policy, 1955–1983*, University of Michigan PhD, 1985, and "Information Flows and Policy Coordination in the Chinese Bureaucracy," in Lieberthal and Lampton, *op. cit.* pp. 125–150. See also Michel Oksenberg and Elizabeth Economy, "China: Implementation Under Economic Growth and Market Reform," in Edith Brown Weiss and Harold Jacobson, eds., *Engaging Countries: Strengthening Compliance with International Environmental Accords*, Cambridge, MA: MIT Press, forthcoming. In our study, we broaden the scope of the term to include all who become involved in the formation of IPR policy.

¹⁵ See especially Carol Lee Hamrin and Suisheng Zhao, eds., *Decision Making in Deng's China*, Armonk, NY: M.E. Sharpe, 1995.

The top leaders now have to reconcile increasingly diverse interests, as noted above. Bargaining, consensus building, and log rolling have become core features of the Chinese policy-making and implementing processes.

Thus, typical of the institutional arrangements that exist in most areas of the Chinese economy, the IPR policy community is not subject to a coherent chain of command. It consists of many diverse and only loosely integrated parts: top leaders responsible for specific bureaucracies and issues; policy-coordinating bodies; national agencies; the producing, distributing, and consuming industries; specialized publications; think tanks; IPR lawyers; and state-sponsored professional associations.

The Leadership Level

As already noted, a different cluster of top leaders is responsible for each major policy area in China: agriculture, education, energy, foreign policy, and so on. Every Politburo member, vice premier, and state councilor has a portfolio of departments, ministers, and agencies for which he or she is responsible.

Members of the Beijing IPR policy community think that for the most part the top leaders now understand the importance of IPR for China's development. . . . But none of the top leaders has unambiguously claimed IPR as an issue for which he is prepared to fight, and none of the five leaders primarily responsible for IPR is a member of the Standing Committee of the Politburo, where the highest issues of state are resolved.

In the IPR area, five leaders play crucial roles. State Councilor Song Jian is director of the State Science and Technology Commission (SSTC), whose portfolio includes the China Patent Office. Furthermore, as director of the SSTC, he heads an interagency task force on IPR, the IPR Working Conference. Song is an internationally renowned scientist and experienced science administrator. He understands computer technology and the complexities of technological change. Ren Jianxin is head of the Supreme Court and hence is responsible for the nation's courts, including the tribunals that have been established to enforce IPR laws. More importantly, as a member of the CCP Secretariat, Ren oversees the entire political-legal system—the *zhengfa kou*—that includes the Ministry of Public Security, the Procuracy, the Ministry of Justice, the Ministry of Civil Affairs, and the court system. Ren's involvement with IPR issues is long-standing. In 1973, he headed the first Chinese delegation to attend a meeting of the World Intellectual Property Organization. As the former head of the Legal Department of the Chinese Council for the Promotion of International Trade, Ren became involved in trademark issues and then extended his expertise to patents and copyrights. Vice Premier Li Lanqing, who represents the foreign trade bureaucracies in high-level deliberations, is responsible for the Trademark Office and is deputy director of the IPR Working Conference. A former minister of foreign economic relations and trade, Li understands the requisites for attracting foreign investment. Finally, in leadership discussions, Ding Guang'en and Li Tieying, because of their roles in the CCP Propaganda Department, represent the State Press and Publications Administration, and hence the SCA.

Members of the Beijing IPR policy community think that for the most part the top leaders now understand the importance of IPR for China's development. They cite remarks by General Secretary Jiang Zemin on the relationship between IPR and a creative society. They also note that China's white paper on human rights asserts that IPR is a human right. But none of the top leaders has unambiguously claimed IPR as an issue for which he is prepared to fight, and none of the five leaders primarily responsible for IPR is a member of the Standing Committee of the Politburo, where the highest issues of state are resolved.

The IPR Working Conference

As in other policy areas, the large number of agencies involved in IPR in Beijing produces problems of coordination. Until recently, the standard Chinese political response to problems of insufficient national attention, inadequate coordination, and failures in policy implementation has been to create a "leadership small group" headed by a vice premier to give prominence to the issue.¹⁶ These interagency task forces maintain a staff office located in the agency that has the greatest responsibility for the problem at hand and they have considerable authority to set policy guidelines and resolve interagency disputes. The creation of such a group indicates the primacy that the top leaders attach to a given issue. Throughout the 1980s, such groups proliferated.

In 1988 an IPR leadership small group was established, but it apparently was downgraded in the early 1990s as part of an effort to reduce the number and prominence of such groups. By 1994 the need for such a coordinating office was again evident, especially in light of mounting foreign complaints, led by the United States. A "working conference" (*bangong huiyi*) was established for IPR, embodying an organizational designation that was appearing with increasing frequency in Beijing as a substitute for the previous leadership small groups. The IPR Working Conference office may eventually acquire the same authority and stature as a leadership small group. The IPR Working Conference is composed of representatives of the State Science and Technology Commission; the Ministry of Foreign Trade and Economic Cooperation; the Ministry of Culture; the Ministry of Broadcast, Film, and Television; the Ministry of Justice; the Ministry of Public Security; the Customs Bureau; the State Administration for Industry and Commerce; the national patent, trademark, and copyright offices; and other relevant agencies. The IPR Working Conference was placed in the State Science and Technology Commission under the leadership of State Councilor Song Jian. Its initial organization chart calls for ten personnel, drawn from the SSTC staff. Perhaps indicative of the priority that SSTC gives to this agency, only five people had been assigned to it by late 1995. Its responsibilities clearly exceed its manpower allotment, but to circumvent this problem it has created an Intellectual Property Affairs Center under its jurisdiction. This center is an "undertaking" (*shiye*) in the Chinese lexicon, which means it can receive foreign funds and earn revenue through entrepreneurial activity. With the money it raises it can hire personnel. It has received seed money from SSTC and wishes to commence activity. Organizations similar to the IPR Working Conference are to be established within provincial Science and Technology Commissions to spearhead IPR work at the provincial levels. The personnel and funding for these agencies must be provided by the province.

In three respects, the IPR Working Conference's authority is limited. First, its staff is drawn directly from the agency in which it is housed. Second, its reduced stature makes it more difficult to secure attendance at meetings it convenes. Third, it cannot issue a regulation on its own but instead can only draft circulars (*tongzhi*) that member agencies then issue but that agencies of equal rank can disregard. Thus, precisely when the IPR computer software issue has come to the fore in U.S.-China relations, a crucial ingredient seems lacking: a strong, high-level coordinating agency.

¹⁶ Carol Lee Hamrin, "The Party Leadership System," in Lieberthal and Lampton, *op. cit.*, pp. 95-124.

The Administrative Agencies

Institutionally, by 1995 three agencies existed to implement the major IPR laws and regulations: the previously mentioned State Copyright Administration, with an authorized staff in Beijing of 35 people organized into six bureaus and housed within the SPPA; the China Patent Office, an independent agency with over one thousand employees in 18 departments; and the Trademark Office, which is under the State Administration of Industry and Commerce (SAIC). Applications for protection of IPR in pharmaceuticals and agricultural chemicals must be filed with the State Pharmaceutical Administration's China Huake Pharmaceutical Intellectual Property Consultation Center.

The Software Registration Center in Beijing administers the registration of computer software protected by copyright. It has ten people on its staff, although it has no formal manpower allotment. Chinese officials claim its procedures are the same as the United States Software Office. It has no branches at present at the provincial level, posing difficulties for registration outside Beijing, but it plans to open local offices. Originally placed under the Ministry of Electronics Industries, the Software Registration Center was transferred to the State Copyright Administration in June 1995 as a result of the State Council decision to vest administration of copyright under one authority. The restructuring of lines of responsibility also reportedly put an end to the "monopoly" of software copyright management, which the MEI held as both a producer and regulator of computer software. As noted earlier, this dual role had given rise to conflicts of interest. Enterprises under the regulatory jurisdiction of the MEI sometimes had key enterprise personnel in official positions within the MEI, or these enterprises transferred portions of their profits to the MEI. For example, the New Star Electronics Company, which passed 20 percent of its profits to the MEI and whose president held the post of a departmental director in the MEI, reportedly sold large quantities of pirated video games.

Six other agencies have important enforcement responsibilities: (1) the Ministry of Public Security (MPS) arrests violators of the law and accumulates evidence against alleged criminals; (2) the People's Procuracy receives cases from the MPS and brings cases to court; (3) the courts and especially their recently created intellectual property tribunals at national and provincial levels hear complaints of infringement and can impose fines and imprisonment; (4) the Culture Market Management sections within the Ministry of Culture are responsible for inspecting all retail and wholesale outlets selling cultural commodities (books, records, videotapes, CDs, paintings), for removing offending materials, and for fining the violators;¹⁷ (5) the State Administration of Industry and Commerce licenses corporations to do business and therefore can withdraw licenses from IPR infringers; and (6) the Customs Administration has authority to intercept and halt the export or import of pirated products at China's border.

In addition, the Legislative Bureau of the State Council plays a pivotal role in the legislative drafting process. The National People's Congress and its Standing Committee have played a major role in delaying and amending IPR legislation. The Ministry of Foreign Trade and Economic Cooperation negotiates IPR issues with foreign countries. Academics at CASS Law Institute and in the Law Departments at People's University and Beijing University have become IPR specialists. Chinese lawyers have begun to specialize in IPR law and have IPR clients; plaintiffs can seek remedies for infringement of their patents, trademarks, or copyrights in the intellectual property tribunals.

¹⁷ For a general discussion of the management of the cultural market, see Daniel Lynch, *The Market Is the Message*, *op. cit.*, pp. 397-411.

The implementing agencies and mechanisms are varied, complex, and potentially sophisticated. The institutional arrangements are now sufficiently elaborate and differentiated that they offer both Chinese and foreign parties choices in the means of enforcement and redress. Simply stated, violations of China's IPR laws can be remedied either through administrative action or through the courts.

The implementing agencies and mechanisms are varied, complex, and potentially sophisticated. The institutional arrangements are now sufficiently elaborate and differentiated that they offer both Chinese and foreign parties choices in the means of enforcement and redress. Simply stated, violations of China's IPR laws can be remedied either through administrative action or through the courts. And the courts can assess damages based on the harm that the infringement has done to society or to the individual owning the intellectual property. Both administrative and legal-judicial mechanisms are now fundamental to the development of China's IPR agencies.

The administrative solutions rest in the hands of the Ministry of Public Security, the Culture Market Management section of the Ministry of Culture, and the State Administration of Industry and Commerce. These agencies are able swiftly to end IPR violations through withdrawal of licenses, steep fines, disruption of business, and even coerced confessions. This year, for example, as a result of pressure from the United States, the Ministry of Public Security targeted IPR violations in its annual campaign to "strike at serious crimes." This campaign rounds up suspects, leads to swift trials, and ends with public sentencing and executions of those criminals found guilty of capital crimes. The quality of justice achieved via this method of law enforcement has been criticized by human rights organizations outside China.

An IPR regime in China that relies on these types of public-punitive instruments is not only vulnerable to corruption and arbitrariness but also creates, unwittingly, a competitive system for fines and fees. By generating substantial fines and fees for cash-hungry government offices, punitive measures create strong economic incentives for different legal and administrative agencies to see that violations, and hence the problem itself, continue. Public-punitive methods are also subject to the capricious personal commands of top Chinese Communist Party officials, and they undermine the development of private law, especially in the areas of property and contract.

The other, contrasting, recourse is to strengthen the role of private-compensatory remedies for victims of IPR infringement. Use of this mechanism, in theory, is preferable since its exercise would strengthen the rule of private law and the links between IPR enforcement and market forces. At present, however, this alternative is problematic. The laws are in place, but the institutions and norms are weak, and the lawyers and judges are too few and as yet not well-trained. Special IPR tribunals at lower levels have approached IPR cases primarily from the vantage of protecting the state and enforcing the public interest, rather than assessing and awarding damages to private parties. In the West, particularly the United States, the remedy in IPR cases is to compensate the plaintiff or injured party. In China, the tendency has been for the tribunals to evaluate the damage done to society. The result is that the fines imposed on violators typically are far less than the financial damage to the injured party.

The current institutional arrangements present injured parties with a Hobson's choice: to rely on administrative procedures activated by political intervention at higher levels, offering short-term solutions of little relevance to the injured party; or to rely on a judicial system whose capacity to provide remedies is inadequate. A preferable alternative would be a system that focuses on

compensating injured parties for the losses suffered as a result of infringement of intellectual property rights. An approach of augmenting public and punitive remedies, such as fines and criminal sanctions, with a private compensation regime could usefully be adopted in both China's administrative and judicial systems. Administrative agencies, while primarily concerned with public law administration, could still become more attuned to compensating victims rather than punishing violators. And while the court system is plagued with problems of inadequate funding, lack of trained staff, and insufficient political clout for enforcing judgments, the intellectual property tribunals that are being established within the courts could be effective over the long run as a source of private compensatory remedies.

Producers and Consumers

Domestic producers and consumers of licensed products in China have grown enormously, including domestic software and other hi-tech firms that have intellectual property to protect.¹⁸ However, a number of these firms have been found to have infringed upon the intellectual property rights of their foreign as well as domestic competitors. Domestically, Zhuai Electronic Technology Development Co. was found liable of software infringement against the East Computer Institute in the People's Court in Beijing's Haidian District. The court granted the largest damage award for software infringement up to that time, approximately \$36,200, in favor of the East Computer Institute. The Washington, D.C.-based Business Software Alliance (BSA), on behalf of Autodesk Inc., the Microsoft Corporation, and Novell and the WordPerfect Applications Group, recently obtained a ruling against Juren Computer Co. in the Intellectual Property Rights Chamber of the Beijing Intermediate People's Court, with damages assessed at \$69,600.¹⁹

Consumers of protected goods are also part of the IPR community. We have already noted the influence of ministries that use large amounts of software, such as the Petroleum Ministry and the Ministry of Public Security, in the drafting of the software copyright law. The largest single consumers of intellectual property—especially software—are governmental units.²⁰ While the Chinese government is not a highly coordinated single entity, the various agencies of the government obtain their software from highly organized distribution systems. For example, in Sichuan province and especially in the Chongqing municipality, government units that require software seek to obtain it from a local branch of a national software company that is a subsidiary of Beijing University. This company sells software packages that it has developed. If the unit finds the Beijing University outfit does not have a product to meet its needs, it contacts foreign distributors who have established outlets in Beijing. In rural Shandong province, where personal computers and mini-computers are spreading rapidly, government agencies obtain their software from parent agencies in the provincial capital. Thus, the county Foreign Affairs Bureau secures software for its new computers from the Foreign Affairs Office of the Shandong provincial government, while the county Statistical Bureau gets its packages from the provincial Statistical Bureau.

Associations, Publications, Conferences, and Training Institutes

Government-encouraged associations and government-registered trade associations with natural interests in IPR issues are also being formed in Beijing. The China Software Alliance (CSA), for example, is a Beijing-based organization formed in March 1995 to promote the protection of IPR in computer software. The main tasks of the CSA are the advancement of public awareness of IPR in computer software and close cooperation with state policymaking, administrative, law enforcement, and judiciary organs to combat piracy.

¹⁸ A partial listing of them appears in the appendix: "The Emerging IPR Policy Community in China."

¹⁹ *IP Asia*, June 1996, p. 26.

²⁰ The distribution system of software within Chinese government organs merits study. For an initial survey, see Adam Goff, "Chinese Intellectual Property Rights Protection and Market Potential: The Case of the Government Software Market," *NBR Executive Insight*, Seattle, WA, The National Bureau of Asian Research (Spring 1995).

Two other associations and their activities merit special mention. The China Intellectual Property Association (CIPA) claims to have thousands of members in branches throughout China. It holds an annual meeting attended by two to three hundred delegates from throughout China, as well as by foreign experts (including representatives of the United States Patent and Trademark Office). The CIPA now has extensive contact, including exchanges, with the Taiwan Intellectual Property Association. Gao Lulin, the energetic and capable head of the Patent Office, is a director of CIPA. The Copyright Society of China (CSC), closely linked to the State Copyright Administration, also convenes meetings and initiates research. The associations, in conjunction with their parent bodies, hold frequent international as well as national meetings. For example, the SCA has held 20 copyright conferences since 1992, including ten with international participation. One such meeting was organized in Kunming and brought copyright specialists from twelve East and Southeast Asian countries on behalf of the World Intellectual Property Organization, while another meeting, also organized on behalf of the WIPO, was devoted exclusively to the impact of digital technology on the intellectual property law.

In the training area, the State Council is establishing a China Intellectual Property Center (CIPC), under the supervision of the China Patent Office. Its purpose will be to provide training in patent, copyright, and trademark law to judges, lawyers, customs officials, public security personnel, and other officials from both the national and local levels. CIPC already has professors of law at foreign law schools who serve as advisors and honorary faculty.

Encouraged by the government, publications devoted to IPR issues are proliferating. The China Patent Office publishes the *China Patent News* twice a week and plans to publish a special newspaper devoted to intellectual property issues more generally. Finally, two Chinese-language journals are noteworthy. *Zhuzuo quan* (Copyright) is published by the CSC and SCA. Its editor-in-chief is the talented and articulate Shen Rengan, the head of the SCA. This journal chronicles legal developments and meetings, and reprints important speeches and articles by top officials. *Zhishi Chanquan* (Intellectual Property) is jointly published by the CIPA, the Chinese branch of the International Protection of Industrial Property Association, and the China Association of Export License and Trade Workers.

Thus a policy community has emerged, especially in Beijing and Shanghai, that is concerned with and knowledgeable about IPR. Some bureaucrats favor IPR and are responsible for enforcing it. Others benefit from infringement and seek to block development of an IPR regime in China. The bureaucratic landscape has clearly changed over the last decade. Major bureaucracies responsible for intellectual property have been created. Linkages with the external world have been forged. Many in the IPR policy community have traveled abroad, have attended IPR seminars in Beijing convened by foreigners, and maintain regular contact with the growing international community in China. For example, China now is represented in the Geneva office of the World Intellectual Property Organization by a former student at the Stanford University Law School. Other top officials have studied elsewhere. Foreign lawyers routinely lecture in China.

Taiwan has played a particularly significant role in the developing IPR policy community in China. Taipei lawyers have been active in educating Chinese officials about the importance of IPR. However, as Taiwan has sought to clean up its own sorry IPR record, many of its violators have shifted their operations to the mainland, particularly to the southern provinces.²¹ As a result, some Chinese manufacturers are in business with the help of long-time, skilled IPR violators from Taiwan and Hong Kong. The impact, both negative and positive, of Taiwan and Hong Kong on Chinese understanding and implementation of IPR would be difficult to exaggerate.

²¹ For a discussion of the Taiwan linkage, see Daniel Lynch, *The Market Is the Message*, *op. cit.*, pp. 326–329.

Policy communities exist in Beijing and Shanghai that understand and are committed to IPR. Similar communities do not exist on the same scale in other cities.

The Provinces

The situation in China's provinces does not mirror the situation in Beijing and Shanghai. China specialists today note the growing income disparities between the coastal and the inland provinces. Perhaps as significant is the widening intellectual gap between Beijing and Shanghai on the one hand, and provincial capitals on the other. Policy communities exist in Beijing and Shanghai that understand and are committed to IPR. Similar communities do not exist on the same scale in other cities. (Discrepancies exist in many other issue areas as well, such as environmental protection, international relations, and economics.) Beijing and Shanghai have become part of the international regimes in these areas, while provincial capitals have yet to be drawn into the web. The intellectual and bureaucratic gap on IPR matters between Beijing and the provinces is a major factor impeding effective IPR protection at the local level.

Indeed, much more than a gap in understanding separates officialdom in Beijing and Shanghai from the provinces. Local officials are under enormous pressure from above and below to achieve rapid economic development. They must attempt to meet demands for employment by the growing numbers of urban residents. They must expand their sources of revenue in order to finance the "unfunded mandates" that cascade upon them from Beijing. They have great incentive to permit joint ventures to operate in their localities, especially if the enterprises earn foreign currency. And to curry favor with high officials in Beijing, they welcome family members of these officials to operate businesses in their locale. Thus, despite the regulatory climate in Beijing, the gains many local officials secure from allowing IPR-infringing manufacturers to operate in their territory outweigh the risks and costs of closing these operations, especially in those locales where there is no indigenous IPR to protect. Key to improving IPR protection in China, therefore, is changing the incentive structure at the local level.

American Computer Industry Perceptions of IPR Enforcement in China²²

In general, U.S. computer hardware and software companies operating in China strongly disapprove of intellectual property violations in the P.R.C. However, a series of interviews with representatives of U.S. computer companies revealed widely varied corporate perceptions as to both the actual level of intellectual property rights protection offered in China and the degree to which the current IPR regime affected the company's activities in China. In general, industry perceptions of the status of China's IPR regime are a function of a company's mission, product line, and China strategy. For example, companies that predominantly produce hardware products and non-personal computer software products (i.e., products designed for use in larger, more powerful computers by technically trained users in a large-scale corporate or government environment) generally perceive themselves as less vulnerable to ineffective IPR protection than companies that produce easily copied PC software for Chinese small-office or home users.

Observers at most companies concede that China's IPR regime has improved in recent years (admittedly from a low baseline), although most of the company representatives interviewed

²² This section summarizes a series of interviews with representatives from major U.S. computer hardware and software companies that conduct significant business with and have business operations in the People's Republic of China.

were too unfamiliar with the IPR regimes in other areas of the world (especially outside of Asia) to offer many comparative examples. A marketing executive at one large software company did claim, however, that in 1993 Italy was a weaker protector of IPR than China. A Hong Kong-based executive at another firm, who has worked in Asia for ten years, suggested that of all Asia, Singapore and Hong Kong should be regarded as having the most favorable IPR regimes and Indonesia the worst—possibly joined by China. Some companies view China as one of the world's leading violators—especially in the area of software.²³

Not only do perceptions of China's IPR regime vary from company to company, but there are a great many variations within companies as well. Generally, two variables seem to play a major role in determining a company representative's view of China's IPR record: occupation (e.g., marketing executive, general counsel, government relations, etc.) and location (e.g., Beijing, Hong Kong, United States). Marketing executives tend to perceive IPR protection as yet another marketing challenge to overcome, whereas IPR attorneys are likely to view IPR protection from a more focused, legal perspective. And government relations personnel tend to look at IPR as part of a host government's domestic industrial regulatory system, which is most effectively modified through bilateral or multilateral government negotiations, with the private corporations assuming an indirect, advisory role. Furthermore, those interviewees based in the P.R.C. tend to be much more sensitive to local exigencies than do those based in regional or corporate headquarters. As might be expected, China's IPR regime often appears differently from afar than it does up close.

Industry Concerns

In the immediate and short term, the most pressing concern for software companies is the rampant piracy of software, which takes many forms, ranging from the unlicensed copying of software onto diskettes and PC hard drives for domestic use, to the copying of software onto CD-ROMs for export to markets such as Hong Kong and Europe. The Business Software Alliance, a nonprofit trade organization representing major U.S.-based software publishers, estimates that China's "piracy rate" (the ratio of pirated, unlicensed copies of software programs to licensed ones) is as high as 98 percent. In other words, for every two legally sold copies in the Chinese marketplace, there are 98 unlicensed copies.²⁴ The unlicensed copying onto CD-ROMs for sale abroad expands the industry's concerns over domestic piracy. Some 80 software programs—with a retail value of around US \$18,000 or so—can be copied onto one CD-ROM that retails on the streets of Hong Kong for the equivalent of US \$5.00.²⁵

In contrast, most hardware companies do not report significant patent infringement concerns, though some complain about annoying trademark violations. One company representative attributed some trademark problems to the activities of "a couple of Mom and Pop companies in central China" and claimed that cost-effectiveness—more than any other factor—determines whether or not his company considers a trademark violation worth doing something about.²⁶ Other hardware companies report similar, nuisance complaints.²⁷ While it is possible that in the

²³ Interview with the Hong Kong-based legal counsel of a small software company; interviews with various U.S. and Hong Kong-based attorneys from a large software company; and discussions with officials from the Business Software Alliance (BSA) and the Software Publishers' Association (SPA). Interview with the Tokyo-based legal counsel of a large computer company. Several other U.S. computer companies known primarily, but not exclusively, for their hardware products, echoed these perceptions.

²⁴ From communication with BSA representatives, including an interview with a current BSA vice president.

²⁵ Interview with the Hong Kong-based legal counsel of a small software company; and interviews with a Hong Kong-based attorney for a large computer company. Incidentally, the latter was quick to point out that his company stood—on average—to be harmed by the illegal copying of only 2 of those 80 programs.

²⁶ Interviews with a Hong Kong-based attorney for a large computer company, and with the Tokyo-based assistant general counsel of a large computer company.

²⁷ Interviews with two Hong Kong-based attorneys for two large computer companies.

future growing trademark violations or patent infringement cases may heighten concerns among hardware companies active in China, at present such appears not to be the case.²⁸

From the perspectives of representatives of U.S. companies involved in the computer industry and operating in the P.R.C. during 1994–96, the major, long-term industry concerns can be summarized as follows:

- inadequate IPR laws on the books;
- inadequate and highly expensive enforcement of existing laws;
- lack of P.R.C. cooperation and lack of transparent Chinese administrative and judicial procedures;
- local economic interests that often outweigh IPR considerations;
- lack of IPR awareness and education among the Chinese population as a whole;
- lack of IPR training and experience among judicial and administrative IPR enforcement personnel.

Industry “Coping Strategies”

U.S. companies attempt to use every means at their disposal to cope with short-term and long-term IPR concerns. Strategies include assisting government organizations to develop their own computer resources, forming strategic partnerships with Chinese firms, and helping universities and institutes to develop China’s technology base. Some companies pursue “bundling” strategies that are designed to reduce the losses from software piracy by transferring the exposure to hardware resellers, who load the software in the hard drives of the PCs they sell to Chinese customers.

All U.S. companies surveyed believe that China’s IPR regime will improve over time. Some companies even have internal timetables. Consequently, most of the company representatives interviewed consider investment in IPR awareness, training, and education to be a major part of their company’s long-term “coping strategy.”

One large U.S. hardware company concurrently cultivates administrative support from local offices of the State Administration of Industry and Commerce across China; pursues selective judicial relief; and tries to increase IPR awareness through education of its dealers as well as the general public. In one innovative attempt to raise public awareness of IPR (and promote computer usage), a leading software firm has teamed up with a hardware manufacturer to sponsor a weekly television sitcom.

All U.S. companies surveyed believe that China’s IPR regime will improve over time. Some companies even have internal timetables.²⁹ Consequently, most of the company representatives

²⁸ A Hong Kong-based attorney from a large computer company reports that his company is aware of the practice of “marking” chips (removing the original semiconductor chip speed indicator—in megahertz—and replacing it with a “faster” counterfeit one), but has not devoted any resources to follow up on this concern. Many American hardware companies reported that currently it is simply not cost-effective for their companies to pursue IPR violations with alleged P.R.C. offenders.

²⁹ Interview with a representative of a large software company (the most optimistic company representative interviewed), who believes that by the turn of the century China is likely to develop an IPR regime that measures up to world standards. Other company responses varied from “no definite timetable” to “international standards are simply not that stringent” (this last quotation is from an interview with the Hong Kong-based legal counsel of a small software company).

interviewed consider investment in IPR awareness, training, and education to be a major part of their company's long-term "coping strategy." Yet while certain IPR coping strategies might work for some companies—especially hardware companies and large companies with sufficient resources—other companies find IPR problems virtually insurmountable. Some U.S. companies prefer to limit their presence in China precisely because their IPR concerns greatly affect their bottom lines. Financial managers debate with marketing managers over how long a company can justify a major presence in a market that generates practically no short-term revenue while bringing hefty expenses.

Some of these companies believe that participation in trade associations such as the Business Software Alliance can increase their bargaining power vis-à-vis the IPR-related agencies in China, and can provide an effective and unified voice to communicate their interests to the U.S. government. The consensus view appears to be that the single most important office in the U.S. government for IPR concerns is the U.S. Trade Representative. Accordingly, the coping strategies of some firms include regular communication with the USTR in an effort to maintain pressure on China to improve its overall IPR regime. Based on the interviews conducted, there does not appear to be a corporate consensus on the proper level of pressure that the USTR should apply. Some companies argue that considerable pressure is necessary to effect positive changes in China's IPR regime, whereas others claim that too heavy a hand is likely to discourage the Chinese leadership from cooperating on IPR issues. In general, the companies with the most to win from the development of an effective Chinese IPR regime—primarily PC software publishers—tend to be the most avid supporters of the use of pressure.

Prospects

American computer companies become attracted to China for two primary reasons: off-shore production opportunities that take advantage of China's relatively low-cost structure and competitive tax advantages for export-oriented companies; and the hope of gaining access to the world's potentially largest and still relatively untapped market for computer hardware and software. While corporate concerns over IPR in China clearly influence investment decisions regarding the establishment of *hardware* manufacturing facilities in China, those same concerns appear to be even greater in the boardrooms of *software* publishers, who hope someday to sell their products to the country with "ten billion fingers" for entering data on computer keyboards.

There is a feeling among many in the U.S. computer industry that in the short-term, complicated internal political problems in Beijing coupled with equally complex political-economic interrelationships at the local level will probably lead to incremental, as opposed to dramatic, improvements in IPR protection. Nevertheless, even the harshest critics of China's IPR regime grudgingly give China a modicum of credit for making some improvements.

China—despite recent pledges to USTR—has proven reluctant (for non-IPR-related reasons) to grant unrestricted market access to foreign computer companies. Some foreign companies believe that in the short term the Chinese government is likely to "blackmail" foreign computer companies into accepting market access gains in exchange for fewer genuine improvements in IPR enforcement. There is a feeling among many in the U.S. computer industry that in the short-

term, complicated internal political problems in Beijing coupled with equally complex political-economic interrelationships at the local level will probably lead to incremental, as opposed to dramatic, improvements in IPR protection. Nevertheless, even the harshest critics of China's IPR regime grudgingly give China a modicum of credit for making some improvements. For example, one well-informed and experienced IPR attorney reported that while China deserved the grade of "F" in 1994 for its IPR regime, its grade in 1995 would be a "D."³⁰

With few exceptions, American computer companies expect major improvements in China's IPR regime over the long term. Growing IPR awareness, training, and education will certainly help, as will the growing level of IPR-related experience among P.R.C. administrative and judicial bodies. There also appears to be a consensus that major IPR improvements will occur only when the Chinese government perceives them to be in its self-interest. American computer firms believe there are three general directions from which future pressure for IPR improvements will emanate: (1) from the growing perception among China's leaders and influential Chinese "opinion makers" of the vital linkage between improved IPR protection and economic development; (2) from foreign pressure on China to accept genuine international standards of IPR protection; and (3) from domestic software developers and representatives of the domestic computer industry in China.

Summary and Policy Recommendations

Several preliminary conclusions emerge concerning obstacles to IPR enforcement in China and possible constructive measures to foster improvements in China's IPR system. These are set forth in summary form below:

Cultural and Historical Factors

While reference to Chinese cultural and historical considerations can be overstated and become a convenient excuse for shortcomings in the IPR realm, they unquestionably inhibit effective implementation, especially in the copyright area. For reasons of ideology and history, the copyright and software copyright administrations are in the domain of the Propaganda Department of the CCP. To install an effective copyright regime, the Propaganda Department must be convinced that IPR will contribute to a flowering of Chinese culture and creativity. Acceptance of the IPR regime also involves changing existing popular attitudes, many of which derive from lingering traditional views that learning occurs through emulation and copying and from Marxist-Maoist views that private property is a "bourgeois right" not to be protected in a socialist state. Finally, historical and cultural factors often affect the ways in which local officials weigh IPR when balancing economic and political interests and objectives. Thus, when other factors are roughly in balance, such as when local officials are attempting to satisfy local economic and political priorities while still complying with central directives, cultural and historical attitudes about IPR will tend to tilt the balance away from IPR protection.

Leadership Issues

The top leaders seem to recognize that protection of IPR is in China's long-term economic interests. That IPR, innovation, and economic development are linked now seems to be a fairly widely held belief. But none of the five top officials responsible for IPR sits on the Politburo Standing Committee, and no one on the Standing Committee has become identified with the issue—as Li Peng has clearly been with the Three Gorges Dam or Deng Xiaoping with China's

³⁰ Interviews with the Hong Kong-based legal counsel of a small software company, and with a current BSA vice president.

special economic zones. These examples help explain the reluctance of the highest leaders to give top priority to IPR. Unlike the Three Gorges project or the special economic zones, it lacks strong supportive constituencies. And advocacy of IPR is seen as yielding to foreign pressure.

Bureaucratic Factors

We have identified three major issues. First, in Chinese bureaucratic politics, it is always wise to neutralize a loser. That has not been done for IPR, where the Ministry of Electronics Industries lost out in a struggle over authority for the copyright system for computer software and was not compensated to offset its loss. Second, the new interagency IPR Working Conference is weak. It appears to be a thin reed on which to base efforts to strengthen IPR enforcement and is likely to remain so absent a significant injection of resources and prestige. Third, the choice between public-punitive instruments and private-compensatory mechanisms for protecting intellectual property presents an evolving challenge. Giving the legal system that is now in place time to mature and develop—for norms to change and for the human resources to be trained—is the best way to implement an IPR regime.

The greatest problems for effective protection of IPR reside at the local level. . . . In addition to the direct economic benefits flowing to local officials who have relations with local enterprises, the political evaluation of these cadres places a premium on economic growth and employment, rather than—and in most instances in contradiction to—protection of IPR.

Local Levels

The greatest problems for effective protection of IPR reside at the local level. Short-term economic and political interests often move leaders in many localities to tolerate or encourage IPR infringement. Moreover, it is fairly obvious that the central government cannot tightly control all activities at the local levels. Simply put, unless the nation's highest leaders have unambiguously made IPR a priority issue, central directives on IPR enforcement have insufficient impact on many local officials, whose political and economic interests are linked more closely with the success of local enterprises than with the central government. In addition to the direct economic benefits flowing to local officials who have relations with local enterprises, the political evaluation of these cadres places a premium on economic growth and employment, rather than—and in most instances in contradiction to—protection of IPR. Sporadic punishment and even harsh sanctions are unlikely to change this calculus in the near term. Rather, recasting incentives, effecting attitudinal change, and adjusting structures (in budgeting and personnel management) will be necessary to improve IPR protection at the local level.

IPR Policy Communities

Gradually, policy communities supportive and understanding of IPR are arising on the Chinese landscape, particularly in Beijing and Shanghai. In effect, constituencies who stand to gain from IPR are beginning to appear and influence public policy. But their strength is relatively weak, especially in such provinces as Fujian, Guangdong, and Hunan, precisely the regions where the countervailing factors that constrain protection of IPR are particularly strong.

Providing incentives to some of the current infringers, such as through licensing agreements to manufacture and retail CDs within China at less than world price, would strengthen the supporters of IPR protection.

The Role of Foreign Pressure

Virtually all Chinese sources admit that foreign pressure has resulted in various MOUs, influenced institutional development, and resulted in some improved compliance. None of this would have occurred without foreign, especially American, demands. But the external pressure has tended to obscure the connection between China's own economic interests and the protection of IPR. Basically sympathetic Chinese administrators wonder whether their efforts to enforce IPR are undermined by the impression that this is a foreign-driven initiative. Regardless of how much effort foreign governments and enterprises devote to improving understanding and increasing resources for IPR enforcement, unless the effort is seen as indigenous, obstacles to effective IPR enforcement will remain.

The outside world, and particularly the United States, should not lose sight of the progress that China has made in establishing an IPR regime nor underestimate the many obstacles that were overcome in establishing such a regime.

Policy Recommendations

The purpose of this paper was not to wade into the middle of the immediate IPR controversy—which has been alleviated at least temporarily by the June 1996 Sino-American agreement—but rather to illuminate the broader issues and to offer some suggestions to alleviate the problem over the long run. Our excursion into this important issue in China's economic relations with the outside world, however, does lead to a number of conclusions with policy relevance.

- The outside world, and particularly the United States, should not lose sight of the progress that China has made in establishing an IPR regime nor underestimate the many obstacles that were overcome in establishing such a regime. Failure to acknowledge the progress and difficulties creates a perception in China of foreign arrogance.
- At the same time, it is very important for the Chinese side, and particularly its IPR negotiators, not to make false claims of success in implementing agreements. Nor should the Chinese side exaggerate the difficulties they confront. Failure to be candid creates an impression among the outside world of Chinese duplicity and evasion.
- The agreements that are reached should be realistic and have mileposts by which to measure success. Neither side should make commitments that cannot be met. Foreign negotiators should informally assure themselves that their Chinese counterparts have obtained a working consensus within the Beijing bureaucracy in support of agreements and that a strategy exists on the Chinese side to handle recalcitrant opponents. Chinese negotiators should similarly leave the table assured that their foreign partners have the resources to meet the commitments they have made and have a clear sense of the Chinese performance levels that would satisfy foreign negotiators' constituencies.

- Agreements should not be excessively ballyhooed. Expectations must be kept realistic. The IPR problem is going to exist for a long time. Nonetheless, both sides must recognize that they will be held responsible for the commitments they make.
- Above all, it is imperative to develop a long-term strategy for improving IPR performance in China. And this entails addressing all the challenges noted in this study: (1) fostering new attitudes about IPR among the leaders, bureaucrats, and the populace at large; (2) conveying the understanding and resolve of the top leaders to their subordinates; (3) strengthening the legal and administrative regimes, especially at the provincial levels; (4) providing the recalcitrant agencies a stake in IPR; and (5) altering the balance between the pro- and anti-IPR communities at the local levels. The environment of local leaders and enforcement agencies must be changed so that the balance of incentives and disincentives for adherence to the nationally prescribed IPR regime decisively tilts in favor of compliance. We favor long-term remedies and look askance at the short-term gains secured, for example, by welcoming inclusion of IPR enforcement in the Ministry of Public Security's annual "strike at serious crimes" campaign. We encourage efforts to replace or at least augment the public-punitive enforcement regime with one emphasizing private-compensatory remedies.

In short, we recommend that the outside world and China join in a cooperative effort to build the norms—the attitudes, institutions, trained personnel, and behavioral patterns—that would voluntarily sustain an IPR regime.³¹ We recommend that foreign corporations actively support such an endeavor.

Several Chinese officials have recommended some specific measures for improving IPR in China. They note that it is important to address IPR concerns where they originate: in the capabilities of local and national IPR administrative agencies; and in the incentives to protect IPR available to those agencies, China's leadership, and the populace. Both capabilities and incentives can be addressed through a program that highlights the benefits for China arising from better protection of intellectual property rights. Those benefits include better prospects for long-term, sustainable economic development through measures to encourage a more creative and innovative society—a society that rewards its entrepreneurs. In no industry will this be more important than in information technologies. To highlight these benefits we recommend the following measures:

Annual National Conference An annual IPR conference, logically convened by the State Science and Technology Commission's IPR Working Conference, would be a useful exercise. With attendant publicity, such meetings would keep IPR matters at the forefront of the policy discourse. The CCP Propaganda Department could play an important role in disseminating information about this conference. If China's top leaders addressed the meeting, they would communicate their commitment to IPR and their identity with the issue. Conferences should focus on such issues as the role of creativity and innovation in Chinese society and its implications for economic development, or deal with a specific policy issue. And preparatory workshops should be held at provincial levels prior to the conference.

In addition to exploring the relationship between IPR, creativity and innovation, and economic development, conferences and local workshops could address how to provide economic incentives for enterprises that have little in the way of proprietary technology to encourage them

³¹ Melanie Manion has thoughtfully analyzed the issue of norm-building in Chinese society in her study of the introduction of a system of retirement in the civil service. See her *Retirement of Revolutionaries in China: Public Policies, Social Norms, Private Interests*, Princeton, NJ: Princeton University Press, 1993.

to respect the property rights of other Chinese firms or foreign firms. The distribution of Chinese state-owned technology to specific state enterprises should be explored. As enterprises are privatized, this distributed technology would form part of the asset base and might provide at least partial incentive to protect IPR. Policy work in this area would entail linkages with the State Asset Management Bureau as well as the Committee on Restructuring the Economy, and might build a linkage between IPR and ongoing efforts at Chinese enterprise reform. Informed observers note that many local officials are quite pragmatic in assessing the potential impact that IPR enforcement (and non-enforcement) have on continuing foreign investment and technology transfer.

Participants in the conference should include representatives from each of the regulatory agencies, as well as representatives from the State Economic and Planning Commissions and the industrial, commercial, and communications ministries. In addition, state, collective, and private-enterprise sectors from throughout China should be well represented. While there are sound reasons for holding a national conference in Beijing, since this is where the national regulatory agencies are located, it would be important to consider having the meeting at a location such as Shanghai, where regulatory and business activities are equally well represented.

Local Workshops Since the main problems exist at the local level, more intensive, sustained efforts at IPR-norm building must also occur in the provinces in order to complement the pro-IPR communities that are beginning to exist in Beijing and Shanghai.

Institutional Development The staffing and budgetary commitments made to IPR enforcement organs seem woefully low—particularly at the local level, but also by the central government. Institutional development programs targeted at the State Council's IPR Working Conference, the Software Registration Center at the State Copyright Administration, and perhaps select provinces would be particularly useful. In this respect, it may be useful to consider how an annual national conference could lead and contribute to World Bank and Asian Development Bank projects for IPR institutional development.

Training The need for training of officials and administrators, particularly at the local level, is a common theme in interviews with knowledgeable officials in China's IPR bureaucracy. A program of technical training in the United States, Europe, and Japan would be useful on matters of copyright, trademark, and patent administration. Judicial training would also be useful as a step toward strengthening the judiciary's role in IPR enforcement—particularly in civil (not criminal) actions. Finally, training exchanges to bring Chinese enterprise managers together with managers of foreign firms would be an effective means to demonstrate how non-Chinese firms organize to protect IPR.

Numerous training initiatives are already being undertaken by such organizations as the Business Software Alliance, the European Union, the United Nations Development Program, the U.S. Customs Service, and the Canadian International Development Agency, and it will be important for any new initiative to bring a value-added approach to whatever training program is adopted.

Research Remarkably little is known about the IPR policy communities at the provincial level. Before attempting to influence the incentive structure at the local level, the current situation must be better understood, not only by the foreign community but also by the Chinese in Beijing. Frequently, many of the relevant actors in Beijing do not have an accurate understanding of the situation in the provinces.

Conclusion

The IPR problem in China's foreign relations is complex and will not be easily solved. The tension between those who produce advanced technologies and seek to obtain rewards for their innovations and those who seek to profit by copying the innovations of others is not unique to China. It seems clear that technology-importing countries like China will continue to lag behind in innovation unless they develop their own IPR regimes to attract the transfer of advanced technologies and to nurture their own high-technology industries.

But the outside world cannot force China or other developing countries to improve their IPR regimes solely by threatening or using sanctions or through agreements reached in high pressure negotiations. To be sure, some pressure is necessary, and when commitments have been made, they must be honored. In addition and perhaps more important, a constructive agenda of cooperation must accompany the threats. The outside world should energetically assist China in creating an effective IPR regime not just for the profits to be derived, but in order to enable China to become a technologically advanced, innovative society in the 21st century.¹¹

Appendix

The Emerging IPR Policy Community in China

A. Administrative Institutions Under the State Council

1. Ministries

- Ministry of Foreign Affairs
- Ministry of Foreign Trade and Economic Cooperation (MOFTEC)
- Ministry of Electronics Industry (MEI)
- Ministry of Culture - State Press and Publications Administration
- Ministry of Public Security
- Ministry of Chemicals and Chemical Engineering (MCE)

2. National Commissions and Agencies

- State Copyright Administration (SCA)
- State Administration of Industry and Commerce (SAIC)
- China Patent Office
- State Pharmaceutical Administration (SPA)
 - China Huake Pharmaceutical Intellectual Property Consultative Center
- Education, Science, Culture and Public Health Committee
- Technology Supervision Bureau
- State Science and Technology Commission (SSTC)
- State Council Working Conference on IPR

B. Judicial Sector

1. The Supreme People's Court
2. The People's Procuracy
3. Intellectual property tribunals

C. Entrepreneurial Sector

1. Trade Associations

- China Software Alliance
- China Intellectual Property Association
- Copyright Society of China

2. Leading Chinese Computer Software and Information Technology Companies

- Beijing Legend Group
- Founder Group
- China Computer Software & Technologies Services Corporation
- Lianxing Company
- Stone Group
- Beida Fangzheng Co.
- Hope High Tech Group
- New World
- Huaguang
- Juren Computer Co.
- Yongyou Financial Consulting
- Gongpin Co.
- Lianbang Software Stores
- Gaoli Computer Co.
- Lianying Computer Corp.

- Great Wall Computer Group
 - Ji Tong Communications Co.
 - Yuanwang Technology
 - Zhuai Electronic Technology Development Company
 - Sanhua Electronics
 - Huili Computer Co.
 - Huiqin Computer Stores
 - Tianjin New Star Electronics Co.
 - New Star Electronics
3. Leading Publishers and Entertainment (Video, Audio, and Film) Firms
- Beijing Publishing Press
 - New China Book Store
 - Xiangke Jiguang Market
 - Julin University Publishing House
 - Guangzhou Chailing Audio and Video Production Co., Ltd.
 - Foshan Fenglong Electronics Co., Ltd.
 - Panyu Yongtong Audio and Video Production Co., Ltd.
 - Zhongshan Yusheng CD-ROM Production Co., Ltd.
 - Chaoyang Jinfafa CD-ROM Science and Technology Co., Ltd.
 - Zhuhai Hainan Leiguang Production Ltd.

D. Policy Research Sector

1. Institute of Law of the Chinese Academy of Social Sciences, IPR Research Center
2. Beijing University Law Department, IPR Research Center
3. People's University Law Department