

CHAPTER 15

INTELLECTUAL PROPERTY IN LARGER CONTEXT: CHALLENGES TO U.S.-CHINA RELATIONS

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Executive Summary

ntellectual property rights (IPR) have long occupied a prominent position within the ▲ broader U.S.-China relationship – especially in commercial relations. The topic has seen intense U.S.-China government-to-government engagement for many years. As time has passed, intellectual property (IP) questions have taken on both a routine quality - both countries know the issues and use the concepts and vocabularies of this complex field with ease - and a somewhat gloomier aspect as IPR has become a staple in a never-ending dialogue of the nearly deaf. Much of the discussion has settled into a familiar "glass-half-full/glasshalf-empty" argument, characterized by charges and counter-charges, complaints and direct or diversionary retorts.

In this short essay, I want to take relatively little time discussing the daily 'state of play' in the ongoing process of conflict and cooperation, determination and resignation, consultation and exclusion. I want primarily to place the IP situation in a few larger contexts, most of them specific to China, but all of them deeply relevant to today's and tomorrow's U.S.-China relations.

To me, as both a student of China's modern history and a modest participant in the development of U.S.-China relations over many years, particularly business relations, the IP story is really a minidrama in the broader story of China's emergence as a modern nation state and a world power. The U.S., as one of the world's principal technology and creative-industry powers, feels the effects of China becoming – almost overnight – the world's second largest economy. As China races toward economic advancement – both qualitative and quantitative – neither country's evaluation of the other remains

static. Massive benefits continue to accrue to each from the ever-expanding economic relationship, but new differences emerge as well – and longstanding ones – like IPR, broadly defined, defy simple and rapid resolution.

The ultimate fate of U.S.-China IPR issues will depend on the course China charts, far beyond the confines of IPR itself. The 150-year-old Chinese debate over how to master the challenges of a modernity not hitherto defined by China itself, without sacrificing the profound core of Chinese identity, is still very much alive, now expressed in the slightly defiant rhetoric of 'Chinese characteristics' and the more recent and more confident evocation of 'the China Dream'. Statesmen continue to reaffirm that China will chart its own path, and not simply adopt 'Western' forms, especially in the development of its political system. Similar impulses appear, as we will see below, as China defines its role in the global economy.

What those rhetorical constructs will turn out to mean in practice – domestically and in China's relations with the world – remains unclear. Applied to the more concrete issues of U.S.-China IPR problems, the broad looming questions are these:

- As China continues to amass the economic and technological weight to make its presence clearly felt around the globe, will it strive to predicate its practices on the need for maximum compatibility with the world it has by now so decisively joined?
- Will China conclude that the urgency of national needs and the sheer administrative and cultural burdens of the continued acceptance of externally-derived norms require it to demand others'



- acceptance of 'Chinese characteristics' and standards instead? And
- What mixture of the two not altogether compatible instincts will emerge?

This is a process of fundamental significance to China, to the world and indeed, to human history. As the world's largest economy, the most technologically advanced nation and the possessor of the most industrially and technologically potent military force on the planet, the U.S. has a huge stake in the outcome of China's evolution. It behooves the United States to explore, with China, the path of intensive consultation and cooperation on all major concerns, just as it behooves China to deal openly and cooperatively with the United States

Openness and cooperation, however, do not mean that the U.S. should turn away from its traditions, including its notions of the rule of law, while American IP holders lose their most valuable economic assets to IPR violators, in China or anywhere else. While the U.S. and China must continually 'seek common ground' on these issues, the U.S. – both in the government and private sectors – also must concentrate on practical ways of defending vital economic assets from unauthorized expropriation, whether by adversaries, competitors or even partners.

The good news is that China has come a long way in a short time, by constructing a legal framework and a nascent institutional framework, beginning to embed a broad conceptual understanding of the vital function of IPR in its development strategy, and maintaining an active dialogue with the U.S. and other nations in its efforts to preserve progressive economic relations, while advancing its own global interests. The U.S. and China must continue to build on that foundation over the long term.

Intellectual Property in Larger Context: Challenges to U.S.-China Relations

The U.S.-China Dialogue on Intellectual Property Rights in a Nutshell

Today, the U.S. conversation with China on intellectual property (IP) usually boils down to this: The U.S. side notes – often in detail – the astonishing losses incurred by American companies at the hands of Chinese intellectual property rights (IPR) violators, small and large, who reproduce U.S. IP products without authorization and without payment. A major study by the U.S. International Trade Commission a few years ago, for example, put the size of U.S. companies' losses to IPR abuse in China, from both lost sales and unpaid royalties and licensing fees, at US\$48bn in a single year and, using an economic model detailed in its report, estimated that nearly a million U.S. jobs would have existed were it not for IP theft by Chinese IPR abusers.

While noting the progress China has made since the 1980s in building a structure of IP law, the U.S. side regularly notes that:

- China's laws fail to provide penalties for IPR violations sufficiently painful to deter would-be pirates;
- Implementation of China's own laws remains weak, and local evasion of the laws pervasive;
- American patience is not unlimited; and
- The U.S. will take steps either at the multilateral level or under U.S. law to protect Americans' interests.

Whether spoken or unspoken, the U.S. conveys the message that IPR violation is a highly politically sensitive issue in the U.S. The U.S. side – whether

the government or representatives of the private sector – then goes on to recommend, in increasing detail, steps that the Chinese government ought to take to improve IP protection and especially IP protection for non-Chinese firms. The IP topic is on the agenda of virtually every government-to-government discussion at the highest levels, such as the U.S.-China Strategic and Economic Dialogue (SED) and the longstanding U.S.-China Joint Commission on Commerce and Trade (JCCT).

The Chinese side responds by pointing out:

- Foreign critics must be patient as great changes in law and social behavior, such as the cultivation of an IPR-oriented culture, take time.
- China has come a long way in little more than three decades and deserves greater credit for its efforts.
- The Chinese government attaches great importance to the development of effective IPR protection in the interests of China's own economic development.
- China's leading organs have infused the latest strategic guidelines for national development with the imperatives of an effective IPR regime.
- China has not only passed a raft of IP legislation, but has set up specialized IP agencies in the administrative sector and in the judiciary.
- The PRC has conducted several high-profile public campaigns to popularize acceptance of IP protection and to prosecute violators.
- Powerful government agencies at senior levels have been created to focus on IPR preservation.
- China has joined with the U.S. through a multiplicity of bilateral and multilateral fora in efforts at IPR protection and better 'mutual understanding'.



Definitions, Qualifiers and Emphases Upon the Positive

Let me start with several preliminary observations, so as to forestall predictable protestations and debunk any notion that IP issues are simple problems amenable to simple solutions.

First of all, the whole concept of IPR is in perpetual flux, and remains something of a cultural artifact, whose shifting definitions reflect, above all, technological change and national circumstance. Moreover, within any given nation, the definition and treatment - whether in law or in social custom - of what is defined as IP, is often the subject of heated debates, whose partisans' certainties vary with vantage points and material interests: consider, for example, the monumental debate in the U.S. about musical file sharing. In the U.S.-China context, where each nation's image of itself (America's self-image as the rightful creator and owner of valuable, costly, hard-earned and privately-held economic assets, and China's as a poor and disadvantaged society seeking to break out of the excessive domination by the techno-economic power of U.S. multinationals so as to create an opportunity for China to develop), shared certainties about IPR have proven difficult to reach.

For most American corporations, the many inadequacies of IP protection are still – as they have been for years –a central concern of doing business in China, a serious negative aspect of the Chinese business environment and the cause of complex and costly efforts to prevent losses. The list of 'best practices' now recommended for corporate prevention of IP loss, carried out to varying degrees by different firms, is as remarkable for its costly complexity as for its imperfect effectiveness. The dialogue on IPR between U.S. businesses, individually or through trade associations, and the U.S. government's executive branch, is active and ongoing.

IP by now subsumes so many topics that its usefulness as an organizing concept may bear re-

examination. Trademarks, copyrights, patents of various descriptions, trade secrets – all fall within the IPR denominator, but each is vastly complex in its own right, within any one country's economic and legal systems, and even more arcane in bilateral or multilateral environments

Moreover, because of these complex specializations, IPR has become an industry of its own, not only in terms of the legions of legal, technical and government specialists whose jobs focus on IP, but in terms of the degree to which IP problems define the conduct of governments, corporations and societies more generally. We learn, for example, that small American companies, unaccustomed to the dangers posed by loss of IP or financially illequipped to bear the costs of adequate IPR protection – whether by prevention or prosecution of IPR abuse – have intrinsic vulnerabilities.

We learn, as well, just how deeply the internalization of a responsible IPR culture demands the building of human resources at all levels of Chinese government and society. We will ask, below, just how much the Chinese system in particular can bear.

On IPR, China has made significant strides, albeit from a very 'low base'.

It is becoming harder to remember, as the years pass by, what China was like before its "Reform and Opening up" policy came into force in late 1978, that is, before the introduction of domestic market economic processes and integration with the global economy. But we should never forget how far China has come. In the late 1970s, the legal scholar Victor Li was able to publish a slim but important volume called Law without Lawyers: A Comparative View of China and the United States (Westview Press, 1978) which reflected the underdeveloped nature of China's legal system and the nearly complete absence of a legal profession after decades of Maoist 'politics' and the depredations of the Cultural Revolution. Imperfect as the rule of law may remain in China today, the P.R.C. possesses a vast catalogue

of law and regulation, particularly with respect to the economy.

By any accepted definition, IPR abuse is found in most countries, even those with underdeveloped industrial or less internationally connected economies, which - in the age of the internet - means everybody. Even as the U.S. and China ponder the mixture of accommodation and confrontation that the IP situation presents to them, they should point out to each other - and they often do - that the problem is not merely bilateral. This applies not only to 'traditional' forms of IPR abuse, but to its most current alarming form: computer hacking. In a recent eloquent article in the magazine The New Yorker, on the recent suicide of the precocious and complex young American computer genius and activist Aaron Swartz, the author notes, completely in passing, "At M.I.T. [Massachusetts Institute of Technology], hacking, broadly understood, was a tradition. It was taken to be a part of the culture that led to technological innovation and was rarely punished, even if it resulted in considerable annoyance and expense to the hackee." The point is obvious, but it needs to be kept in mind.

IPR in China's Changing Economic Environment

Thus far, the core of the IP problem for the U.S. in China has been primarily commercial, while for China it has been an issue of development strategy, both domestic and global. For the U.S., however, the problem is fast becoming a strategic national security issue as well.

We should not make light of the rampant piracy of successful international products and brands that has been a feature of the Chinese social land-scape for decades – apparel knockoffs, cheap DVDs of foreign films, ubiquitous pirated software, and so on. These behaviors took root quickly after the start of "Reform and Opening." They persist to-day – artifacts, in part, of a legacy of isolation and

impoverishment that still drives many people to find whatever living they can without undue regard for IPR niceties and induces many others to acquire replicas of otherwise unaffordable objects at prices they can pay. (The Chinese writer Yu Hua recently wrote an article entitled "Stealing Books for the Poor" in the *New York Times*, in which he argues that the demand for pirated books rests on the needs of vast numbers of people who cannot begin to afford to pay for the legitimate copies of books or anything else.)

But the heart of the IPR challenges in U.S.-China relations continues to shift, as China becomes wealthier and more powerful; its economy more sophisticated; its own IP management policies, laws and institutions more ramified; and its politics and foreign policies increasingly driven by a contemporary vision of a 21st century "rejuvenation of the Chinese people". What was once a nasty international conflict over implementation of China's early Opening policy has strikingly evolved – as China pursues a government-led strategy of increased global competitiveness in advanced economic sectors through the promotion of domestic 'innovation' and the reduction of Chinese dependence on products and technologies sourced abroad.

Some Thoughts on Older Issues in China

It is understandable that the Sino-American dialogue on IPR generally concentrates on problems in the 'here and now', which I have touched upon already. Let me offer a few comments on broader frameworks of understanding of contemporary IPR issues in China.

One Intriguing Speculation on 'Shanzhai' Piracy and the Culture of the 'Men of the Marshes'

The Chinese term for the vast, society-wide production and consumption of cheap imitations of branded consumer goods (such as mobile phones, athletic



shoes, etc.) is Romanized in pinyin as 'shanzhai', and is usually translated as 'mountain stronghold' or 'mountain redoubt'.

A fascinating paper by the scholar Paul Hennessey argues that behind today's shanzhai phenomenon lies an historical tradition of ingenious but courageous defiance of the oppressive abuse of power by tyrannical ruling elites. There has long been, Hennessey maintains, a deeply rooted romantic tradition of admiration for those who boldly flout the power of the state, as exercised through its corrupt and brutal local officialdom. Those who ingeniously skirt official orders in order to behave righteously - if in an unorthodox manner - thrive in a durable alternative universe. Thus, Hennessey suggests that today's shanzhai world is driven by a kind of nether-world gusto. It is animated by a contemporary relationship of the lower depths of Chinese society – to the official representatives of state power not so very different from that found in the 15th century. The Hennessey paper was not an economics or a business study, and of course, its creative interpretation can neither be 'proved' or 'disproved'. It raises, however, intriguing questions as to whether - beyond what we might term 'the universality of economic opportunism' that surely motivates the legions of contemporary knockoff artists and petty counterfeiters - certain forms of consumer-goods piracy find their roots in a longerlived 'Little Tradition'.

The Confucian Heritage of Reverence for the Past and Imitation of Past Models

Among the cultural holdovers from the late traditional period in China, running right into the twentieth century, was the idea derived from classical Confucianism and later elaborations, that emulation models of social and aesthetic perfection were to be found in the past, and that the highest aspiration of the contemporary achiever must be the approximation, through imitation, of earlier exemplars. In this view, although many members of China's political and social elite had, by the end of the 20th century, accepted the contemporary challenge of 'self-strengthening' – a goal enunciated by late Qing dynasty reformers in the second half of the 19th century, and defined by the words 'wealth' and 'might' – they remained trapped by a culturally dictated bias against originality and a deeply rooted affinity for diligent but unoriginal copying.

Nowadays, Chinese planners still cannot conclude that China has escaped from the inherited inhibitions of originality and innovation, even with the creation of a complex legal and regulatory framework, backed by increasingly comprehensive central government policies aimed at ordaining from above a culture of innovation to meet the needs of rapid economic development; and even with the laying down of quantitative targets – for example, of patent applications and grants – as definitive measures on 'innovation' in the Chinese economy; and even with the vast crescendo of patent filings by Chinese companies over the past decade.

China's Governing Structure in light of Recent History

The collapse of imperial political and social institutions in the early 20th century, after millennia of enduring continuity; the turmoil of the Republican era, from the end of the last dynasty in 1912 to the establishment of the People's Republic in 1949; and then the near-constant political upheavals of the first 30 years of Communist rule (1949-1979) all left the task of building an effective structure of modern political power in China unfinished, and the task remains far from finished today. A central aspect of that incompleteness is the absence, thus far, of a new governing synthesis effortlessly connecting the mass of the Chinese population to its government, in spite of the Leninist disciplines exercised by the Chinese Communist Party. To the point here, a

manifestation of this today is the paradox, on the one hand, of a unitary governmental structure, in which ultimate command authority resides at the apex of a vast pyramidal administrative system and flows downward through provinces, counties, townships and villages; and, on the other hand, the practical impossibility of ensuring full implementation of most central mandates across China's immense land mass and population.

In practical terms, this structural challenge left over from China's history manifests itself in such daily realities as the regional and local variations evident in the implementation of IPR policies and regulations, the persistence of personal particularisms as key factors in determining IPR outcomes at the local level, and the uneven levels of professionalism among lower-level bureaucrats and judicial personnel ostensibly responsible for implementing IPR policies and managing IPR disputes on the ground throughout the country.

This structural legacy means not only that issues to be decided at the top of the pyramid, in this post-'Great Man Rule' period, are subject to intense debate among representatives of various interest groups; it also implies that China's central political authorities have to pick and choose very carefully the issues on which they must lean most heavily on the hundreds of thousands or even millions of party members and government bureaucrats who hold the power to carry out or evade the center's will. Forging from the top an IPR system as it might be envisioned by foreign companies, and ensuring that that system applies with perfect even-handedness to domestic and foreign companies nationwide, is at this stage of China's development - an ideal that has proven difficult to realize.

Sun Yat-sen – the early 20th century revolutionary usually credited with leading the uprising that brought down China's last dynasty after two millennia of imperial dynastic rule – once remarked with dismay that the Chinese people were a 'heap of loose sand', and lamented the difficulty of bind-

ing China's immense population together in pursuit of broadly shared understandings of nationhood and recovered national dignity. While his choice of words has remained in the public imagination, he was probably not the first or the last Chinese figure to express that general idea.

Changing China's Post-Cultural Revolution Socio-Ethical Compass

The Chinese nation, under the leadership of the Chinese Communist Party, has come a considerable distance in integrating the enormous population of China around a shared sense of modern national identity. But the task is far from fully accomplished, and is, perhaps, incapable of full realization.

In particular, at this moment in history, Chinese society still grapples with the erosion of ancient traditions mentioned above, but also with the legacy of the disruptive normative firestorms of the Maoist interregnum, particularly the violent and chaotic Cultural Revolution of the late 1960s and early 1970s.

The extent of damage to China's socio-ethical consensus during the Cultural Revolution, and indeed, the effects of the further undermining of social consensus in the early post-Cultural Revolution period – when the revolutionary truths of the preceding decade were rapidly jettisoned – has yet to be fully explored, and remains sensitive.

But one may speculate that, in addition to the historical and cultural legacies referred to already, another aspect of contemporary Chinese social behavior that is proving so difficult to manage – official corruption and abuse of power, and the intransigent resilience of networked particularism– has found fertile soil in this overarching environment of normative uncertainty.

In a host of ways – the zealous pursuit of wealth by any available means; the explosion of ostentatious display; the obsession with luxury branded



goods; the commission of ingenious accounting frauds; the perpetration of food and medicine frauds, the 'marketization' of virtually all social services; the Chinese people's own fears of falling victim to unscrupulous counterfeiters; but also in the apparently wide acceptance of the attractions of engaging in this type of conduct when opportunities arise – we get a glimpse of the deeper challenges to establishing an effective IPR system in China, no matter what Beijing orders or the U.S. demands.

New Developments

IPR issues in U.S.-China relations in the past few years have seen both positive and negative developments.

Authoritative private sector statements from the U.S. business community have taken note, for example, of the growing extent of new IPR institutions, created in response to a continuing series of prescriptions from the top of the Chinese political pyramid. American business surveys suggest, for example, that U.S. companies are gradually coming to consider resorting to China's special IPR judicial institutions - especially, we may assume, in Beijing and Shanghai, since these institutions grow unevenly in both quantity and quality across the vastness of China - as a viable option for pursuing at least partial redress of IPR grievances. Many would find signs of progress in the recent vast increases in the numbers of patent filings by Chinese firms and IPR court disputes between Chinese companies; it is, after all, a staple of the American position that, as China's sophistication in science and technology increases and Chinese companies produce more of their own proprietary knowledge, China's commitment to IP protection through the legal system will deepen, to everyone's benefit.

There has, however, been another development, mainly since the turn of the present century, which is significantly transforming the Chinese IPR landscape and the nature of the ongoing U.S.-China IPR problem. It is the Chinese government's ongoing promulgation of far-reaching policies designed to secure the indigenous foundations of China's advanced industrial and technological development – in support of the nation's global economic competitiveness – and to ensure that Chinese domestic companies will compete successfully against foreign firms, within China and worldwide.

One can hardly blame the Chinese authorities, who have for the past 30 years, shown such exceptional skill in defining long-term strategic economic goals and then delivering on them, for their desire to propel China to the forefront of global economic and technological prowess as fast as possible.

The original strategy of drawing on Chinese supplies of abundant, inexpensive, generally low-skilled labor from the rural sector has borne enormous fruit; China's export system, backed by hugely successful investments in infrastructure, has until very recently proved successful, and China has leapt to the forefront of the world's trading nations, its overall gross domestic product second now only to that of the U.S. and soon to be the world's largest. Living standards for hundreds of millions of Chinese have risen, not only above dire poverty, but to levels of disposable income that define the term 'middle class'.

But Chinese strategic thinkers could perceive that, over time, further gains from the first version of the post-Mao development strategy would thin. For one thing, because of China's one-child policy, the growth of the working-age population was destined to slow. For another, the global market for low-technology goods from Chinese factories could not expand exponentially forever.

Most of all, China would need to break out of the low value-added role that it had initially so diligently carved for itself. It became commonplace that the value of China's contribution to the export price of many of the industrial products it shipped to developed country markets was a small fraction of the

total, because the high-value inputs – those based in IP, including designs and sophisticated technological components – were created outside of China and merely sent to China for final assembly, packaging and distribution to world markets as China exports.

Furthermore, as China's economic strength and global interests grew, the regime recognized that the Chinese armed forces would have to cope with the challenges of the 21st century, which meant, above all, the immense technology driven power of the U.S. military. As frictions with the U.S. over trade, human rights, third-country issues, etc. continued, and U.S. military sanctions against China dating from the Tiananmen tragedy remained in place, P.R.C. planners realized again that China must look to its own efforts to escape from technological dependency on an uncertain 'outside world'.

Thus the past decade has witnessed the emergence of a structure of policy and regulation designed to stimulate the development of 'Invented in China' IP. This has taken the form of state delineation of economic sectors and industries deemed most essential to Chinese economic development; wide-ranging programs of government financial support, on concessional terms, for favored technology projects and 'strategic emerging industries'; and detailed government targets for IP generation. It has also witnessed early and, so far, inconclusive efforts to reformulate bureaucratic performance metrics to include evidence of innovative achievement.

The campaign to propel China to the forefront of the world's high value-added economies has taken as a foundational assumption the need for a well developed system of IP ownership functionally similar to that found in the world's advanced industrial economies. But there remain crucial differences, some of which underlie the continuing frictions characterizing current U.S.-China IPR relations.

First of all, as the state has sought to define the path to advanced technological greatness for the nation, it has retained and even expanded its role in the modern industrial economy. Thus far, despite the proliferation of small, often dynamic, nonstate-owned companies in non-strategic economic sectors, state-owned firms dominate much of the Chinese economic landscape, especially with respect to worldwide business competition. The largesse bestowed by the state on Chinese companies, in support of high-speed, high-end technological development, has flowed overwhelmingly to stateowned enterprises, corporate or otherwise. One of the implications of this is that IP developed in China under government guidance is embedded in a fabric of state-dominated and state-supported economic activity that, when necessary, is different in kind from the activities of competing private foreign firms.

A second element arising from this system of state-directed technological innovation is the emergence of government policies, heatedly contested by foreign companies and their governments, to boost the economic success and competitiveness of domestic companies by mandating their utilization of domestically generated IP, and to discriminate against companies utilizing IP inputs developed outside of the P.R.C. This has become a particularly sensitive topic in the area of government procurement.

There are other aspects of China's now wellestablished development strategy with respect to advanced technology, domestic innovation, foreign participation in the Chinese economy and escape from dependency on international technology sources that provoke external concerns, but space does not permit further elaboration here. It is noteworthy, however, that China is able to use the now proven size of its huge domestic markets to bargain for, if not compel, the sharing of sensitive foreign corporate proprietary knowledge with Chinese partners or users as a condition of market access; while this is theoretically prohibited by the terms of China's World Trade Organization accession, in practice, it remains a familiar artifact of the Chinese business environment. Provisions for



mandatory licensing of proprietary technologies or business secrets have been vigorously protested by foreign companies and their governments.

The overall point is that the anatomy of the IPR debate between the U.S. and China has changed with China's increasing economic maturity, and with shifts in economic and military balances worldwide. The Chinese model of development, with its continuing central role of the state both in strategic planning and in the use of economic resources to support state-defined goals, operates in marked contrast to the private sector-oriented pattern of technological development in the U.S. This, in turn, is an impetus for the U.S. private sector to cooperate ever more closely with the U.S. government in pursuit of key objectives in China, including both market access and the improvement of IPR protection.

The Cyber Situation and the Lurking Metaphor of Threat

To call the rapidly unfolding public drama over alleged cyber-hacking by Chinese operatives against numerous U.S. corporate, government and infrastructure networks, and the allegedly numerous attacks by U.S. hackers against China, an "IP dispute" will both weaken further any meaningful definition of IP and lend a very problematic new dimension to the discourse on IPR.

I have long felt that there is a lurking strain in American perceptions of China, dating from the 19th century, which sees China as a sort of fountainhead of noxious and threatening emanations, whether physical, medical, or even moral. This is most assuredly not the dominant element in American public thinking about China today, and many other more favorable perceptions of China and its people inhabit the forefront of popular imagination. Nevertheless, in my personal view, this nagging sense of lurking contagion from China remains a latent and potentially volatile current of

popular uneasiness. As such, it remains potentially politically volatile as well.

Contaminated products from China that periodically make the headlines as threats to public health similarly contribute to that lurking sense of danger – definable or indefinable – spreading from China to the U.S. Images of contamination – of children's toys coated with lead paint, of pet foods adulterated with lethal chemicals, of the farmyard processing of porcine intestines to produce most of the Heparin used in American hospital operating rooms, or even, most recently, of thousands of bloated pigs floating in the greasy shallows of the Huangpu River that provides most of Shanghai's water supply – become a part of the reservoir of Americans' sense of China, leaving a residue of uneasiness and suspicion.

This is the terrain that the U.S., in its relations with China today, must avoid, and it is my greatest concern that the controversy over cyber-attacks has now escaped from the shadows of corporate reticence and government secrecy into public view.

The rapid rise of cyber intrusions – whether driven by technology, human aspirations to power, a human love of stimulation and amusement, or by undisclosed strategies of governments deeply distrustful of one another – goes far beyond the debates over IP that have preoccupied American and Chinese observers over the past few decades. Yet, because much of the alleged Chinese penetration has been directed at the trade secrets of American corporations, it still falls within the expanding parameters of the IPR discourse between the U.S. and China.

The outcome of this controversy cannot be foreseen, and hopefully the effects of the hacking assaults themselves will never be proven in a lethal crisis between the U.S. and China.

But the hacking crisis today is a further extension of the longer-running IPR situation. It raises to prominence the reality that information secrecy is, if anything, harder to protect now than it was even in the recent past; that the dividing line between

the commercial and the strategic continues to blur; and that the old days of an American economic and technological colossus and a Chinese economic adolescent are gone forever.

A conclusion on the bright side

For all the continuing frustrations over IPR abuse, the formulaic readings of 'talking points' and the never-quite-definitive outcomes of U.S.-China engagement on IPR, we must remember how much has actually been achieved, and not wring our hands about the future.

Though the implanting of a culture of IPR awareness and rights protection remains a work in progress in China, there is little doubt that the leaders of the Chinese political system have moved toward embracing the necessity of viable national and global IPR protections. China's self-perceptions differ from those of the U.S., and within China, not all parties hold the same views on the long menu of IPR-related issues (nor do they in the U.S., for that matter). But I believe that China and the U.S. both understand that the alternatives to dogged engagement and to the search for common ground are worse than the hard work itself.

Moreover, for all the strategic distrust that now pervades the U.S.-China relationship, evidence pops up repeatedly to prove that, when push comes to shove, the two sides are still able to come to mutually acceptable arrangements; and that at popular and local levels, well-intentioned interests survive.

What the immense U.S.-China relationship shows is that neither side is driven primarily by altruism; each side is driven to achieve its own interests and goals. That has, in fact, produced US\$0.5tr in annual two-way trade; it has produced full Chinese participation in the major multilateral economic bodies from which it once had been excluded; it has produced intellectual and cultural exchanges, especially of students, on a scale unimagined not long ago; and it has produced the beginnings of

U.S.-China cooperation on a host of global issues, despite differences in national priorities and stages of development. It has even produced, in times of acute tension, peaceful and face-saving resolutions in ugly disputes.

Management of U.S.-China relations with respect to IPR is highly specialized, hard work. It demands legions of technically, linguistically and culturally trained individuals. Moreover, it requires a continuing flow of them; today's specialists are tomorrow's retirees and tomorrow's specialists always need to learn the basics. The human resource dimension to the U.S.-China IPR challenge is one of the biggest tasks, but it is also one of the most achievable. The two countries should be working together to support, through government and nongovernment resources, the building of an enduring cadre of IPR professionals, capable of managing their own countries' IP issues, but also of engaging with and learning from one another in the interests of managing the bilateral IP agenda. If there was a time to build, the time is now.

As we have noted above, the U.S. cannot be China's patronizing tutor on the P.R.C.'s fundamental development choices. It can, and should, however, continue to work with China on the development of educational programs designed to help a culture of responsible IPR protection take root at local levels of society and government, and within Chinese business. American companies must continue to implement comprehensive, sometimes costly, strategies for protection of their intellectual property, including close collaboration with educational institutions, supplier companies, and their own employees who carry out the daily work of business on the ground in the P.R.C.

For its part, we must hope that China will continue to deepen and strengthen the structures of IP protection that it has already erected, while making sure that discrimination in the treatment of Chinese firms and foreign (including American) companies is rigorously eliminated.



It is too much to expect a sudden, miraculous lightening of the burden of IPR conflict between the U.S. and the P.R.C. We should look, instead, for what, in a different context, I called 'reciprocal unilateralism', a process of gradual removal of irritants by each side's unilateral action, without any hint of coercion or concession to foreign pressure.

Finally, given the broader contexts discussed in this essay, Americans interested in the IPR dilemma should learn to take heart from progressive developments in other Chinese arenas. Because IPR solutions are part of a broader pattern of Chinese modernization, the indirect long-term effects of improvements in, for example, the oft-discussed rule of law in China, or in other dimensions of U.S.-China relations, are likely to be felt ultimately, if indirectly, in an improved IPR environment as well.

"These things take time", however, is not a sufficient answer, economically or politically, to the IPR problem of today. When Reform and Opening commenced in the 1980s, China was a newcomer in an established league. Its industries were backward, its population's spending power low and its engagement with the world only in its infancy. China opened the door and foreign companies poured in, mesmerized by hoary dreams of the China market, but also eager to do business helping Chinese industries to modernize. Much of that industrial modernization has now taken place, as has the creation of a huge domestic consumer market. The P.R.C. looks far more confidently at a world that needs China every bit as much as China needs the world, and it sets its sights on successful competition with the best the world can offer. In the IP sector, that often means competition with the U.S.

American companies now must make hard decisions on whether to submit to IP exploitation for fear of losing commercial opportunities in China's market, or to confront major abuses and pursue redress at the risk of Chinese government retaliation. They understand the inutility of perpetual confron-

tation, but little is left of the strategically charitable instinct that American businesses manifested in earlier Reform and Opening times. I think that U.S. companies will decide to pursue IPR redress in carefully selected cases. When they do, Chinese authorities would be well advised to listen carefully, and to establish mechanisms for the expedited resolution of U.S. complaints. A growing list of successful resolutions could prove, in and of itself, a significant factor in improving the IPR climate between the U.S. and the P.R.C.