

## Innovation Culture and the Intellectual Property Divide

Standing here discussing an innovation culture and the role that the development and maintenance of such a culture plays in both industrial and commercial development in Asia, I am extremely aware of how undefined the concepts of innovation and culture are.

“Innovation” has become the watchword of the 21<sup>st</sup> Century.<sup>1</sup> It is used to describe everything from new communication technologies to new businesses to the latest web postings.<sup>2</sup> More to the point, “innovation” has become a talisman for both those who support strong protection for intellectual property rights,<sup>3</sup> as well as for those who reject intellectual property protection in favor of a stronger “public domain.”<sup>4</sup> In his recent work *A Culture of Improvement*, Robert Friedel states that innovation is a subset of improvement. An improvement is merely a way to doing something in a better manner. Friedel intends the term “innovation” to be value neutral, neither suggesting that technological developments are positive or negative, or even that such developments constitute “progress.” To Friedel, innovation, like its parent improvement merely suggests that the possibility exists

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<sup>1</sup> A recently conducted Google search of the term “innovation” disclosed over 95, 900,000 entries in English using the term. A search for the related term “innovative” disclosed 132, 000, 000 entries in English. A Google Book print disclosed 4, 064 books containing the term “innovation” in its title.

<sup>2</sup> See, e.g., Google Closes Acquisition of YouTube November 13, 2006 <http://www.google.com/press/pressrel/youtube.html> (“YouTube and Google will together provide innovative and exciting services for our users that will add a new dimension to on-line media entertainment. We look forward to working with content creators and owners large and small to harness the power of the internet to promote, distribute and monetize their content.”); Innovative Blog hopes to make Youtube Exciting Again, *webwire.com* (February 9, 2008) located at <http://www.webwire.com>. (blog described as “innovative”); Innovative Marketing Techniques: Google Monetizes Youtube Not User Generated Content, located at <http://gawdlevelmarketing.blogspot.com/2007/08/google-monetizes-youtube-not-user.html>; and sites listed in search responses described *supra* note2.

<sup>3</sup> See, e.g., Trevor M. Jones, *Indian innovation at crossroads?*, *Express Pharma* at <http://www.expresspharmaonline.com/20070715/management02.shtml>; Christopher M. Kalanje, *Role of Intellectual Property in Innovation and New Product Development (WIPO)*, located at [http://www.wipo.int/sme/en/documents/ip\\_innovation\\_development.htm](http://www.wipo.int/sme/en/documents/ip_innovation_development.htm); *USTR Focus on Intellectual Property and Innovation*, [www.ustr.gov/IP](http://www.ustr.gov/IP); Kamil Idris, *INTELLECTUAL PROPERTY: A POWER TOOL FOR ECONOMIC GROWTH* (WIPO 2003); Shahid Alikhan, *Socio-Economic Benefits of Intellectual Property Protection Developing Countries* (WIPO 2000).

<sup>4</sup> See, e.g., David Bollier, *SILENT THEFT: THE PRIVATE PLUNDER OF OUR COMMON WEALTH* (Routledge 2003); Lawrence Lessig, *THE FUTURE OF IDEAS: THE FATE OF THE COMMON IN A CONNECTED WORLD* (Random House 2001)(“Ideas”); James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, 66-*SPG Law & Contemp. Probs.* 33 (2003); James Boyle, *Shamans, Software and Spleens: Law and the Construction of Information* (Harvard U Press 1997).

to do something in a new way and that this possibility has been acted upon throughout history.

I do not take such a value neutral view. To the contrary, I accept the view of the Report on the Task Force on Science, Technology and Innovation of the UN Millennium Project that emphasizes the progressive nature of innovation and its critical role in helping transform countries from reliance on the exploitation of natural resources, the so-called labor and resources stage of economic development, to technological innovation as a basis for development. In short, to move from the provider of labor and natural resources to a source of technological and knowledge based goods and services. Yet in achieving this level of potentially sustainable economic development, it is not merely scientific progress that is required. It is the creation and nurturing of a culture of innovation that is necessary. Moreover, a critical element of this innovation culture, is not necessarily industrial, scientific or technological advances, although such advances may form part of the products of such a culture. It is not a blind faith in technology to solve all problems, however, “technology” may be defined. It is instead the combination of a belief in the desirability of innovation (which may be achieved at least in part through a recognition of reward for innovation), and a recognition that innovation includes a heavy dose of entrepreneurial advances. In short, an innovation culture represents or is at least supported by an innovation policy that includes both industrial innovation, as well as economic innovation.

Joseph Schumpeter defines innovation as the introduction of new goods (...), new methods of production (...), the opening of new markets (...), the conquest of new sources of supply (...) and the carrying out of a new organization of any industry” It is this focus on new products, new methods of production, and I would add, new methods of sales and entrepreneurship that lie at the heart of a culture of innovation. This emphasis on entrepreneurial enterprise values decisions that help commodify knowledge possessing marketable applications. I do not mean to suggest that this emphasis on market driven or commercial innovation is the only factor which should be considered in creating innovation policies. To the contrary, as other scholars including Margaret Chon have demonstrated, there is no reason why social benefit considerations should not inform innovation policy. So although I am focusing my comments today on entrepreneurial and industrial innovation, I want to stress that I am not ignoring that innovation policies should also encompass appropriate social justice goals as well.

## **INTELLECTUAL PROPERTY AND THE INNOVATION DIVIDE**

In discussing the stages of development of innovation culture in Asia, I am going to be using intellectual property protection as a lens through which to observe and analyze innovation policies. Intellectual property is *not* a necessary adjunct to innovation. To the contrary, the history of Asia itself demonstrates that a great deal of innovation, including technological advances in medicine, astronomy, mechanical engineering including time keeping have occurred without the benefit of an established intellectual property regime. . What I am going to suggest is that while IP is not a necessary element of innovation or a necessary component of a successful innovation policy, a rational system of IP protection can assist in the nurturing of a culture of innovation. What I want to do is look at the stages of the development of innovation as an interchange between innovation culture and intellectual property protection as modeled by Asia.

### **THE STAGES OF DEVELOPMENT: FROM IMITATION TO INNOVATION**

Van Caenegem in his recent book *Intellectual Property Law and Innovation* contends that “innovation” is “a natural ambition,”<sup>5</sup> and that imitation without rules to govern it is “favored”<sup>6</sup> largely due to the perceived economic benefits available through imitative as opposed to innovative research and product development costs. As van Caenegem explains: “[I]nnovation is uncertain; requires diversion of scarce resources from other activities, and risks immediate subversion by competition imitation. Imitators on the other hand tread a known path, avoid all the risk and expense of innovation, and can enjoy the full benefit of their natural advantages.”<sup>7</sup> One of the goals of a successful innovation culture is to increase the perceived desirability of risk. Innovation is risky. More often innovation policy is about encouraging the willingness to risk failure and to keep going in the face of failure.”

We all know that imitation remains a favored method of commerce today in much of the developing world, including Asia. Despite emerging markets and increasingly sophisticated domestic knowledge based industries, piracy and counterfeiting remain rampant. Protection of IP remains problematic and the subject of ongoing disputes between Asia and developed countries, including the presently pending complaints before the WTO against China, involving, among other issues, thresholds for criminal penalties for counterfeiting and piracy. Yet historically imitation is a necessary stage of innovation. The story of Japan in the

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<sup>5</sup> Van Caenegem at 1.

<sup>6</sup> *Id.*

<sup>7</sup> *Id.*

1950's and 1960s is a story of a voracious technology imitator, particularly in the area of consumer goods. Yet this imitation stage was combined with the development of stronger patent protection laws, so that when imitation turned to innovation, the rewards of the innovation culture were in place.

Similarly, China has become a voracious acquirer of technology, while simultaneously being accused of unauthorized use or imitation of third party technologies. From the automotive industry, to the electronics area, there are increasing complaints that third party technology is being used without authorization to create competitive products. Yet at the same time that complaints continue over the inability of China to protect IP rights, China is continuing to perfect its intellectual property laws.

The imitative stage of development is not limited to Asian cultures. To the contrary, in the 19<sup>th</sup> Century, the US textile industry was created through the wholesale acquisition of British trade secrets and technology, often through illicit means.

Imitation is not just a cheaper alternative to innovation or a necessary stage in developing an innovation culture, there may be cultural elements that encourage imitation beyond those of economic incentives. Thus, while William Alford's *To Steal a Book is an Elegant Offense* may overstate the impact of Confucianism in China on the development of an imitation culture, or at least one that does not readily accept the ownership of creative expression and innovative works that is at the heart of the current IP regime, there are none the less cultural reasons why imitation may be perceived as a more valuable or more acceptable stage of innovation development.

If imitation is a standard phase of development, the problem is how to move out of imitation into innovation. As Japan, India and China show, such movement requires a multiplicity of factors, not the least of which is a convergence between changing cultural mores regarding innovative activities, but also educational legal and investment opportunities. As Hisamitsu Arai demonstrates in *The Japanese Experience of Wealth Creation*, part of what led to Japan's ultimate achievement of its role as a technology exporter, was an focused intention on the part of the Japanese Government to create a patent system, and to work with its leading companies to help them exploit this system, to help consolidate Japanese advances in technology once the necessary learning curve on existing technologies had been absorbed. India's emergence as a burgeoning source of Indian developed

technology similarly arose from concerted efforts by the Indian government to encourage the educational and investment environment that would support such technology breakthroughs. China has been engaged in a similar curve as it combines greater educational facilities with increasingly easier investment rules in certain industries in order to encourage foreign on the ground training in both technology and in entrepreneurship necessary to support its growing emergence as a provider of knowledge based products. Unlike earlier models some of the necessary skills have been achieved through the acquisition of foreign based companies. While each country's path has been different, they all share certain remarkable similarities, including the role of the government in providing educational and investment opportunities, while simultaneously altering the legal environment to provide greater protection for the domestic fruits of such endeavors.

Even as the government moves toward innovation, imitation culture may still maintain a strong grip on certain aspects. Thus, for example, when the Olympics were awarded to Beijing China, the Chinese Government moved swiftly to enact a special regulation to protect the Olympic symbols. By 2002 a special regulation for the protection of the Olympic symbols was enacted. This regulation not only provided for the standard protection against unauthorized uses of the symbols, it provided several benefits to Olympic Symbols that trademarks do not presently enjoy. The Olympic Symbol Regulation reduces the thresholds for criminal prosecutions. While trademarks establish a 50,000 RMB threshold, Olympic Symbols only need to reach a 30,000 RMB threshold. Furthermore, the Regulation and establishing a basis for determining such thresholds that is based on the licensed price of the goods, and not on the pirate price, which appears to be the primary basis for determining thresholds, even though Chinese law allows for consideration of labeled prices. The regulation also increases the fines for prohibited activity imposed by SAIC from up to 5 times the amount of the illegally obtained income. (Trademark law sets the penalty at 3 times the amount.) The Government went even further and issued enforcement directives to various agencies regarding the need to protect these special symbols.

Yet despite these efforts, the counterfeiters have started early. Statistics on the amount of counterfeiting activity of Olympic Symbols pre-Olympics are difficult to obtain. News stories derived from English language newspapers and websites, however, demonstrate that everything from stuffed animals to dolls to decals are already being pirated in large enough numbers to warrant publicized seizures of the goods.

As countries cross the divide between an imitation versus an innovation culture, the difficult issue becomes knowing when and how to implement an intellectual property system that supports economic development at the domestic level. History shows that IP protection increases as its value to domestic industry becomes more apparent. Yet at the same time in order to support the goal of nurturing an innovation culture, the one size fits all approach to international IP regimes is far from satisfactory. What is needed is a rational system, which reflects not merely cultural norms, but the innovation imperatives of the country at the time.

Patent protection is undoubtedly designed to encourage industrial innovation. It grants exclusivity in exchange for access to the inventor's knowledge. Yet with its elevated inventiveness standards,<sup>8</sup> patent laws have largely been perceived as protecting the innovations of developed countries at the cost of innovation activities for less industrially developed countries. The perception is not wholly inaccurate. To the contrary the high inventiveness standards for patent protection are largely met by technologically based innovations, the majority of which are presently created by developed countries.<sup>9</sup> Moreover, even though patent regimes require disclosure, there is no longer a concomitant requirement that patents be practiced (or "worked") in the country where protection is sought.<sup>10</sup> Thus, while the knowledge of the invention may be disclosed, the practical *application* of that knowledge may remain unavailing.

I do not mean to suggest that the citizens of developing and least development countries lack innovative capabilities. However, in order to take advantage of such innate innovative abilities, a culture of innovation must be established. Asking innovators to wait until they have crossed some technology threshold before receiving a market reward continues present innovation imbalances. By contrast, industrial design protection, in the form of so called "petty patents," may be a more viable choice for countries in their initial stages of commercial and industrial development. Such protection could be used to encourage the socially valuable goal of establishing a culture of innovation by rewarding innovation at its initial

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<sup>8</sup> To qualify for protection an invention must be new, must demonstrate an inventive step and must have utility. *See, e.g.*, TRIPS, Art. 27.

<sup>9</sup> *See, e.g.*, WIPO Patent Report: Statistics Worldwide Patent Activity (2007 Edition)(demonstrating that member patent filings are extremely low (to non-existent) for developing and least developed countries).

<sup>10</sup> While the Paris Convention allowed countries to terminate exclusive rights in patents which were not worked in the country of registration within a given period of time, Paris, Art. 6, the subsequently enacted TRIPS Agreement has largely ended this requirement. It specifically allows "working" requirements to be met by importation of the covered good into the country. TRIPS, Art. 27.

stages. These considerations are critical for developing countries, even if they are lacking in the innovation policies of their more technologically advanced cousins.

While I have focused on industrial innovation, obviously an IP regime designed to encourage innovative commercial activities would include a copyright system that would encourage the development of local culture industries. To be honest, without the pressure from international IP regimes, I do not think we would see so many countries leap to adopt patent regimes. To the contrary early stages in the development of an innovation culture would focus on trademark protection, to encourage entrepreneurial activity, and on copyright to protect domestic cultural industries. Such regimes would be followed by industrial design and traditional knowledge regimes. Patents would be the final regime, if the lens we were using were the lens of local development. Obviously other factors including the perceived need for patent laws to encourage foreign technology investments may alter the timing. The point is that until a certain stage of domestic innovation is reached, securing the local willpower to enforce IP rights is problematic at best. In the what's in it for me stage of IP development, unless the answer is the ability to support a domestic innovation culture, the interest in protecting such rights remains transitory.

For all countries the key issue remains predicting the point at which the intellectual property divide, which raises the stakes for innovative activities and provides stronger penalties for unregulated imitative conduct, should be crossed. Unfortunately the last lesson that Asia has taught us is that predictability in deciding when and how to cross the intellectual property divide may be the most elusive factor of all.