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An Alternative Framework for the Global Regulation of Intellectual Property Rights*

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ABSTRACT

The paper begins by advancing reasons for why freedom of design over property rights matters to countries. It shows that the international regime for intellectual property protection is increasingly circumscribing the freedom of developing countries to set efficient standards of protection for their economies. The bulk of the paper is devoted to elaborating a proposal for a new framework of intellectual property protection. This framework takes the form of a treaty on access to knowledge that is linked to human rights and that is driven by nodally constituted standard-setting committees that are committed to evidence-based standard-setting.

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1. Introduction

Within the institutional tradition of economics property rights have a clear and fundamental role to play in economic growth. Coase (1960: 44) pointed out that rights could be thought of as factors of production. Since rights are the product of institutional arrangements, it follows that institutions are part of the factor endowment or comparative advantage of a society. This line of thinking has been explored with respect to property rights in the work of subsequent institutionalists. Central to their explanation for why European economies went from being developing to developed economies is the proposition that these economies created well-defined property rights that stimulated individuals into productive activity by raising the level of private return to meet the social return (North and Thomas 1973). Demsetz (1967) in one of the first attempts to provide an economic theory of property rights also links changes in property rights to greater efficiency. As the benefits of internalizing externalities outweigh the costs so property rights change to internalize those externalities.

One important implication of these institutional approaches to property-based growth is that the freedom of design matters to a social group. This means that the group must have some processes for arriving at specifications of rules over resources that, based on the information available to the group, will raise the welfare of the group. Freedom of design does not exist where outsiders dictate a set of property arrangements for a group. It is freedom of design, in the sense of non-interference from outsiders, that enabled England and the Netherlands to arrive at institutions of property in the eighteenth century that led to their superior economic performance over rival European powers of the time (North and Thomas 1973). Freedom to choose is not the only way that a group might arrive at a set of property rights. Institutions may also change for better (or worse) because of accident or evolution (Goodin 1996: 24). Nevertheless intentional design has been strongly present in the history of property rights in all countries. Land law, for example, has been a perennial topic of reform, as well as revolutionary change.

Starting from the proposition that freedom of design is important to the design of property rights this paper briefly examines the extent to which the current international regime of intellectual property rights allows states freedom of design. It shows that the globalization of intellectual property has set significant limits on the capacity of states to move to lower standards of protection than currently exist. This restriction most directly affects developing countries, many of which do not have direct economic incentives to move to higher standards of protection. In the second section, the paper asks whether there are ways that developing states might try and recapture some of the design freedom that they have lost under the present regime. Following a general argument advanced by Braithwaite and Drahos (2000) that framework treaties are important to weaker actors in the global regulatory system, the paper looks at ways in which a framework treaty might be used to enhance the design freedom of states over property. The paper suggests a structure that a possible framework treaty could follow and that would enable developing states to evolve a more evidence-based approach to the design of intellectual property rights. The assumption is that such an enhancement will offer developing countries greater potential for economic growth. The historical evidence on property rights and economic growth suggests that this is a correct assumption.

Before moving to the substantive arguments of the paper we need to say a few brief words about the rights and subject matters that are encompassed by the term intellectual property rights. In law intellectual property rights are generally described as rights that relate to intangibles such as information, knowledge, images or signs (hence they are sometimes referred to as incorporeal property rights). The rights granted to owners are complex and qualified in many ways, but at base there is a core negative right to exclude others from the imitative production of the intangible. The term intellectual property rights has become a generic label for systems of rights that are in fact very different from each others in terms of subject matter, duration of protection and strength of protection. Patents, trade secrets, industrial design, copyrights, trade marks and indications of origin are all examples of older systems of protection. New forms of intellectual property protection for commercially valuable intangibles keep on emerging at national and international levels. Examples of this include plant variety protection, database

protection, semiconductor chip protection, protection for data submitted by pharmaceutical companies to drug registration authorities and protection for traditional knowledge. A detailed analysis of today's many international and national systems of intellectual property protection would reveal that intellectual property rights are a pervasive feature of market economies. They affect the production, distribution and utilization of many different kinds of valuable intangibles. Whether one is looking at the high technology sector or the agricultural sector intellectual property rights are omnipresent (in the agricultural sector patents, trade secrets and plant variety rights affect the ownership of seeds).

2. From the past to the present: the current intellectual property regime

Today's international regime for intellectual property has its origins in the nineteenth century when European states began to sign more and more bilateral treaties in the field of intellectual property. The bulk of these agreements related to copyright and trade marks (Ricketson 1987; Ladas 1975: 43, 54-5). Two multilateral pillars of the present regime were built towards the end of the nineteenth century: the Paris Convention for the Protection of Industrial Property (1883) and the Berne Convention for the Protection of Literary and Artistic Works (1886). These two conventions also saw the creation of secretariats that were then merged to form the United International Bureaux for the Protection of Intellectual Property (Bogsch 1992: 7-8). The Bureaux was eventually superseded by a new organization called the World Intellectual Property Organization (WIPO) that was established in 1967.

The twentieth century saw more and more multilateral agreements developed to cover areas such as trade marks, performers' rights, plant varieties and semiconductor chips (Braithwaite and Drahos 2000: 60). The Paris and Berne Conventions underwent a number of revisions. Writing in 1992 the then Director General of WIPO observed that WIPO was responsible for some 24 multilateral treaties with another 5 being planned (Bogsch 1992: 23). Today the WIPO website lists 23 treaties that it administers. These

treaties are not all of equal importance. In terms of treaties that set substantive standards the Paris and Berne Conventions are probably the most important with the two recent WIPO internet treaties, the WIPO Copyright Treaty and the Performances and Phonograms Treaty becoming increasingly important. WIPO also administers a number of treaties that allow an applicant to make an international application that can then be processed in the jurisdictions of the contracting parties. The Patent Cooperation Treaty (PCT) has attracted 127 members and is much used by patent applicants. Essentially all it requires is for an applicant to tick the relevant country box on an application form to keep alive the possibility of pursuing a national patent in that country. WIPO is a profoundly important organizational axis around which much of the international intellectual property regime revolves (Drahos 2002:776-778). WIPO administers far more intellectual property treaties than any other organization. Through the treaty services it provides, especially the PCT, it generates income and uses that income to promote intellectual property protection in many different ways, especially in developing countries. WIPO runs training programs in intellectual property and its enforcement, drafts and provides advice on legislation, assists in the establishment of intellectual property administration (for example, patent offices), and generally works on raising intellectual property consciousness (Bogsch 1992). Its treaty work is in many ways only the tip of a rather large iceberg. Through this proselytizing and promotion, which has gone on for decades, WIPO has been successful in integrating developing countries into the international intellectual property regime (Drahos 2002). The WIPO-led regime is characterized by a careful consensual style of decision-making to ensure that treaties do get on the books, as well as a detailed and technical approach to standard-setting that is tilted in the direction of expanding the reach of intellectual property rights. It is very much an owners' regime rather than a users' or consumers' regime.

The one area in which WIPO was not especially successful was on issues of compliance and enforcement of its treaties. Many states took reservations on the enforcement provisions of the various treaties and in any case there was no culture of enforcement amongst the parties to these treaties (Braithwaite and Drahos 2000: 61). The US in particular began to look for a much more robust approach to enforcement. It turned its

attention to the General Agreement on Tariffs and Trade (GATT) that had evolved a rule-based, litigation-style enforcement mechanism that worked and in which the private sector could play an important behind-the-scenes role. Successful trade litigation depends on close public–private partnerships (Shaffer 2003). The US argued that the issue of intellectual property protection should become the subject of a multilateral trade negotiation within the GATT. Largely due to the efforts of the US and the US big business community, the Final Act of the Uruguay Round (1994) contained the Agreement on the Trade-Related Aspects of Intellectual Property Rights (TRIPS) (Drahos with Braithwaite 2002; Sell 2003).

TRIPS is probably the most important intellectual property agreement of the twentieth century. It has also become the most controversial agreement in the World Trade Organization (WTO), one reason being that its patent provisions have been linked to increased healthcare costs, costs that few developing countries can afford (World Health Organization 1999: 83-86; Lanjouw 2002: 87). For present purposes it is important to see that TRIPS is part of an evolving structure that directly impacts on the design freedom of all countries when it comes to intellectual property rights. All members of the WTO have to implement the obligations of TRIPS. The agreement allows for the possibility that a member may move to “more extensive protection” of intellectual property, but it expressly prohibits members from forms of protection that contravene TRIPS provisions (see Article 1.1). The object of protection, as the preamble of TRIPS makes clear, is intellectual property rights, these rights being described as “private rights”. This provision along with the most-favoured-nation (MFN) principle in Article 4 sets up a global regulatory ratchet for intellectual property rights (Drahos 2001). Essentially, states can only move to higher standards of protection for intellectual protection, where higher standards are being read as meaning a commitment to stronger private rights. Since the conclusion of TRIPS, the US has negotiated bilateral agreements, including free trade agreements that contain higher standards of intellectual property protection than are contained in TRIPS (Drahos 2004). Like TRIPS, these bilaterals allow the parties to move to higher standards of protection, but not lower ones. This ratcheting process is making use of the efficiency savings of the MFN principle.

Each new bilateral agreement that sets higher standards of intellectual property is picked up by the MFN principle of TRIPS. The savings of MFN become significant as more states enter into agreements with the US. If, for example, 29 states each enter into a bilateral agreement with the US that contains the same provisions on intellectual property, the MFN principle spreads those standards amongst all the states. Without MFN, 435 agreements would be needed. Through a combination of TRIPS and bilaterals, US-defined standards of intellectual property protection are rapidly encircling the globe. The purpose of the graph below is to illustrate that developed and developing countries are converging on higher and higher standards of intellectual property protection. It also shows that for a period developing countries were choosing lower levels of protection of intellectual property rights.

Figure 1 Developing Countries and International Intellectual Property Regime

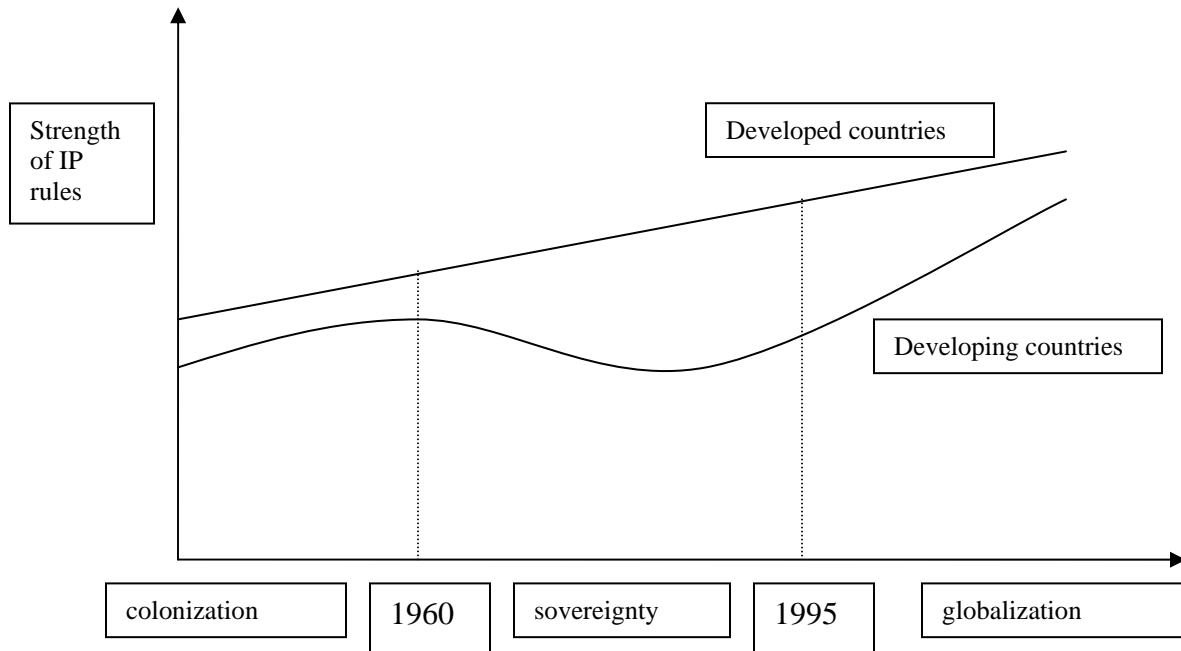


Figure 1 encapsulates a complex history of intellectual property that cannot be dealt with here, but it is worth spending a little time understanding how that history relates to the argument that design freedom matters to intellectual property rights. Broadly speaking, intellectual property rights have spread from key western states with strong intellectual property exporting lobbies to developing countries. There are some exceptions to this. Prior to the beginning of liberalisation in Vietnam in 1986, its intellectual property laws were modelled on those of the former Soviet Union. In the area of patents, the Soviet Union devised its own approach based on the idea of inventors' certificates that essentially made inventions freely available for use while recognizing that the inventor was entitled to compensation (Van Caenegem 1993). The fact that the Soviet Union created an alternative model meant that Western patent law had little practical influence

on the Soviet Union or on those countries that were part of the Soviet Union's area of influence.

In most cases the transplant of intellectual property laws to developing countries has been the outcome of processes of empire-building and colonisation. It follows that design freedom for institutions, including property rights, lies in the hands of the colonizing power. For example, in parts of pre-independent Malaysia it was English copyright law that applied (Tee 1994). Patent law in the Philippines also reveals the forces of empire at work. While the Philippines remained a Spanish colony, it was Spanish patent law that applied. After December 1898 when the US took over the running of the Philippines, patent applications from the Philippines went to the US Patent and Trademark Office and were assessed under US law (Astudillo 1999). The direction of Korean patent law was affected by military conflict. In 1910 the Japanese replaced Korean patent law with their own. In 1946 Korea acquired another patent law as a consequence of US military administration. In the 1980s South Korea was amongst the first to have its intellectual property laws targetted by the US under US trade laws. India had a patent law before many European countries, having acquired one in 1856 while under British colonial rule.

Colonialism had a profound impact on the expansion of copyright (Ricketson 1987). Four major colonial powers ratified the Berne Convention in 1887, the year in which it came into force: France, Germany, Spain and the UK. Each of these colonial powers included their territories, colonies and protectorates in their accession to the Convention. The Berne system was run to suit the interests of copyright exporters. Each successive revision of the Berne brought with it a higher set of copyright standards. By the time many countries shed their colonial status, they were confronted by a Berne system that was run by an Old World club of former or diminished colonial powers to suit their economic interests. Former colonial powers continued to watch over their former colonies. When eleven Sub-Saharan states joined Berne they were "so totally dependent economically and culturally upon France (and Belgium) and so inexperienced in copyright matters that their adherence was, in effect, politically dictated by the 'mother country' during the aftermath of reaching independence" (Lazar 1971: 14).

After World War II many developing countries that had been colonies became independent states. Figure 1 captures this decolonization movement by choosing 1960 as a rough marker to indicate that by this time many developing countries had made the transition to sovereignty. During the 1960s and 70s developing countries flexed, as it were, their new muscles of sovereignty. Many developing countries nationalized their industries, embraced import substitution policies and at the international level pushed for a New International Economic Order. Some developing countries began to review the operation of the intellectual property systems that had been left to them by their colonisers. So, for example, after India's independence two expert committees conducted a review of the Indian patent system. They concluded that the Indian system had failed "to stimulate inventions among Indians and to encourage the development and exploitation of new inventions" (Vedaraman 1972: 43). Interestingly, India did not choose to abandon patent law as a tool of regulatory policy, but instead to redesign it to suit her own national circumstances – a country with a low R&D base, with a large population of poor people and having some of the highest drug prices in the world. Passed in 1970, India's new patent law followed the German system of allowing the patenting of methods or processes that led to drugs, but not allowing the patenting of the drugs themselves.

India was not the only country that began to reform its patent law. During the 1970s Brazil, Argentina, Mexico and the Andean Pact countries all passed laws that saw patent rights in the pharmaceutical area weakened. Developing country generic manufacturers also became a threat to the Western pharmaceutical cartels that had dominated the international pharmaceutical industry. Mexico's entry into the manufacture of steroids in the 1960s, for example, contributed to the end of the European cartel that had dominated production until then (Gereffi 1983). Developing countries, in adjusting their intellectual property laws to suit their national interests, were only doing what they had observed developed countries doing. So, for example, fearing the might of the German chemical industry the UK changed its patent law in 1919 to prevent the patentability of chemical compounds.

During the 1960s and 1970s developing countries began to ask questions about the international standards of intellectual property that had emerged in previous decades, particularly in relation to the two main conventions, the Paris Convention and the Berne Convention. The theme of these questions was always the same. Were the international standards tilted too far towards the appropriation of knowledge rather than its diffusion? Developing countries sought adjustments to both the international copyright regime and the international patent regime. In both cases they were unsuccessful. Their attempts to adjust copyright rules to meet their needs in mass education precipitated a crisis in international copyright in the 1960s (Story 2002). Similarly, the attempts to revise the Paris Convention broke down. Developing countries began to push a reform agenda that would enable them gain access to the technology of multinationals on favourable terms. The fiercest debates took place over the revision of compulsory licensing of patented technology (Mills 1985). The revision of the Paris Convention that had begun in 1980 was never completed (Sell 1998: 107).

The disappointments of the 1970s in intellectual property standard-setting led the US in the 1980s to adopt a strategy of forum-shifting (Braithwaite and Drahos 2000: ch. 24). This strategy produced TRIPS and ushered in the era of globalization for intellectual property rights (roughly captured in Figure 1 by 1995, the year in which TRIPS entered into force).

Summarizing this section of the paper we can say that the current regime for intellectual property rights is a highly globalized one, with developed and developing countries converging on higher standards of protection. The key organizational axes of this regime are WIPO and the WTO. The former promotes multilateral treaties that are framed from an owner's perspective of intellectual property. The latter is a key player in a rapidly evolving trade-based paradigm of intellectual property that is integrating developing countries into the intellectual property regime and most importantly provides intellectual property exporting states with an enforcement mechanism. For the sake of completeness we should mention that other fora, in particular the Parties to the Convention on

Biological Diversity, the Food and Agriculture Organization, the World Health Organization and the UN Human Rights System, also contribute to the international regime. These fora are most often used as sites of opposition (Helfer 2004) to the hard core of the regime that is controlled by WIPO and the WTO. Our analysis also shows that developing countries gained design sovereignty over intellectual property rights for a time, but that the globalization of the intellectual property regime is setting severe limits on that sovereignty. Developing countries have the freedom to adopt higher standards of protection, but not to move to lower standards. This raises two crucial questions. First, does it matter to developing countries that they are losing the freedom to move to lower standards of protection? If the answer is yes, what should they do about it? Proposing answers to these two questions occupies the next section of the paper.

3. An alternative framework for intellectual property rights

There is enough evidence to suggest that restricting the opportunity of developing countries to move to lower levels of protection will have a negative impact on their development, with that impact varying from country to country. The historical analysis of property rights by Douglass North and other neo-institutionalists suggests that property rights matter to long-run growth more than other variables. North's analysis of the differing performances of European countries is told against a background of emerging nations states that had full sovereignty over the definition of property rights. The implications of this sovereignty have not been fully explored. Regression analyses that aim to isolate the importance of property in economic growth face the difficulty that property is a complex system of rules in which not all the rules are of equal importance. Even if, as seems clear from regression analysis, there is a strong link between property and economic growth (Holcombe 2001: 629), it does not follow that all property rights have been equally important in that growth. The recent work by Chang (2002) on property rights in the context of development suggests that European states in the

nineteenth century benefited from being able to choose lower levels of intellectual property protection, with even those lower levels having little in the way of real enforcement mechanisms. Graham Dutfield's (2003) recent study of the history of the pharmaceutical industry also reveals the different ways in which European states were able to exploit freedom of design over their patent laws. The rise of a successful Indian generic industry was importantly assisted by the Indian government's planning of its patent law (Omer 2002). The success of East Asian economies in the 1970s and 1980s, the so-called tiger economies, did not depend on high standards of intellectual property protection. These economies only became fully integrated into the intellectual property paradigm once they had become economically successful and then through US unilateral trade action against them, rather than through voluntary acceptance of the regime (Drahos with Braithwaite 2002: ch.6). More fundamentally, it is clear that imitative production and learning is important to developing countries. Multinationals operating in developing countries typically do so with higher levels of knowledge assets than domestic firms. There is scope for domestic firms to benefit from this positive externality (Görg and Strobl 2001). Whether domestic firms make productivity gains is profoundly affected by the property rules that govern imitative production. Imitative production and learning requires an appropriately designed set of intellectual property rights (for example, rules that permit some degree of reverse engineering).

Imitative production typically requires less capital, a factor that is important in developing countries. If, following Coase, we think of property rights as a factor of production it follows that those property rights should be designed in ways that match the comparative advantage that a country has in other factors of production. This suggests that there will be real long-run costs for developing countries if they continue to participate in a regime of intellectual property rights that continues to ratchet up standards of protection. Much the same conclusion follows from the theory of comparative capitalism (Hall and Soskice 2001). This theory suggests that countries must choose their system for regulating intellectual property with an eye to how it will fit other crucial legal and industry policy institutions from competition policy to labour market policy. Property and these other institutions form an organic whole. Whether or

not particular property rights contribute to the well being of the whole is a matter of careful diagnosis. Crucially, just like a physician, countries must have the freedom to design the right treatment once the diagnosis has revealed the source of the problem. As Jeffrey Sachs (2005: 75) says development economics must strive to be more like clinical medicine in its approach to problems.

The answer to our first question of whether it matters to developing countries that the international regime is circumscribing the choices of developing countries is yes. It matters because there will be costs to developing countries in having to implement property rights not of local design and that do not attend to the other institutional features that affect choices and trading in their economies. The cost of giving up design freedom over intellectual property will probably never be calculated, but we do know that there are costs for developing countries in adopting intellectual property rights (for example, Subramanian 1991; Gould and Gruben 1996; Commission on Intellectual Property Rights 2002; World Bank 2002: 137; Sundakov and McKinlay 2004) .

Our second question is what should developing countries do if the current intellectual property regime imposes high costs on them? If, as many economists now think, it will be the growth and use of knowledge and ideas that will drive the economies of the twenty-first century then developing countries have to begin thinking about the institutions that will affect their chances of having flourishing knowledge economies. The remainder of this paper explores one possible response by developing countries based on the use of a framework agreement. This strategy is based on the premise that for the time being the US and the EU are united on the promotion of a protectionist intellectual property paradigm through the trade regime and that developing countries have comparatively little power to influence the direction in which this trade regime is pushing standards of intellectual property. Developing countries do have the option of articulating an alternative set of standards for the way in which knowledge assets are protected and diffused. Rather than attempting to ratchet existing standards down, the goal would be to start constructing an alternative regime that might provide markets in

knowledge assets with an institutional infrastructure that was different to the existing one and that would facilitate different kinds of trading in those assets.

A framework treaty would be the first critical step because it would create the “contracting space” for the evolution of more specific and enforceable obligations. There are many examples of treaties that begin as “vague and platitudinous” and end up as highly specific and with an enforcement regime (Braithwaite and Drahos 2000: 620). The present WTO regime, which is often held up as having a rule-based enforcement mechanism, began life as an agreement guided by non-legal norms on enforcement. The Paris and Berne conventions each represent a 100 or so years of intensive state negotiations and in essence started life as little more than framework agreements. Many treaties in fact disappoint the aspirations of their original architects, but then over time as opportunities and state groupings change such treaties may evolve into something of genuine significance (Braithwaite and Drahos 2000: 619-20).

For developing countries the coming century of knowledge-based growth raises two basic development priorities. The first is that these countries must give more urgent attention to encouraging investment in human capital. This essentially translates into investment in health and education. Without growth in human capital developing countries will be left to participate in simple commodities markets rather than the knowledge economy. The second basic priority is to think creatively about models of governance for the production of knowledge that maximize the participation of developing countries in the processes of innovation, that maximize the spillover benefits of knowledge and that minimize the social cost of accumulating knowledge.

These two basic goals can be met by a framework treaty on access to knowledge (Drahos 2003). An initiative to produce a draft of a treaty on access to knowledge is currently being led by a coalition of civil society actors (the details of which are available at <http://www.cptech.org/a2k/>). This initiative flows out of a WIPO General Assembly decision to examine proposals for a development agenda that were put forward by Argentina and Brazil in 2004 (Proposal by Argentina and Brazil for the Establishment of

a Development Agenda for WIPO 2004). As the civil society coalition around the draft treaty builds more and more proposals will probably find their way into the draft. The treaty might end up taking the form of a comprehensive and detailed set of rules written from multiple perspectives such as, for example, human rights, rights of copyrights users, the open source movement in software and other standards, and the access-to-medicines lobby. Detailed rules make costs and benefit more transparent. Intellectual property rules typically create winners and losers and so veto coalitions are more or less certain to form. There is also the complication that as states become parties to an increasing number of treaties, especially preferential trade agreements that cover intellectual property, their capacity to entrench treaty-based exceptions to the higher standards in those treaties lessens. For these kinds of reasons a rule-based treaty on access to knowledge might not be the best way to go.

Another approach to the drafting of a framework treaty would be to distinguish clearly between the task of establishing general principles (the principles task) that would constitute the normative code for the evolution of the treaty and the task of detailed rule-setting that would be ongoing as technologies and markets changed (the rules task). The principles of any treaty on access to knowledge have to be grounded in a positive legal order that will give them legitimacy and authority. The most obvious choice here is the human rights framework because like the intellectual property regime it is globalized. The human rights framework is also the closest thing that the international community has to a common resource of values that might be used to guide issues of access to and property in knowledge. A key principle within a draft treaty would be the subordinate and instrumental nature of intellectual property rights. The draft treaty would contain the principle that governments have a duty under human rights law to regulate property in ways that promote the primary rights and values of their citizens. This principle directly follows from key human rights treaties that deal with the general rights of property (Drahoš 1999).

Having established that intellectual property rights are the regulatory servants of basic human rights the framework treaty would then identify those basic rights. Whilst there

can be much discussion about which rights to identify, absolutely fundamental to increasing the skills and capacities of knowledge workers are social policies aimed at improving healthcare and education. Educational policies followed by healthcare policies were foundational to Japan's economic growth, as well as the success of East Asian economies (Sen 1999: 41). A treaty on access to knowledge would therefore place at the centre of its basic rights the right to health and the right to education. Naturally there are a range of other rights that might be considered for debate and inclusion. The right to food security, traditional community rights and perhaps most obviously the right to development are all plausible candidates. Settling on a list would be a matter for those players that supported a treaty in the first place. The crucial conceptual move though would be for the treaty to link the instrumental status of intellectual property to the promotion of these basic rights.

The first two steps that we have outlined as part of the principles task of the treaty are essentially declaratory moves – the declaration of the subordinate status of intellectual property and the declaration of basic rights in relation to which intellectual property was a regulatory instrument. In order for these declarations to have “bite” a treaty on access to knowledge would have to commit its members to some sort of national machinery of implementation. One way in which to do this would be to oblige the members of the treaty to follow a three-stage procedural test aimed at the implementation of its two declarations. The procedural test would be made up of prohibitions and presumptions that would be lexically ordered by a test.

In order to make our idea of a procedural test more concrete we can consider the following prohibitions and presumptions for inclusion in the test. A fundamental prohibition would be the following:

No rule of intellectual property regulation can contradict or undermine a basic human rights norm.

This prohibition necessarily follows from the declarations that we have discussed. Other prohibitions could be added, but these would be a matter of value consensus rather than necessary implication.

Prohibitions would be followed by a list of presumptions that would apply to all proposals for change of intellectual property regulation. Bearing in mind that the purpose of the treaty is to avoid the dangers of the current protectionist paradigm of intellectual property, the following presumptions constitute a defensible minimum –

Presumptions:

Presumption against the criminalization of infringement of intellectual property.

Presumption against the creation of new areas of intellectual property.

Presumption against the extension of existing privileges of intellectual property rights holders.

Presumption against making it easier to prove intellectual property infringement or extending the scope of tests of infringement.

Presumption against extending the duration of intellectual property rights.

Presumption against being able to contract out of statutory provisions that lift restrictions that enable the use of intellectual property.

Having given content to both the category of prohibitions and presumptions it remains to bring our procedural test to life by stipulating a procedure for determining the way in which prohibitions and presumptions are to operate in relation to intellectual property regulation. Our procedure consists of following four steps.

1. Prohibitions are to be read absolutely.
2. Presumptions apply to all forms of intellectual property regulation, but they may be rebutted.
3. Presumptions may be rebutted if and only if an evidence-based analysis of real-world costs clearly demonstrates that such rebuttal will lead to gains in intellectual property regulation that promote the exercise of basic rights of citizens.
4. The burden of rebutting a presumption lies on those public and private actors that advocate changes in intellectual property regulation.

The prohibitions, the presumptions and the four-step test taken together form the procedural test that all parties to a treaty on access to knowledge would agree to implement in their national law reform processes. The test would commit parties to the treaty to take a tough-minded, evidence-based approach to proposals for the extension of intellectual property regulation within a shared framework of human rights values and treaties.

The test, it must be emphasized, is not anti-growth or anti-intellectual property. Intellectual property rights are treated with circumspection because they function as a limit on competition and so are open to abuse. These abuses are part of the real world costs of intellectual property regulation and so have to be part of any evidence-based approach to intellectual property. At the same time, forms of intellectual property regulation that involve new rights or new ways of using rights are permitted as long as they contribute to the *exercise* of basic rights. The Free Software Foundation's General Public Licence is an example of a practice that satisfies the test because it promotes new ways of doing business and guarantees access to the algorithmic building blocks of

computer software. The licence is a practical instrument that provides people with a direct means of exercising the abstract right of sharing in scientific advancement, a right recognized in The Universal Declaration of Human Rights. By adopting the test governments would be encouraging a policy process in which there would be a search for concrete links between innovation, social welfare, intellectual property and basic rights.

We can now turn to a brief elaboration of the rules task of a treaty on access to knowledge. Here it is important to bear in mind that national intellectual property laws are complex systems that in the case of developed countries are nested in a jurisprudence that for some laws goes back hundreds of years. There are many technical questions of intellectual property relating to matters of definition, scope and infringement that remain the province of national courts and legislatures and that would be difficult to make the subject of treaty rule-making. Moreover, for the reasons we saw at the beginning of this paper design freedom over the rules of intellectual property is economically desirable. This said, there may be cases where developing countries in particular will be interested in learning about rules of intellectual property that constitute best practice from the point of view of access to knowledge. This will be true in cases where there are shared technologies (the Internet being the most obvious example) or where developing countries stand to benefit if key technologies are developed in ways that facilitate sharing (for example, research tools in biotechnology). Developing countries and for that matter smaller developed countries also face an expertise problem. Intellectual property rules straddle complex legal, economic and technological domains. It is not especially easy to define computer software in ways that ensure that an exception to its patentability works in a robust fashion. Likewise devising open source licences for biotechnology requires a detailed understanding of the ways in which biotechnology differs from computer software (Hope 2003). Generating solutions to these kinds of problems requires technical experts from different backgrounds to come together to develop integrated approaches. Assembling these networks would be difficult for many countries to do alone.

Enough has been said to identify the challenges that a treaty on access to knowledge must meet as part of its rules task. The way in which the treaty would meet these challenges

would be to establish a process of nodal governance for the generation of rules and standards of best practice. An insight of the theory of nodal governance is that the tying together of different networks produces nodal concentrations in power and knowledge (Shearing and Wood 2003, Burris, Drahos and Shearing 2005). This is a form of governance that weak as well as strong players can utilize in the world system (Braithwaite 2004). By linking different kinds of expert networks the treaty would create nodes of rule-setting expertise on those issues and problems that arise in context of access to knowledge and intellectual property rules. By concentrating nodally technical expertise at their disposal developing countries would increase the influence of that expertise (Braithwaite 2004). Organizationally this is not an especially radical proposal since much of the regulation that affects the daily lives of citizens is in the hands of thousands of technical standard-setting committees that work as part of international regimes as diverse as telecommunications, food regulation, aircraft safety and marine regulation (Braithwaite and Drahos 2000: 503). What is distinctive about the current proposal is that very different nodes of technical expertise would be integrated into a governance structure that itself would be nested in a human rights framework by virtue of the treaty's two declarations and procedural test.

Clearly the organization of these expert nodes is something that would, as in any standards-setting process, evolve over time. But we can at least provide a sense of a possible organizational blueprint. The high level of rule complexity and the fact that intellectual property affects so many domains and industries means that multiple nodes would be required. Different substantive areas would have their own annex in the treaty. So, for example, there would be an Annex on technical standards and intellectual property, an Annex on open source innovation in software, an Annex on education, libraries and copyright, an Annex on open source innovation in the life sciences, an Annex on Intellectual Property and Health and so on. Inevitably there would be some overlap between the different annexes and so some procedure for achieving overall coherence would have to be found.

The responsibility for the development of the standards in each Annex would rest with a group of technical experts in the relevant field. Representation in these groups would not be state-based, but rather based on a commitment to a genuine evidence-based approach to development and intellectual property. Built into the selection process for these committees would be rigorous conflict-of-interest tests to ensure that companies with vested profit interests in stronger intellectual property standards did not gain membership. On this point it is worth noting that Article 5.3 of WHO Framework Convention on Tobacco Control obliges parties to protect their public health policies “from commercial and other vested interests of the tobacco industry”.

In order to illustrate how the committee structure of the treaty would work imagine, as is likely, that the treaty contains an Annex on Intellectual Property and Health. Looking after this Annex would be a committee comprised of public health experts, pharmaco-economic experts, economists with specialist knowledge of the pharmaceutical industry and trade and patent law experts. There might also be subcommittees working on regions or groups of developing countries, these sub-committees containing individual country experts. It would be the task of this committee to evaluate current standards of intellectual property protection and their impact on health and to formulate new standards taking into account the different needs of different developing countries.

Membership of these committees would be based on demonstrated technical expertise and the possession of information about the problems that the committee in question was addressing. Imposing this information criterion would be vital to the effective working of the committees under the treaty. For example, the doctors that work in a developing country for an organization like Médecins Sans Frontières will often have the best information about the public health problems in that country, including intellectual-property-related problems such as being able to import patented medicines for the purposes of treating HIV/AIDS patients. Other civil society organizations that have long experience with farmers in developing countries will have years of practical experience and information to bring to the table on issues relating to the effects of intellectual property rights on traditional patterns of saving and exchanging seeds. It is hard for

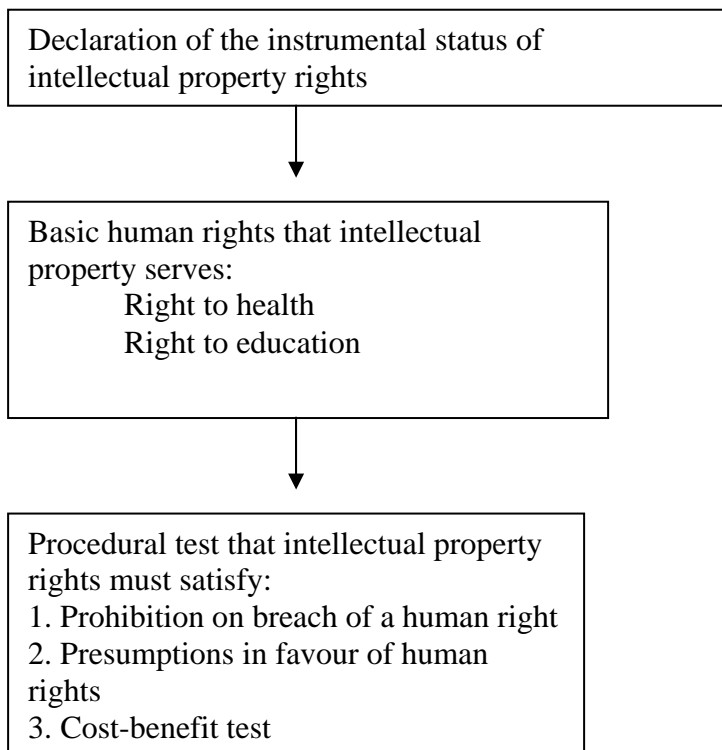
international consultants that only visit a country for a few weeks and who are under various kinds of pressures and deadlines to match the knowledge of a civil society organization that has years of experience in a country. In short, the criterion of best information about the problem would mean that committees under the treaty would draw many of their experts from civil society. It is perhaps worth adding that the members on the committees doing their work under the treaty could expect to have their output closely scrutinized by the thousands of civil society organizations that now work on issues related to intellectual property. This would act as an incentive for those committees to produce quality evidence-based standards and it would also make the regulatory capture of the committees by industry a much more difficult task. Civil society activists would act as watch dogs over the work of the committees. No individual who had the honour of working on such globally important committees would want to compromise his or her reputation for independence and evidence-base analysis by accepting pre-packaged analyses from industry. There is now considerable evidence that public interest groups can improve the quality of domestic regulation (Ayres and Braithwaite 1992). The same approach towards the constructive utilization of the regulatory influence of civil society groups needs to be structurally injected into global regulatory regimes.

Each annex in the treaty would have a committee that tied together the relevant kinds of expertise for its subject matter. One important feature and advantage of constituting standard-setting committees in this way is that standard-setting in intellectual property would cease to be dominated by legal expertise. Lawyers are culturally predisposed to protect and expand property rights and yet lack the epistemological basis or methods to evaluate the consequences of this professional bias. Committees that functioned as interdisciplinary nodes of technical expertise would have a better chance of arriving at standards that were genuinely efficient for developing countries. Putting the point more abstractly, a treaty on access to knowledge offers developing countries the chance to establish a nodal governance that is epistemically open and relevant to their needs as opposed to the current form of governance that is epistemically closed and irrelevant or harmful to their needs.

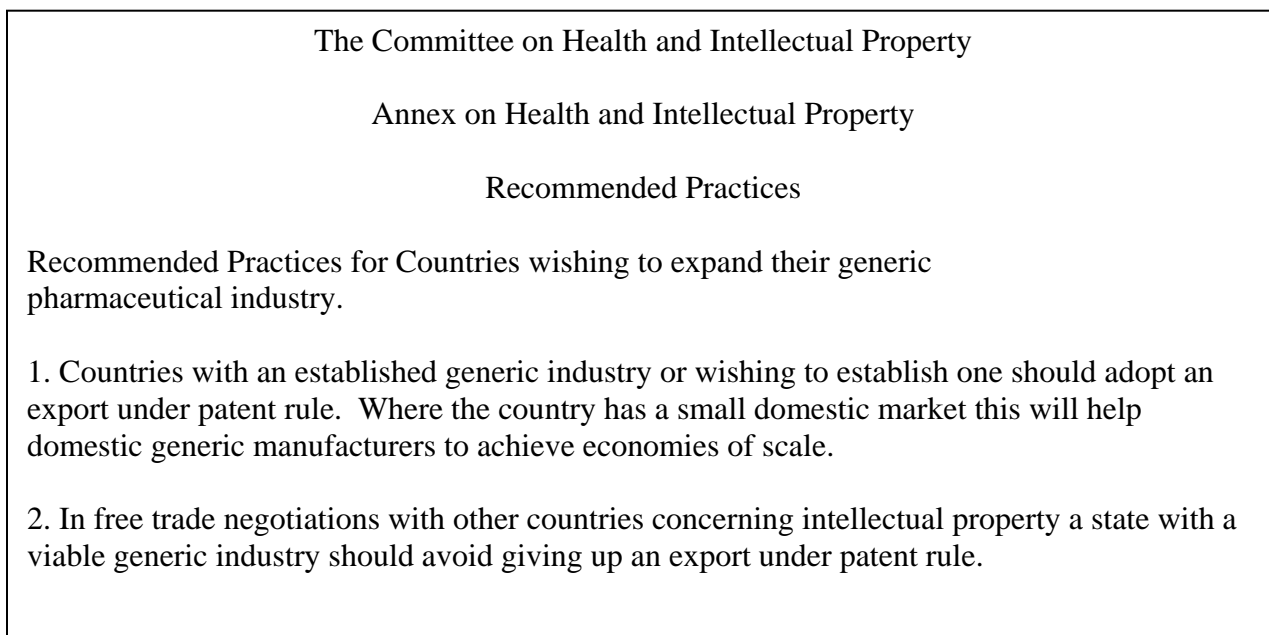
The standards could, at least in the beginning, simply be issued in the form of recommended practices. The International Civil Aviation Organization, for example, issues some of its standards as recommended practices. This would leave states with the freedom to choose those standards that were consistent with their overall treaty obligations. For example, the Committee on Intellectual Property and Health might recommend that countries that were interested in developing a robust generic industry adopt an export under patent rule. Essentially this would allow a generic manufacturer to export a pharmaceutical product that was under patent in its jurisdiction to a market where the product was no longer on patent. Such a rule would help companies achieve economies of scale. However, some states such as Australia, Chile and Singapore have signed free trade agreements with the US that prohibit them from adopting this kind of rule. Clearly if the rule were a treaty standard in a treaty on access to knowledge those states would not be able to ratify the treaty without breaching their bilateral obligation to the US. The advantage of issuing the rule as a best practice standard is that it would still allow states that had assumed a contrary obligation to join the treaty on access to knowledge and take advantage of it in other ways. The more general lesson that this example illustrates is that the present hard law regime of intellectual property could potentially defeat the future success of a treaty on access of knowledge. By designing standard-setting in a way that was authoritative by virtue of its expert origins and evidence-based nature, but that was issued in soft form states could adopt those standards that best suited them.

Structure of a Treaty on Access to Knowledge

Principles Task



The Rules Task (an example)



A treaty on access to knowledge should not be seen as just having the negative task of limiting the spread of inappropriate intellectual property rules. It can also aid in the positive task of developing the institutional infrastructure that will be needed to support the knowledge markets of the twenty-first century. Models of innovation are increasingly recognizing its polycentric and collective nature. The role of end users in innovation has been recognized as has the role of sharing. These models of innovation require bits of institutional infrastructure that make it easy for potential agents of innovation to enter the process of innovation. The rules of game that facilitate this kind of innovation typically minimize the cost of entry into the system of innovation by offering free licences, placing the innovative information into the public domain and cultivating and socializing for norms of free exchange.

A treaty of the kind we have been discussing offers the possibility of constituting a genuinely multilateralized networked approach to standard-setting for innovation that is based on open access. A remarkable historical opportunity is presenting itself. If one looks at the technologies of the nineteenth and twentieth centuries such as telegraph, radio and telephone, standard-setting was dominated by US-government regulated private monopolies such as ATT and the public monopolies of the European post, telephone and telegraph system (Braithwaite and Drahos 2000: ch.14). Even Japan, the great development success story of the second half of the twentieth century, was able to make little impression on a standard-setting game played out by western commercial interests in fora like the International Telecommunication Union. Developing countries were simply not players in such international organizations. Open access innovation offers developing countries great advantages. Its norms favour sharing, access free of monetary restraints and broad participation (see, for example, Krogh and Hippel 2003; Benkler 2004). Standards emerge through dispersed networks linked by information technology rather than from organizations located in expensive cities to which mainly well-heeled governments and multinationals send representatives. In economic terms these values and norms lower costs for those wishing to enter the relevant innovative system. This clearly advantages developing countries that have low-cost highly trained knowledge workers.

Finally, it should be said that the success of a treaty on access to knowledge depends profoundly on the involvement of that segment of business entrepreneurship that sees in open access innovation the possibility of new business models and new markets. Much of that new entrepreneurship resides in the US. A treaty on access to knowledge should through its committees of technical experts draw on the insights and energy of that entrepreneurship and foster the growth of networks that stretch across developed and developing countries. It is through such networked communities that the organic spread and growth of tomorrow's technologies has its best chance.

5. Conclusion

Design freedom over property rights matters. It matters to the kinds of exchanges that can take place and therefore to the structure of markets and long-run economic growth. Groups must have the capacity to change the rules of property in order to adapt the use of resources to new contexts. Historically today's developed states had considerable design freedom over intellectual property rules. Today's developing states had very little because they acquired those rules as part of empire and colonization processes. After achieving sovereignty developing states had to contend with, in the last quarter of the twentieth century, the intensification in the globalization of intellectual property rules via the WTO trade regime. This led to a further loss of their design freedom over intellectual property rules. In particular developing states do not have the freedom to maintain or shift to lower standards of intellectual property protection.

Radical reform of the current intellectual property regime is not for the time being feasible in geo-political terms. The US and the EU remain committed to the current regime. However, it may be possible to stem the expansion of this regime by stimulating the emergence of alternative models for the governance of knowledge, models that encourage the use of knowledge assets in open access systems of innovation.

An important architectural tool to this end would be the creation of a framework treaty on access to knowledge. The treaty would expressly establish the subordinate status of intellectual property norms by drawing on the existing human rights framework. In order to ensure that intellectual property regulation did serve basic rights, members of the treaty would agree to adopt a procedural test consisting of a prohibition on the contravention of basic norms and human rights regarding presumptions against intellectual property expansion that could be rebutted if the evidence showed that such expansion did bring clear benefits to citizens. The treaty would also create a new approach to standard setting. Subject-specific annexes would contain standards that would be issued by committees as recommended practices. This soft norm approach would give all parties to the treaty maximum flexibility. The authority of these norms would not be based on law; rather it would flow from the fact that the norms had been produced by networks of experts committed to evidence-based analysis, working independently of vested commercial interests.

In summary form the advantages of a treaty on access to knowledge are the following. It is a low-cost way of beginning the process of constructing an alternative to the present property-based forms of governance for knowledge. In the absence of an alternative the present form of governance will simply continue to strengthen. By linking intellectual property to the human rights framework the treaty would be able to draw on the resources of an established international juridical order to promote a development agenda. By creating nodal points of technical expertise to steer the process of standard-setting, the treaty would help developing countries overcome their capacity problems. Finally, the treaty could help developing countries to encourage more market actors to participate in open access innovation. This type of innovation has lower entry costs than a model of innovation that restricts the diffusion of knowledge assets through strong property rights. For developing countries a treaty on access to knowledge is perhaps the first step towards a more meaningful share of the emerging knowledge markets of the twenty-first century.

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