Hegemony Based on Knowledge: The Role of Intellectual Property

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The efficiency and distributive effects of the global knowledge economy are deeply affected by the rules of intellectual property. This article describes how these rules were globalised by a small group of individuals in the 1980s. This group developed a strategy that was driven by a single idea that US intellectual property standards could be imposed on all other countries by incorporating those rules into the international trade regime. The results of this US hegemony over the global knowledge economy have potentially devastating consequences for economic development. In effect, the information rich have found new ways to rob the information poor. The article looks at some consequences, especially the effects of patent rules on access to medicines. Its conclusion is that the US has had a historically unprecedented opportunity to use its stock of knowledge to further the development of the many poor states in the world, but for the time being the US state and US multinationals remained committed partners in the institutional project of information feudalism, that is the project of acquiring and maintaining global power based on the ownership of knowledge assets.

Introduction

The power of states depends upon their capacity to contain and harness resources within their borders. Informational resources – scientific knowledge, technological information and data – are a potent, yet fragile source of power. When the mathematical algorithms that drive 'smart' US military technology become known and exploited by other nations, those nations become a competitive threat to the US. When the chemical processes and genetic engineering techniques that give US chemical and pharmaceutical multinationals global commercial advantages become understood by others, that knowledge has become a source of competitive threat. The logic of hegemonic power based on knowledge is to lock up knowledge, to deal with ignorance selectively, to create a morality that judges knowledge to be a private good and to punish through the criminal apparatus of the state those who steal knowledge.

The creation of proprietorial divides over knowledge carries with it costs. As millions of AIDS sufferers are discovering, obscure and complex patent rules are literally a matter of life and death, for they determine whether or not cheaper generic versions of AIDS drugs can be imported into their country or whether a generic manufacturer can in fact make the drug in the first place. Intellectual property affects much more than access to pharmaceuticals. Trade marks are fundamental to marketing strategies that affect the hopes and emotions of consumers and copyright has long affected the structure of international publishing, the costs of education and, more recently, industries like computer software (copyright was one of the principal means by which Microsoft achieved its position of dominance). Patents are the chief weapon that proprietary software owners use to undermine the free software movement, a movement that sees virtue in the rapid exchange of knowledge and autonomy over its use.

The abstract logic of domination through the propertisation of knowledge has a concrete institutional manifestation in the international regime of intellectual property. Beginning in the mid-1980s a sea change took place in the way that international standards of intellectual property were set. As we shall see in the first part of the article a small group of key players in the US had a big idea – to link intellectual property to the General Agreement on Tariffs and Trade (GATT). When more than a hundred trade ministers gathered in the splendid Salle Royale of the Palais des Congrès in Marrakesh on 15 April 1994 to sign the Final Act of the Uruguay trade round negotiations, one of the agreements in that Final Act that was obligatory on all members of the future World Trade Organization (WTO) was the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). TRIPS contained a minimum set of standards that all members of the WTO had to enact and enforce for a range of intellectual property standards including copyright, patents and trade marks. Many of these standards were in fact modelled on US domestic law. The WTO was thus born an agency that globalised (and more importantly could enforce) US approved standards of intellectual property. With this step the WTO entered the juridically complex world of intellectual property rights, a world in which the export of goods across borders could be defeated if intellectual property rights had been infringed and competition to produce those goods could be stopped if some conduct that infringed a TRIPS standard could be found.

Many developing countries had agreed to TRIPS in the hope that the US would be content with its standards and the gains it brought to the US economy. It was a naive hope and it turned out be one in vain. TRIPS, as we will see, has turned out to be a floor without a ceiling.

The Story of TRIPS

Private Networked Governance

Susan Sell in her study of TRIPS points out that some 12 US corporations were primarily responsible for the lobbying that brought TRIPS into being (Sell, 2003). We have come to a similar conclusion (Drahos and Braithwaite, 2002). TRIPS, however, was not a case of simple lobbying because it required the drafting of a detailed international agreement containing US standards of intellectual property protection. That draft then had to be steered through a multilateral trade negotiation involving more than 100 states and that lasted from 1986 to 1993. The key to explaining how this was achieved lies in a small number of corporations creating ever widening circles of influence that brought more actors and networks into the cause of global intellectual property rights. The activities of Pfizer Corporation during this time illustrate how TRIPS came to be an output of a sophisticated form of private networked governance.

Pfizer more than most pharmaceutical corporations had invested in developing countries and so saw the threat to international markets that generic manufacturers in countries like India posed for the US pharmaceutical industry. Pfizer saw the Indian market as a long-term bet and so wanted strong patent protection within India for its products. Stronger patent protection, especially product patents over pharmaceutical compounds would also allow companies like Pfizer to make it difficult for Indian generic manufacturers to export to third markets such as Canada. The key was to get India to enact the same standards of protection as Pfizer and other large companies enjoyed in the US. The problem was that the Indian government had enacted patent law, but that law only recognised pharmaceutical patents on processes and not products. The idea behind this product/process distinction was that Indian pharmaceutical manufacturers would have an incentive to find cheaper and cheaper processes for the production of drugs, but could not use patents on the pharmaceutical product itself to pursue a monopoly pricing strategy.

India was not the only developing country to craft patent policies that suited its stage of development, but it was the most dangerous as a competitor because of its export capabilities. As these policies began to bite, Pfizer was faced with unprofitable operations in developing countries. In the words of Edmund Pratt, the CEO of Pfizer from 1972 to 1991, '[w]e were beginning to notice that we were losing market share dramatically [in developing countries] because our intellectual property rights were not being respected in these countries' (Pfizer, 1992: 6). Lack of respect on the part of developing countries did not necessarily imply illegality, but rather that developing countries were adjusting the rules of the patent game to serve their local industries in exactly the same way that Western states used intellectual property for their own protectionist ends. The loss of market share in developing countries did not really impact on Pfizer's overall profitability. Pratt again: 'Fortunately, we were doing well in our other operations so it didn't affect our overall performance dramatically' (Pfizer, 1992: 7). The world's biggest pharmaceutical markets remained the US, Japan and Europe. Pfizer's own sales in developing markets were never much more than 10-12 per cent of its total sales (Pfizer, 1992: 2, 4). Nevertheless, these less developed countries were nibbling at the edges of the global knowledge game that to date had been dominated by Western multinationals.

Pfizer also saw that a new approach to the international patent regime was needed because increasingly developing countries were using their superior numbers in the World Intellectual Property Organization (WIPO) to put forward initiatives that favoured their own position as net importers of foreign technology. WIPO, which had become a specialised agency of the United Nations in 1974, had experienced a steady rise in membership by developing countries. Until the WTO stepped into the field in the 1990s, WIPO had been unchallenged as the international agency responsible for fostering convergence in national intellectual property rules and capacity building with developing countries as they acquired more sophisticated intellectual property law. The small group of developed countries that owned most of the world's intellectual property in the form of patents, trade marks and copyrights found it harder to fulfil their agendas for expansion of the regime through WIPO. Developing countries were users and importers of intellectual property and so wanted a regime that paid more attention to these interests. During the early 1980s a small group of Washington-based policy entrepreneurs had conceived of the idea of

linking the intellectual property regime to the trade regime. Under the dynamic and aggressive leadership of their CEO Edmund Pratt, Pfizer executives became leading proponents of this idea. Essentially their notion was to get an agreement on intellectual property into the GATT. It was a radical idea. States had moved cautiously in ceding sovereignty over intellectual property rights within the context of WIPO.

Pfizer executives began to use their networks in two important ways. The first consisted of network activation. They started to disseminate the idea of a trade-based approach to intellectual property. Pratt began delivering speeches at business fora like the National Foreign Trade Council and the Business Round Table, outlining the links between trade, intellectual property and investment. As a CEO of a major US company, he could work the trade association scene at the highest levels. Other Pfizer senior executives also began to push the intellectual property issue within national and international trade associations. Gerald Laubach, President of Pfizer Inc, was on the board of the Pharmaceutical Manufacturers Association and on the Council on Competitiveness set up by President Ronald Reagan; Lou Clemente, Pfizer's General Counsel, headed up the Intellectual Property Committee of the US Council for International Business; Bob Neimeth, Pfizer International's President, was the Chair of the US side of the Business and Industry Advisory Committee to the OECD. The message about intellectual property went out along the business networks to chambers of commerce, business councils, business committees, trade associations and peak business bodies. Progressively Pfizer executives who occupied key positions in strategic business organisations were able to enrol the support of these organisations for a trade-based approach to intellectual property. With every such enrolment the business power behind the case for such an approach became harder and harder for governments to resist.

The second way in which Pfizer operated was by tying various networks together to obtain action. One of the nodes in the network that played a pivotal role in the negotiations over intellectual property was the Advisory Committee on Trade Negotiations (ACTN). ACTN had been created in 1974 by Congress under US trade law as part of a large and complex private sector advisory committee system. Comprised of many different sectoral and technical committees on which sit representatives from the private sector, the purpose of this system was and is to ensure a concordance between official US trade objectives and

US commercial and economic interests. These committees are places where US public and commercial law mixes with private interest and emerges transformed, adapted or discarded and replaced by a new initiative. Behind the rule of law in the US there is pragmatism of principle and the rule of committees.

ACTN existed at the apex of this private sector committee system. Pratt, with the assistance of other senior executives within Pfizer, began to put himself forward within business circles as someone who could develop US business thinking about trade and economic policy. In 1979 Pratt became a member of ACTN and in 1981 its Chairman. During the 1980s representatives from the most senior levels of big business within the US were appointed by the President to serve on the committee (Pratt was appointed by President Carter). The Committee was a purely advisory one, but with direct access to the US Trade Representative (USTR) and the duty of advising him or her on US trade policy and negotiating objectives in the light of national interest, it was an extremely influential committee (the USTR is the chief trade negotiator for the US and the main policy advisor to the President on trade issues).

Out of this business crucible came the crucial strategic thinking on the trade-based approach to intellectual property. Aside from Pratt, the CEOs of IBM and DuPont also served on ACTN. With Pratt at the helm, ACTN began to develop a sweeping trade and investment agenda. A Task Force on Intellectual Property was established within ACTN. John Opel, the then Chairman of IBM and another key member of ACTN, headed this Task Force. Other members of the Task Force included Fritz Attaway (Vice President and Counsel of the Motion Picture Industry Association) and Abraham Cohen (President of the International Division of Merck) (Sell, 2003: 89). During Pratt's six years of chairmanship, ACTN worked closely with William E Brock III, the USTR from 1981-85 and Clayton K Yeutter the USTR from 1985-89 helping to shape the services, investment and IP (intellectual property) trade agenda of the US.

ACTN's basic message to the US government was that it should pull every lever at its disposal in order to obtain the right result for the US on intellectual property. There were a lot of possible levers. US Executive Directors to the IMF and World Bank could ask about intellectual property when casting their votes on loans and access to bank facilities; US aid and development agencies could use their funds

to help spread the intellectual property gospel. Over time the message was heard and acted upon. Provisions protecting intellectual property as an investment activity were automatically included in the Bilateral Investment Treaty program that the US was engaged in with developing countries in the 1980s. Means of influence of a personal and powerful kind also began to operate. George Shultz, the then Secretary of State, discussed the intellectual property issue with Prime Minister Lee Kuan Yew, stated Jacques Gorlin in his 1985 analysis of the trade-based approach to intellectual property (1985: 47). President Reagan in his message to Congress of 6 February 1986, entitled 'America's Agenda for the Future', proposed that a key item was much greater protection for US intellectual property abroad (*BNA's Patent, Trademark & Copyright Journal*, 1986: 285). The ground was being prepared for intellectual property to become the stuff of big picture political dealing and not just technical trade negotiation.

Both Opel and Pratt had been pushing the intellectual property agenda with the USTR, at first with William Brock and then his successor, Clayton Yeutter. In 1981 Brock had formed the Quadrilateral Group (Quad) of countries for the purpose of trying to develop a consensus for a new round of multilateral trade negotiations. The Quad consisted of the US, the European Community, Japan and Canada. It still remains the most important group within the WTO. In the early 1980s there were differences of view between Europe and the US on the desirability and content of a future trade round. Without the agreement of the US and Europe the prospects of a multilateral trade round getting off the ground were slim. Once the Quad countries had achieved a consensus on an agenda for a multilateral trade round, the round would most likely begin. Yeutter saw the centrality of intellectual property to a new trade round, but the problem was, as he explained to Pratt and Opel, that when he went to meetings of the Quad there was no real support from the other Quad members to merge intellectual property and trade (Drahos and Braithwaite, 2002: 117).

The problem facing Pratt and Opel was clear enough. They had to convince business organisations in Quad countries to pressure their governments to include intellectual property in the next round of trade negotiations. That meant first convincing European and Japanese business that it was in their interests for intellectual property to become a priority issue in the next trade round.

Pratt and Opel's response was swift. In March of 1986 they created the Intellectual Property Committee (IPC) (Drahos and Braithwaite, 2002: 118). The IPC was an ad hoc coalition of 13 major US corporations; Bristol-Myers, DuPont, FMC Corporation, General Electric, General Motors, Hewlett-Packard, IBM, Johnson & Johnson, Merck, Monsanto, Pfizer, Rockwell International and Warner Communications. It described itself as 'dedicated to the negotiation of a comprehensive agreement on intellectual property in the current GATT round of multilateral trade negotiations'.

Europe was the key target for the IPC. Once Europe was on board Japan was likely to follow, or at least not to raise significant opposition. Canada, despite its Quad membership, was not really a player. It was the support of European and Japanese corporations that was crucial. What followed was a consensus-building exercise carried out at the highest levels of senior corporate management. CEOs of US companies belonging to the IPC would contact their counterparts in Europe and Japan and urge them to put pressure on their governments to support the inclusion of intellectual property in the next trade round. Small but very senior and powerful business networks were activated. The IPC also sent delegations to Europe in June 1986 and Japan in August of 1986 to persuade business in those countries that they also had an interest in seeing the GATT become a vehicle of globally enforceable intellectual property rights. The IPC's efforts in the lead-up to a crucial ministerial meeting at Punte del Este in 1986 brought it success, for both European and Japanese industry responded by putting pressure on their governments to put intellectual property on the trade agenda. At Punta del Este the US got the mandate it wanted to negotiate an agreement on intellectual property. The Ministerial Declaration that launched the Uruguay Round in September of 1986 contained a brief reference to the 'trade-related aspects' of intellectual property rights. With these few brief words intellectual property rights entered the GATT.

Public economic coercion

TRIPS was not, however, just the product of private governance based on a strategy of tying influential networks together. Some of the nodes within this network, such as the USTR, were vested with the formal authority and power of the state. At base TRIPS was the product of this coercive power. The power of the USTR to issue or threaten to issue

determinations to increase duties on a range of products being exported to the US market by developing countries was a power that no single US corporation had or even would have wanted to exercise. In many cases they were doing or wanted to do more business in these countries.

When the US began to push for the inclusion of intellectual property in the GATT at the beginning of the 1980s, developing countries resisted the proposal. Developing countries, which at that time held about 1 per cent of the world's patents, and were desperate for access to Western technology, knew that such a proposal would not be in their interests.

The countries that were the most active in their opposition to the US agenda were India, Brazil, Argentina, Cuba, Egypt, Nicaragua, Nigeria, Peru, Tanzania and Yugoslavia (Bradley, 1987: 81). Breaking the resistance of these 'hard liners' was fundamental to achieving the outcome that the US wanted. Many developing countries had selective access to the US market under a system known as the Generalised System of Preferences (GSP). The US had begun its GSP program in 1976. Under its terms around 140 developing countries achieved preferential duty free entry for particular products (roughly between 4000 and 5000 products at any given time). It was not free trade in the general sense, but rather special privileges for some countries in relation to some products. Over time many developing countries became dependent upon this form of trade welfare benefit.

In 1984 the US began a process of reforming its GSP system and its Trade Act essentially to create a national trade enforcement tool for intellectual property on behalf of its corporations. Under US trade law, US corporations could petition the USTR to withdraw benefits of trade agreements or impose duties on goods from foreign countries that were not extending adequate and effective protection for US intellectual property. The USTR then had the option of listing countries under what came to be known as the '301' process. Table 1 opposite shows how systematically the US used its trade enforcement tool to break the resistance of key developing countries. As the Table shows almost every developing country that opposed the US at the GATT ended up being listed for bilateral attention by the US. There was nothing very secret about this process. In 1988 the US changed its Trade Act to make resisting the US in a multilateral forum part of the conditions that could lead to a country being identified as a Priority Foreign Country and therefore the subject of a Special 301 investigation (19

USC 2242(b)(1)(c)). There could be no clearer articulation of a threat than to enact it as law.

Table 1
US trade action against key developing countries in the GATT between 1984-1993

Developing Country members of the hardliners opposing intellectual property in the GATT or active in the 10 plus 10 TRIPS negotiating Group or both.[1]	Years between 1984-1993 in which a developing country was the subject of a petition, listed, investigated or had penalties imposed under US 301 or GSP program.
Argentina	1988-1993
Brazil	1985, 1987-1993 (1988*)
Chile	1988-1993
Colombia	1989-1993
Cuba	
Egypt	1989-1993
Hong Kong	**
India	1989-1993 (1992*)
Indonesia	1989, 1990
Malaysia	1989, 1990 1993
Mexico	1987*,1989
Nicaragua	
Nigeria	
Peru	1992,1993
Singapore	**
South Korea	1985,1989, 1992, 1993**
Tanzania	
Thailand	1989*-1993
Uruguay	
Venezuela	1989-1993
Yugoslavia	1989-1991

* Year in which penalties were actually imposed.
** Countries that were given favourable GSP packages because they had improved their intellectual property protection.

Developing countries hoped that by negotiating multilaterally there was the possibility that they would be able to obtain some limits on the use of 301 actions by the US on intellectual property. This, at any rate, was what they were being told by developed country negotiators and the GATT Secretariat. Exactly the opposite happened. During the 1990s the US increased its unilateral surveillance of countries on intellectual property issues. In her 2000 *Special 301 Report* the then USTR Charlene Barshefsky pointed out that more than 70 countries had been reviewed under Special 301. She named 59 foreign countries that failed to meet satisfactory standards of intellectual property; 59 countries that had been graded and listed; 59 countries whose laws and practices on intellectual property had to be watched, analysed and acted upon.

During the 1980s and 1990s the US created, in effect, a global regulatory ratchet for intellectual property. This ratchet consists of waves of bilateral agreements (beginning in the 1980s) followed by occasional multilateral or regional standard-setting (eg, TRIPS and NAFTA). Each wave of bilateral or multilateral treaties never derogates from existing standards and very often sets new ones. In all these agreements states are bound not to offer less protection than agreed to, but are allowed to offer more extensive protection than is required under the relevant agreement. Thus the ratchet only ever moves upwards. Its latest manifestation is the free trade agreements that the US has concluded with Jordan (2001), Chile (2003) and Singapore (2003). More recently, free trade agreements have been concluded with Australia, Morocco and the Central American nations (Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua). These are yet to be approved by the US Congress. There are also ongoing negotiations with members of the Southern African Customs Union (Botswana, Lesotho, Namibia, South Africa and Swaziland). These FTAs all contain long and detailed provisions on intellectual property, provisions that are 'TRIPS-plus'. So, by way of example, the US-Singapore FTA does not allow the parties to omit plants and animals from patentability, something that TRIPS permits (art 16.7.1 of the US-Singapore FTA).

Intellectual Property Rights and Development: Fuzzy Values, Hard Rules

The Doha Round of trade negotiations that was launched in Doha, Qatar in November of 2001 has been referred to as a 'development

round', the idea being that this round, in apparent contrast to previous rounds, will pay some attention to the needs of developing countries. Some reference to a fairer development agenda is an almost obligatory part of speech-making for Western leaders. The policy elites that operate in the global corridors of power of institutions such as the World Bank, the IMF and WTO spend their time writing reports that symbolically utilise warm and fuzzy development values. Thus a recent World Bank report says that development is about 'improving the quality of people's lives, expanding their ability to shape their own futures' (World Bank, 2000: xxiii). It is now clear that major development problems such as lack of market access for developing countries' exports, ill health and lack of education in developing countries 'can be solved only with cooperation from high-income countries' (World Bank, 2001: 188). And, in addition, '[p]oor people and poor countries should have greater voice in international forums' (World Bank, 2001: 12; Narayan, 2000). Here we have a group of fuzzy values that include cooperating with the poor, recognising their autonomy and helping to empower them. How do these values square with the detailed technical rule-making that goes on with respect to intellectual property rights in trade fora?

The value of autonomy implies at the level of rule-making for developing countries that one should set rules that do not limit the opportunities of poor countries and that leave them with some sovereign discretion over informational resources. The very concept of development, it might be argued, implies rule diversity. Yet the practice of rule-making in trade fora is about the globalisation and harmonisation of one set of intellectual property standards. The standards of intellectual property that the US is globalising are its domestic standards, standards that meet its own economic needs and fit with its cultural and philosophical traditions. Strong patent standards may make sense in the US because, amongst other things, it has 3676 scientists and engineers in R&D per million people, but surely they make no sense in a country like Rwanda that has only 35 per million (World Bank, 2001: 311). Around the world many people have deeply held reservations about the patentability of plants, animals and human genetic resources, reservations that are based on a variety of ethical perspectives and traditions, including religious, indigenous and environmental ones. Yet the US has relentlessly pushed in TRIPS and subsequent bilateral agreements what the US Supreme Court has

declared to be its domestic position, namely that anything under the sun is patentable (*Diamond v Chakrabarty*, 200). It is equally relentless in seeking to impose upon the world a system of agriculture that is really a system of technology in which the farmer becomes the lessee of patented seeds, plants, fertilisers and pesticides. Fears that this technology does not meet the needs of subsistence farmers around the world, that it carries with it environmental risks that have not been properly assessed, that it cuts across farmer traditions such as the saving and exchange of seed or that it requires economies of scale that few countries can really exploit tend to be brushed aside by the US as disguised protectionism. It responds by threatening litigation in the WTO, knowing that its weight of lawyers will more than likely tilt the playing field in its favour.

Ignoring moral diversity in the definition of intellectual property rules while seeking through those rules to universalise its own cultural perceptions is a US practice to be found in other parts of intellectual property. The US was successful in excluding from TRIPS the recognition of authors' rights, those rights that are based on European philosophical traditions that recognise an indissoluble link between creators and their works (the key ones being the right to paternity and the right to integrity). Hollywood, in the form of the Motion Picture Association of America (MPA), has been opposed to these rights because they are potential interferences in its world-wide systems of production, marketing, distribution and exhibition. The right of integrity, for example, gives authors, potentially at least, some rights over how their works might be used in a film. Directors may also use the right to exercise some control over the commercial fate of their films (for example, preventing the colourisation of a film shot in black and white).

Yet at the same time actors like the MPA invoke free speech values to argue that there should be no restrictions on the circulation of US film, television and other copyright works. Of course, there is a trade agenda because, as has been known for a long time, trade follows the film. The practical upshot of these free speech/free trade arguments is a constant pressure to remove quotas. No quota is too low to be ignored. When Indonesia imposed a screen quota requiring its First Run theatres to show at least two Indonesian films each month for a minimum of two days both the MPA and the International Intellectual

Property Alliance raised the matter with the USTR as part of their recommendation in 1993 to list Indonesia under the 301 process. The endgame for Hollywood is no restriction on its capacity to dominate any type of screen in the world at any time and place.

Empowerment is another fuzzy value that routinely makes it into the 'development-speak' of Western policy elites. Whatever empowerment means, it surely does not mean transferring wealth from the poor to wealthy. Yet by imposing its own standards of intellectual property on developing country economies the US has changed the *terms of trade* of those economies. Developing states, which are net importers of intellectual property, will have to make greater payments to the US for the use of intellectual property rights than otherwise would have been the case. A study by the World Bank, for example, pointed out that the net rent transfers to the US from the patent provisions of TRIPS would be about $19 billion per year (World Bank, 2002: 137). This figure only represents a beginning since it does not cover many other valuable areas of intellectual property like copyright that relates to the software, music and film industries.

Finally, we arrive at the value of cooperation, perhaps the primary value in development rights talk these days. How does this value square with the reality of technical rule-making in the international intellectual property regime? With more than 20 million dead and more than 40 million people infected by HIV, cooperation in fighting AIDS would seem to be beyond argument. Consider, however, the history of the WTO when it comes to the critical issue of defining intellectual property rights in ways that would encourage generic manufacturers to provide cheap anti-retroviral therapies for poor people in developing countries. In the WTO, negotiations follow a basic pattern in which inner circles of key players (for example, the Quad) forge a consensus that is then progressively expanded to include those in the outer circles. During the TRIPS negotiations and when the rules on patenting were being decided, no African negotiator – the continent worst affected by AIDS – ever made it into the key inner circles of decision-making. During the negotiations, the 'Green Room' process was used to discipline developing countries so that consensus decision-making could be projected to the outside world.[2]

After the signing of TRIPS, cooperation has continued to remain elusive. In 1997 the South African government introduced a bill that

gave the health minister some discretion in setting conditions to ensure the supply of affordable medicines. South Africa has the biggest HIV-infected population in Africa. The bill was signed by President Mandela on 12 December 1997. It specifically allowed the importation into South Africa of patented medicines which had been put onto another market with the consent of the patent owner. The idea was to encourage the importation of patented medicines from the cheapest market (parallel importation), a form of importation that was allowed within the European Union, amongst other places. The response of the US officials was to turn the passage of the South African bill into a trade matter. Agencies of the US government such as the USTR, the Department of Commerce and the State Department, with the assistance of officials from the European Commission, began to pressure South Africa to change the bill. One of their arguments was that the South African government in passing the Medicines bill would be in breach of its obligations under TRIPS. In 1998 the pressure on South Africa intensified. The USTR listed South Africa under its trade law for possible trade sanctions if it did not comply with the demands of the US pharmaceutical industry and, in February of 1998, 41 pharmaceutical companies began proceedings in South African courts against the South African government, naming Nelson Mandela as first defendant. The trade dispute continued to climb up the totem pole of political importance. Senior officials from the US and the EU continued to draw attention to South Africa's obligations under TRIPS. Sir Leon Brittan, the then Vice-President of the European Commission, wrote to Thabo Mbeki, at that time the Deputy President of South Africa, drawing his attention to South Africa's obligations under TRIPS (Oxfam, 2001). At the August 1998 US-South Africa Binational Commission meetings in Washington, Vice President Gore made the protection of US pharmaceutical patents the central issue.[3]

In March 2001, 39 pharmaceutical companies came to the Pretoria High Court armed with most of South Africa's intellectual property barristers and a barrage of arguments against the Medicines Act. TRIPS surfaced again, the line of argument being that TRIPS required that patents be 'enjoyable without discrimination' as to the field of technology (art 27.1). The South African Medicines Act was said to discriminate against pharmaceutical patents. In April of 2001 the pharmaceutical companies withdrew from the litigation because of a highly effective global public campaign by civil society (Mayne, 2002:

15). It put TRIPS, patents and the price of pharmaceuticals firmly in the spotlight. With the debate threatening to spill over into the cost of drugs generally, and hard questions being asked about the patent system, it was time for the large pharmaceutical industry to withdraw to the corridors of Washington and the WTO.

At a special meeting of the TRIPS Council in June 2001 developing states pushed for the recognition of a reading of TRIPS that permitted them to deal with health crises. Ultimately this produced the Declaration on TRIPS and Public Health at a Doha WTO Ministerial in November of 2001, a Declaration that affirms the right of developing countries to protect the health of their populations. The Doha Declaration was of enormous symbolic importance to developing countries, but it did leave unsettled a practical detail. The Declaration affirmed the right of developing countries to issue compulsory licences over pharmaceutical patents, but it did not change the restrictions on the export of patented products under TRIPS. As a UNIDO study showed in 1992, most developing countries do not have a sophisticated pharmaceutical industry and so the capacity to issue domestic compulsory licences is of little practical value (Ballance, Progany and Forstener, 1992). Today only a handful of developing countries have significant innovative capabilities in the pharmaceutical sector (Argentina, Brazil, China, India, Korea, Mexico and Thailand) and of these only India has been a major exporter. Under TRIPS these countries face export restrictions on patented products.

During the course of 2002 and 2003 the members of the TRIPS Council worked to find a solution to the problem of export. A consensus solution was announced in August of 2003 (WTO News: Press/350). Symbolically, a solution was needed to allay the concerns of Western publics and, more importantly, to preserve the WTO as a forum in which technical rule-making on intellectual property could continue. Instead of a simple statement of principle that would permit developing country generic manufacturers to export medicines to the countries that needed them, the solution came in the form of six pages of provisions that set up a complex system of licensing and monitoring by states and the TRIPS Council.[4] For example, the system set up by the draft means that a generic manufacturer in an exporting country is dependent upon *both* the exporting and importing country each complying with the mandatory system of notification and conditions.

The consequences of failure to comply are not spelt out. Generic manufacturers would in practical terms have to monitor the bureaucracies of two countries in relation to every act of export in relation to a single product (potentially many bureaucracies).

The detail of the provisions reveals a familiar pattern in rule-making when developed and developing countries meet at the negotiating table. Developing countries are drawn into complex juridical webs that they do not have the resources to disentangle and that ultimately do not serve them. The main pharmaceutical exporting nations (USA, UK, Japan, Germany, France and Switzerland) have indicated that they will not use the system *as importers*. This suggests that the pharmaceutical companies (including the generic affiliates of multinationals) in these countries may use the system *as exporters*. Generic manufacturers in developing countries may well face strong price competition in the export markets left to them under the system from these companies. This price competition is likely to be subsidised by the lucrative domestic markets of these companies, markets that would remain protected under the proposed system. In the long run this will simply increase the dependency of least-developed countries upon individual acts of charity or politicised development aid programs.

The debates over AIDS, patents, TRIPS and the right to health are complex, but lying at the heart of the problem is a simple structural reality. Developing countries that are members of the WTO have to recognise patents on pharmaceutical products. The only reason that the price of patented anti-retroviral therapies has come down from US$15,000 per year to less than US$300 per year is because a few generic manufacturers like the Indian company Cipla were able to make the drugs at a price closer to marginal cost. They were able to manufacture because of their domestic patent position. However, all those developing countries with serious generic manufacturing capabilities either do or will soon have to recognise pharmaceutical patents as part of their TRIPS obligations. This will have two basic effects, one short term and the other longer term. In the short term, the capacity of these countries to export to other developing countries will slowly dry up. In the longer term, the generic industries of the main developing country exporters will become integrated into the manufacturing and distribution strategies of US and European pharmaceutical multinationals. The effect will be to drive prices up, not down.

Conclusion

For some time now the US has had an historically unprecedented opportunity to use its stock of knowledge to further the development of the many poor states in the world. As measured by indicators such as number of scientific publications, number of students in higher education, number of scientists, the US has a greater volume of knowledge located within it than any other country (Schott, 2001). No hegemonic power has had such a world of knowledge available for utilisation and creative use. Since knowledge has the quality of being non-rivalrous in consumption, it follows that the US would not itself lose the knowledge it utilised for development purposes (and in fact would probably add to it since the application of knowledge generally leads to more knowledge). Moreover, treating knowledge as part of a global intellectual commons would not be inconsistent with the US pursuing its own economic growth. The principle of the intellectual commons is not, as the free software movement has shown, inconsistent with the development of business models.

However, for the time being the US and US multinationals remain committed partners in the institutional project of information feudalism, that is the project of acquiring and maintaining global power based on the ownership of knowledge assets. Patent attorneys in US corporations are able to draft patent claims that travel the institutional pathways of international treaty law arriving as domestic obligations in other states that stipulate what potential competitors may or may not do with US informational assets. This is private networked governance that draws upon public nodes of authority such as the USTR to legitimate and enforce its privately drafted property law. It is global in its reach.

At a deeper level the global intellectual property paradigm is a negative vision. The basis of competition lies in the development of skills. The acquisition of skills by newcomers disturbs roles and hierarchies. After India built a national drug industry it began exporting bulk drugs and formulations to places such as Canada. A developing country that had acquired skills threatened those at the top of an international hierarchy of pharmaceutical production – the US, Japan, Germany and the UK. Underneath the individualist ideology of intellectual property there lies an agenda of under-development, of maintaining an economic hierarchy in the world. Today's global

intellectual property paradigm is all about protecting the knowledge and skills of the leaders of the pack.

Notes

1. The developing country members that were active in the 10 + 10 Group during the TRIPS negotiations were identified with the kind assistance of Adrian Otten of the World Trade Organization. The countries active in this group were Argentina, Brazil, Chile, Colombia, Egypt, Hong Kong, India, Indonesia, Malaysia, Mexico, Peru, Singapore, South Korea and Thailand.
2. The Green Room refers to high-level negotiations between key players over unsettled parts of the negotiating text.
3. The details of this international effort are described in US Department of State, 1999.
4. See Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health, IP/C/W405, 28 August 2003.

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