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International Enclosure, the Regime Complex, and Intellectual Property Schizophrenia

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INTRODUCTION

The year 2005 marked the tenth anniversary of the Agreement on Trade-Related Aspects of Intellectual Property Rights[1] ("TRIPS Agree-

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1. Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994 [hereinafter TRIPS Agreement], Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments—Results of the Uruguay Round, 33 I.L.M. 1197 (1994) [hereinafter Marrakesh Agreement].

ment"). Since it entered into effect on January 1, 1995, the Agreement has impacted a wide variety of areas, including agriculture, health, the environment, education, culture, competition, free speech, democracy, and the rule of law. Today, intellectual property protection has been considered a major issue in both the domestic and international policy debates, and policymakers have actively explored intellectual property issues in many different international regimes. These regimes cover issues ranging from public health to human rights and from biological diversity to information and communications.

As an introduction to this Symposium, this Essay advances three conceptual notions that seek to illuminate the growing complexity of the current international intellectual property regime—or to be more precise, the current international intellectual property regime complex. Part I outlines the international enclosure movement, in which the policy space of countries, usually those in the less developed world, is increasingly enclosed in the name of international harmonization. This Part suggests that the growing complexity of the international intellectual property regime is partly a response to this increased enclosure. Part II examines the concept of the "international intellectual property regime complex," a term I coined as the title of this Symposium to denote a larger conglomerate regime that includes not only the traditional area of intellectual property laws and policies, but also the overlapping areas in related regimes or fora. This Part shows that the international intellectual property regime complex will become increasingly incoherent as it expands and incorporates more issue areas. Part III focuses on what I describe as "intellectual property schizophrenia," a term I use to highlight the rather "schizophrenic" positions taken by policymakers in response to conflicts and competing interests within a country. Focusing on three different types of conflicts—regional conflicts, sectoral conflicts, and issue-based conflicts—this Part discusses the additional complexities within both the domestic and international intellectual property systems.

I. INTERNATIONAL ENCLOSURE

The first notion concerns what I have described elsewhere as the "international enclosure movement."[2] Although most of the recent intellectual property literature focuses on the enclosure of the public domain or the upward ratchet of intellectual property protection,[3] a different, and perhaps

2. Peter K. Yu, *The International Enclosure Movement*, 82 IND. L.J. 827 (2007).

3. For discussions of the enclosure of the public domain and the upward ratchet of intellectual property protection, see, for example, LAWRENCE LESSIG, FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY (2004); Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. REV. 354 (1999); James

more important, enclosure movement is currently taking place at the international level. Instead of the *public domain*, this concurrent movement encloses the *policy space* of individual countries in the name of international harmonization. Unlike the movement to enclose the public domain, which "fenc[es] off common land and turn[s] it into private property,"[4] the international enclosure movement fences off areas that provide attractive policy options for less developed countries. As a result of this enclosure, countries, especially those in the less developed world, are increasingly forced to adopt one-size-fits-all legal standards that ignore local needs, national interests, technological capabilities, institutional capacities, and public health conditions.

When the international intellectual property regime was created in the nineteenth century, it was designed primarily to patch up the divergent laws and customs of the participating nations.[5] The cornerstones of this regime are the Paris Convention for the Protection of Industrial Property[6] and the Berne Convention for the Protection of Literary and Artistic Works,[7] both of which were established in the 1880s.

Consider the Paris Convention, for example. When the Convention was being negotiated, countries disagreed significantly over such issues as compulsory licenses, parallel importation, working requirements, and filing systems.[8] Some countries, like the Netherlands and Switzerland, did not have a patent system,[9] while others, like Germany, remained heavily influ-

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Boyle, *Fencing off Ideas: Enclosure and the Disappearance of the Public Domain*, DAEDALUS, Spring 2002, at 13; James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, LAW & CONTEMP. PROBS., Winter/Spring 2003, at 33 [hereinafter Boyle, *Second Enclosure Movement*]; Rochelle Cooper Dreyfuss, *TRIPS—Round II: Should Users Strike Back?*, 71 U. CHI. L. REV. 21 (2004).

4. Boyle, *Second Enclosure Movement*, *supra* note 3, at 33-34.

5. *See* Paul Edward Geller, *From Patchwork to Network: Strategies for International Intellectual Property in Flux*, 9 DUKE J. COMP. & INT'L L. 69, 70 (1998).

6. Paris Convention for the Protection of Industrial Property, Mar. 20, 1883, *revised at Stockholm* July 14, 1967, 21 U.S.T. 1583, 828 U.N.T.S. 305 [hereinafter Paris Convention].

7. Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, *revised at Paris* July 24, 1971, 25 U.S.T. 1341, 828 U.N.T.S. 221.

8. *See* Peter K. Yu, *Currents and Crosscurrents in the International Intellectual Property Regime*, 38 LOY. L.A. L. REV. 323, 349 (2004) [hereinafter Yu, *Currents and Crosscurrents*].

9. For a discussion of the Netherlands and Switzerland during the time when they did not have a patent system while nearly all other industrialized countries had such a system in place, see generally ERIC SCHIFF, INDUSTRIALIZATION WITHOUT NATIONAL PATENTS (1971). The Netherlands and Switzerland were not the only countries that did not offer every form of protection included in the Paris Convention. The United States, for example, remains a member of the Paris Convention, even though it did not offer protection to utility models and offered limited protection to industrial designs. *See* Pamela Samuelson, *Challenges for the World Intellectual Property Organisation and the Trade-Related Aspects of*

enced by the anti-patent movement.[10] To enable countries to coordinate this wide range of protection at the international level, the Convention struck a compromise by allowing each country to decide how intellectual property was protected within its borders. Instead of creating a system with uniform rules and standards, the Convention embraced the anti-discrimination principle of national treatment[11] and left considerable room for countries to experiment with different intellectual property systems.[12]

In the patent area, for example, countries could decide whether they wanted to include a local working requirement or a compulsory licensing provision. They could also explore whether the protection of patents in processes provided sufficient incentives or whether they needed to extend protection to products as well. Countries could even determine whether they wanted to protect patents in the first place—as in the case of the Netherlands and Switzerland.

Although the Paris Convention worked well for developed countries for decades, most less developed countries were not able to enjoy the autonomy countries traditionally enjoyed in the Convention. Instead, intellectual property laws were transplanted from developed countries onto their soil through colonial laws. As Ruth Okediji explained:

> Intellectual property law was not merely an incidental part of the colonial legal apparatus, but a central technique in the commercial superiority sought by European powers in their interactions *with each other* in regions beyond Europe. Granted, intellectual property systems in Europe prior to the seventeenth century were neither fully developed nor had intellectual property protection become a systematic policy designed primarily for encouraging domestic innovation. Whatever protections existed, however, would be exerted against other Europeans in colonial territories in the process of empire building. The [early period of European contact through trade with non-European peoples] thus was characterized predominantly by the extension of intellectual property laws to the colonies for purposes associ-

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Intellectual Property Rights Council in Regulating Intellectual Property Rights in the Information Age, 21 EUR. INTELL. PROP. REV. 578, 579 (1999).

10. *See* Yu, *Currents and Crosscurrents*, *supra* note 8, at 349. For discussions of the anti-patent movement, see generally Heinrich Kronstein & Irene Till, *A Reevaluation of the International Patent Convention*, 12 LAW & CONTEMP. PROBS. 765 (1947); Fritz Machlup & Edith Penrose, *The Patent Controversy in the Nineteenth Century*, 10 J. ECON. HIST. 1 (1950).

11. *See* Paris Convention, *supra* note 6, art. 2 (providing for the national treatment of foreign rights holders).

12. *See, e.g.*, STEPHEN P. LADAS, PATENTS, TRADEMARKS, AND RELATED RIGHTS: NATIONAL AND INTERNATIONAL PROTECTION 9-16 (1975) (discussing the "laboratory effects" of legal innovation); Sungjoon Cho, *A Bridge Too Far: The Fall of the Fifth WTO Ministerial Conference in Cancun and the Future of Trade Constitution*, 7 J. INT'L ECON. L. 219, 238 (2004) (discussing the "laboratory effect" of regionalism, which allows countries to experience trial-and-error and learning-by-doing techniques at the regional level); John F. Duffy, *Harmony and Diversity in Global Patent Law*, 17 BERKELEY TECH. L.J. 685, 707-08 (2002) (discussing how countries can develop legal systems by experimenting with new regulatory and economic policies through interjurisdictional competition).

> ated generally with the overarching colonial strategies of assimilation, incorporation and control. It was also characterized by efforts to secure national economic interests against other European countries in colonial territories.[13]

Even after these colonies became independent, many of the intellectual property laws that were originally transplanted from the former controlling powers remained on the books. These laws either survived state succession or had been retroactively adopted as part of the post-independence national law.[14] As Professor Okediji observed further:

> It is well-known . . . that most developing countries retained the structure and form of laws and institutions established during the colonial period, including intellectual property laws. Until 1989, Lesotho operated under the Patents, Trade Marks and Designs Protection Proclamation of 1919, a United Kingdom instrument. Mauritius, a former French colony, continued to operate under its Trade Marks Act (1868) and Patents Act (1975) for over twenty years after obtaining independence in 1968. Swaziland also inherited its IP regime "as a colonial legacy." The same is true with respect to other laws and institutions. Indeed, prior to the compelled compliance with intellectual property rights imposed by the TRIPS Agreement, many developing and least developed countries still had as their own domestic laws the old Acts and Ordinances of the colonial era. While some developing countries had laws in place that attracted the ire of the developed countries by explicit refusals to grant patents to pharmaceutical products, or through compulsory licensing provisions, or by the failure to enforce recognized rights, many others simply had obsolete laws.[15]

Nevertheless, the decolonization effort and the subsequent emergence of less developed countries called into question the extent of protection in the international intellectual property regime. During the 1967 Stockholm Revision Conference of the Berne Union, India and other less developed countries demanded special concessions in the international copyright system in light of their divergent economic, social, cultural, and technological conditions.[16] The revision conference eventually led to the creation of the World Intellectual Property Organization (WIPO) and the inclusion of the Protocol Regarding Developing Countries in the Berne Convention.[17]

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13. Ruth L. Okediji, *The International Relations of Intellectual Property: Narratives of Developing Country Participation in the Global Intellectual Property System*, 7 SING. J. INT'L & COMP. L. 315, 324-25 (2003) (citations omitted) [hereinafter Okediji, *International Relations of Intellectual Property*].

14. For an excellent discussion of how the former colonies conducted their international intellectual property relations following their declarations of independence, see *id.* at 325-34.

15. *Id.* at 335-36 & n.73 (footnotes and citations omitted).

16. *See* Barbara A. Ringer, *The Role of the United States in International Copyright—Past, Present, and Future*, 56 GEO. L.J. 1050, 1065 (1968). For a detailed discussion of the origin and aftermath of the Stockholm Protocol, see SAM RICKETSON & JANE C. GINSBURG, INTERNATIONAL COPYRIGHT AND NEIGHBORING RIGHTS: THE BERNE CONVENTION AND BEYOND 879-963 (2d ed. 2005).

17. *See* Yu, *Currents and Crosscurrents*, *supra* note 8, at 328.

In the mid-1970s, less developed countries further demanded a revision of the Paris Convention to lower the minimum standards of intellectual property protection as applied to them and to expand compulsory licenses available under the Convention.[18] Through the efforts of the United Nations Conference on Trade and Development (UNCTAD), countries also worked together to develop a draft International Code of Conduct on the Transfer of Technology.[19]

These demands, to which the United States objected vehemently, eventually precipitated the famous stalemate between developed and less developed countries in the 1981 Diplomatic Conference in Nairobi. Led by the United States and heavily influenced by multinational corporations, developed countries responded to this stalemate by abandoning the intellectual property-based forum in favor of the General Agreement on Tariffs and Trade (GATT),[20] a trade-based forum which eventually expanded into the World Trade Organization (WTO). After close to a decade of negotiations, and some threats of trade sanctions by the United States, countries finally agreed to the Marrakesh Agreement Establishing the World Trade Organization,[21] which included in its annex a multilateral agreement on intellectual property rights known as the TRIPS Agreement.

Based on models from technology-rich countries, this Agreement remade the international intellectual property regime by strengthening protection in at least four significant ways. First, it established minimum standards for intellectual property protection and achieved new international consensus on the protection of emerging technologies and subject matters. For example, article 10(2) states that "[c]omputer programs, whether in source or object code, shall be protected as literary works under the Berne Convention (1971)."[22] Article 23 offers special protection to geographical indications for wines and spirits.[23] Article 27(1) stipulates that "patents . . . be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced."[24] Article 27(3)(b) requires each member state to "provide for the protection of plant varieties either by patents or by an

18. *See id.* at 357.

19. For a collection of essays discussing the draft code of conduct concerning international technology transfer, see INTERNATIONAL TECHNOLOGY TRANSFER: THE ORIGINS AND AFTERMATH OF THE UNITED NATIONS NEGOTIATIONS ON A DRAFT CODE OF CONDUCT (Surendra J. Patel, Pedro Roffe & Abdulqawi Yusuf eds., 2001).

20. *See* Yu, *Currents and Crosscurrents*, *supra* note 8, at 357-58 (discussing the shifting of the negotiating forum by developed countries from WIPO to the WTO).

21. Marrakesh Agreement, *supra* note 1.

22. TRIPS Agreement, *supra* note 1, art. 10(2).

23. *Id.* art. 23.

24. *Id.* art. 21.

effective *sui generis* system or by any combination thereof."[25] Article 35 offers protection to integrated circuit topographies by reference to the Treaty on the Protection of Intellectual Property in Respect of Integrated Circuits.[26]

As I pointed out elsewhere, these heightened standards are particularly important because they transformed the international intellectual property regime from an *international* framework to a *global* one.[27] Traditionally, treaties within the international intellectual property regime, such as the Berne or Paris Conventions, were largely introduced to patch up the divergent protections in various national systems. In light of this patchwork effort, countries tended to focus only on the minimum standards, or the protection floor, when they negotiated international treaties. The TRIPS Agreement, however, altered that setup by imposing a "supranational code" on the weaker WTO member states despite their limited economic development.[28] Because the code now requires higher standards than are appropriate for these countries, the focus on minimum standards becomes misguided, and the lack of maximum international standards has made it difficult for countries to respond to massive domestic problems, such as the widely-reported public health crises concerning HIV/AIDS, tuberculosis, malaria, and other epidemics.[29]

Second, the TRIPS Agreement expanded the coverage of intellectual property protection to eight different areas. In addition to copyrights, patents, and trademarks, which are the three main branches of intellectual property, the Agreement also covers geographical indications, industrial designs, plant variety protection, integrated circuit topographies, and protection of undisclosed information. Such coverage is remarkable because a number of these areas did not attain international consensus before the adoption of the TRIPS Agreement. As Jayashree Watal, the former negotiator for India and a current WTO official, pointed out, "at least one, undisclosed information, has never been the subject of any multilateral agreement before, and another, protection for integrated circuit designs, had no effective international

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25. *Id.* art. 27(3)(b).

26. *Id.* art. 35.

27. *See* Yu, *The International Enclosure Movement*, *supra* note 2, at 901-06.

28. *See* Jane C. Ginsburg, *International Copyright: From a "Bundle" of National Copyright Laws to a Supranational Code?*, 47 J. COPYRIGHT SOC'Y U.S.A. 265, 267-76 (2000) (discussing the transformation from international agreements to a supranational code); *accord* Yu, *Currents and Crosscurrents*, *supra* note 8, at 354-75.

29. *See* Peter K. Yu, *TRIPS and Its Discontents*, 10 MARQ. INTELL. PROP. L. REV. 369, 402 (2006) (discussing the need for including maximum standards in international intellectual property agreements).

treaty, while others, like plant variety protection or performers' rights, were geographically limited."[30]

Third, through complex procedures and burdensome obligations, the TRIPS Agreement significantly curtailed the ability of less developed countries to design an intellectual property system that is tailored to local needs, interests, and goals. The three-step test in articles 13 and 30 and a similar test in article 17 have made it particularly difficult for countries to create new limitations or exceptions in their copyright, patent, and trademark systems.[31] Article 31 also includes a set of complex procedural rules delineating the conditions under which a country can issue a compulsory license.[32] Although these rules have been relaxed lately by the Doha Declaration on the TRIPS Agreement and Public Health (Doha Declaration), the Decision on the Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health, and the recently adopted protocol to formally amend the Agreement by adding a new article 31*bis*,[33] it remains to be seen whether two-thirds of the WTO membership will ratify the proposed amendment before December 1, 2007.[34]

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30. JAYASHREE WATAL, INTELLECTUAL PROPERTY RIGHTS IN THE WTO AND DEVELOPING COUNTRIES 4 (2001).

31. *See* TRIPS Agreement, *supra* note 1, arts. 13, 17, 30.

32. *Id.* art. 31.

33. World Trade Organization, Ministerial Declaration of 14 November 2001, WT/MIN(01)/DEC/2, 41 I.L.M. 755 (2002); Decision of the General Council of 30 August 2003, WT/L/540, 43 I.L.M. 509 (2004) (regarding the implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health); Decision of the General Council of 6 December 2005, WT/L/641 (Dec. 8, 2005) (regarding the protocol amending the TRIPS Agreement), *available at* http://www.wto.org/english/tratop_e/trips_e/wtl641_e.htm.

34. As of October 1, 2007, only ten out of 151 member states (the United States, Australia, Switzerland, El Salvador, South Korea, Norway, India, Israel, Japan, and the Philippines) have ratified the proposed amendment. WTO, *Countries Accepting Amendment of the TRIPS Agreement*, http://www.wto.org/english/tratop_e/trips_e/amendment_e.htm (last visited Oct. 1, 2007). If an insufficient number of members ratify the protocol, the temporary waivers granted by the Decision on Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health will remain in force. The deadline for ratification may also be extended. Nevertheless, commentators have expressed concern about such delay. As Frederick Abbott and Jerome Reichman recently noted:

> [F]rom a strictly legal standpoint there is no apparent risk from delay (or rejection) of the Amendment. However, the authors have serious concerns that industry interests and supporting governments would use delay or failure of acceptance of the Amendment as the basis for an aggressive lobbying campaign intended to undercut the vitality of the waiver. Moreover, there is anecdotal evidence that some governments have taken a "wait and see" attitude toward implementation of the Decision pending formalization via the Amendment.

FREDERICK M. ABBOTT & JEROME H. REICHMAN, ACCESS TO ESSENTIAL MEDICINES: LESSONS LEARNED SINCE THE DOHA DECLARATION ON THE TRIPS AGREEMENT AND PUBLIC HEALTH, AND POLICY OPTIONS FOR THE EUROPEAN UNION iv (2007).

Finally, the TRIPS Agreement "married" intellectual property to international trade and established a dispute settlement process that is mandatory for disputes arising under the Agreement.[35] The Agreement, as a result, has greatly improved the enforceability of international intellectual property treaties, which hitherto have been virtually unenforceable.[36] The Agreement also provided developed countries with a process through which they can induce their less developed trading partners to offer stronger intellectual property protection. This process includes such measures as consultation, conciliation, mediation, and finally, dispute settlement.[37] To many commentators, the mandatory dispute settlement process was one of the crowning achievements, if not *the* crowning achievement, of the Uruguay Round of Multilateral Trade Negotiations that resulted in the establishment of the WTO.[38]

Although the TRIPS Agreement increased considerably the protection of intellectual property rights at the international level, significant safeguards, flexibilities, and transitional measures exist in the Agreement to protect less developed countries. For example, article 7 states explicitly that

> [t]he protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.[39]

Article 8 recognizes the needs of WTO member states to "adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this Agreement."[40]

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35. *See* TRIPS Agreement, *supra* note 1, art. 64.

36. As Daniel Gervais noted: "The two fundamental perceived flaws of the Paris and Berne Conventions were (a) the absence of detailed rules on the enforcement of rights before national judicial administrative authorities; and (b) the absence of a binding and effective dispute settlement mechanism (for disputes between states)." DANIEL GERVAIS, THE TRIPS AGREEMENT: DRAFTING HISTORY AND ANALYSIS 10 (2d ed. 2003).

37. *See* TRIPS Agreement, *supra* note 1, arts. 4-6.

38. *See, e.g.*, William J. Davey, *The WTO Dispute Settlement System: The First Ten Years*, 8 J. INT'L ECON. L. 17, 32 (2005) ("Dispute settlement is one of the great successes of the WTO."); Rochelle Cooper Dreyfuss & Andreas F. Lowenfeld, *Two Achievements of the Uruguay Round: Putting TRIPS and Dispute Settlement Together*, 37 VA. J. INT'L L. 275, 275 (1997) (noting that the two achievements of the Uruguay Round are, as the title suggests, "Putting TRIPS and Dispute Settlement Together"); Ruth Okediji, *Toward an International Fair Use Doctrine*, 39 COLUM. J. TRANSNAT'L L. 75, 149-50 (2000) ("One of the most celebrated accomplishments of the WTO system is the dispute resolution mechanism which adds legitimacy to the overall design of the new trading system." (footnote omitted)).

39. TRIPS Agreement, *supra* note 1, art. 7.

40. *Id.* art. 8(1).

Article 1 further states that member states are "free to determine the appropriate method of implementing the provisions of this Agreement within their own legal system and practice."[41] As Frederick Abbott highlighted, this freedom includes at least the following flexibilities:

> The TRIPS Agreement . . . does not . . . restrict the authority of governments to regulate prices. It . . . permits [compulsory or government-use licenses] to be granted. It permits governments to authorize parallel importation. The TRIPS Agreement does not specify that new-use patents must be granted. It allows patents to be used for regulatory approval purposes, and it does not require the extension of patent terms to offset regulatory approval periods. The TRIPS Agreement provides a limited form of protection for submissions of regulatory data; but this protection does not prevent a generic producer from making use of publicly available information to generate bioequivalence test data. The TRIPS Agreement provides substantial discretion for the application of competition laws.[42]

In addition, through the efforts of skillful negotiators, the TRIPS Agreement includes many ambiguities that have been intentionally built into the instrument. As Carlos Correa pointed out, although developed countries would interpret the word "review" in article 27(3)(b) to mean "review of implementation," less developed countries are likely to interpret that same word to suggest the possibility for "revising" the Agreement to meet their needs and interests.[43] Likewise, Sisule Musungu recently reminded us the different ways of conceptualizing the transitional periods built into the TRIPS Agreement:

> While giving extra time due to administrative and financial constraints was one aim, the central objective of the LDCs [least developed countries] transition period under the TRIPS Agreement is different. Article 66.1 of TRIPS read together with the Preamble of the TRIPS Agreement and its objectives under Article 77 envisage the purpose and objectives of the LDCs transition period to be to respond and address: the special needs and requirements of these countries; and *the need for maximum flexibility to help these countries create a sound and viable technological base.*[44]

Thus, Jayashree Watal has described these ambiguous words and phrases as "constructive ambiguit[ies]."[45] These ambiguities are construc-

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41. *Id.* art. 1(1).

42. Frederick M. Abbott, *The Cycle of Action and Reaction: Developments and Trends in Intellectual Property and Health*, *in* NEGOTIATING HEALTH: INTELLECTUAL PROPERTY AND ACCESS TO MEDICINES 27, 30 (Pedro Roffe, Geoff Tansey & David Vivas-Eugui eds., 2006) (citations omitted).

43. CARLOS M. CORREA, INTELLECTUAL PROPERTY RIGHTS, THE WTO AND DEVELOPING COUNTRIES: THE TRIPS AGREEMENT AND POLICY OPTIONS 211 (2000).

44. SISULE MUSUNGU, A CONCEPTUAL FRAMEWORK FOR PRIORITY IDENTIFICATION AND DELIVERY OF IP TECHNICAL ASSISTANCE FOR LDCS DURING THE EXTENDED TRANSITION PERIOD UNDER THE TRIPS AGREEMENT 5 (Quaker United Nations Office, Issue Paper No. 7, 2007) (footnote omitted), *available at* http://www.quno.org/geneva/pdf/economic/Issues/Priority-ID-English.pdf.

45. WATAL, *supra* note 30, at 7.

tive, because they provide less developed countries with a bulwark against the continuous expansion of intellectual property rights. If carefully interpreted, they will enable countries to preserve the policy space appropriately reserved for them during the negotiation process. They may also allow less developed countries to "'claw[]' back much of what was lost in the negotiating battles in TRIPS."[46]

Finally, the Agreement recognized the inability of less developed countries to immediately increase their levels of protection. Article 65 provided developing and transition countries with a four-year transitional period, which has since expired.[47] Likewise, article 66 provided least developed countries with an initial ten-year transitional period,[48] which has now been extended to seventeen and a half years for most products as long as the country seeking an extension has not yet met the TRIPS requirements or has already offered protection in excess of those requirements.[49] With respect to pharmaceuticals, the Doha Declaration extended to 2016 the deadline for least developed countries to offer protection.[50] Article 66 further requires developed countries to provide incentives for their businesses and institutions to help create "a sound and viable technological base" in least developed countries by promoting and encouraging transfer of technology.[51]

Thus, although the TRIPS Agreement has greatly strengthened intellectual property protection while significantly reducing the policy space of WTO member states, it includes certain safeguards, flexibilities, and transitional measures to help countries "buy time" to update their intellectual property systems. It also leaves little space for less developed countries to develop policies that respond to their needs, interests, and goals. Whether countries will be able to take advantage of these benefits will depend on their capacity to interpret the Agreement, insist on their interpretations, and resolve disputes before the WTO Dispute Settlement Body.[52]

Unfortunately for less developed countries, recent years have seen further enclosure of their policy space. Whatever limited space the TRIPS Agreement retained, that space has been further enclosed by the aggressive

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46. *Id.*

47. TRIPS Agreement, *supra* note 1, arts. 65(2)-(3).

48. *Id.* art. 66(1).

49. *See* Press Release, World Trade Organization, Poorest Countries Given More Time to Apply Intellectual Property Rules (Nov. 29, 2005), http://www.wto.org/english/news_e/pres05_e/pr424_e.htm.

50. World Trade Organization, Ministerial Declaration of 14 November 2001 ¶ 7, WT/MIN(01)/DEC/2, 41 I.L.M. 755 (2002).

51. TRIPS Agreement, *supra* note 1, art. 66(2).

52. *See* Gregory Shaffer, *Recognizing Public Goods in WTO Dispute Settlement: Who Participates? Who Decides? The Case of TRIPS and Pharmaceutical Patent Protection*, 7 J. INT'L ECON. L. 459, 473-76 (2004) (discussing the limited legal expertise in less developed countries).

push by developed countries for TRIPS-plus bilateral and regional trade and investment agreements—free trade agreements for the United States and economic partnership agreements for the European Communities.[53] In fact, the United States' Trade Act of 2002 declared explicitly that

> [t]he principal negotiating objectives of the United States regarding trade-related intellectual property are . . . to further promote adequate and effective protection of intellectual property rights, including through . . . ensuring that the provisions of any multilateral or bilateral trade agreement governing intellectual property rights that is entered into by the United States reflect a standard of protection similar to that found in United States law . . . .[54]

There are generally three different types of provisions in the so-called TRIPS-plus agreements: TRIPS-plus provisions, TRIPS-extra provisions, and TRIPS-restrictive provisions. TRIPS-plus provisions increase the commitments of less developed countries by increasing the protection stated in the TRIPS Agreement. For example, although the Agreement requires patent protection for only twenty years, some recent U.S. free trade agreements have required a limited extension of the patent term based on the period during which a product undergoes regulatory review.[55] Such an extension is similar to the extension provided by the United States' Hatch-Waxman Act of 1984.

TRIPS-extra provisions, by contrast, add new commitments that are not covered by the TRIPS Agreement. Examples of these provisions include those calling for the establishment of a data exclusivity regime to protect clinical trial data submitted during regulatory approval processes; the linkage of pharmaceutical product registration to patent status; the requirement that patents be granted for "new uses," or second indications, of known compounds; the ban on parallel importation of cheap, generic drugs; and the use of dispute settlement processes that are different from the one mandated by the WTO.[56] Although the WTO prohibits member states from taking retaliatory measures before exhausting all of the actions permissible under its rules, TRIPS-extra provisions are likely to rejuvenate the section 301 process and may lead to greater use of trade threats and unilateral sanctions, as the provisions cover issues outside of the TRIPS Agreement.[57]

Finally, TRIPS-restrictive provisions neither increase the protection under the TRIPS Agreement nor cover a new area of protection outside the Agreement, but nonetheless enclose the policy space of less developed

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53. *See* Yu, *Currents and Crosscurrents*, *supra* note 8, at 392-400 (discussing the growing use of bilateral and regional trade agreements).

54. 19 U.S.C. § 3802(b)(4)(A) (2004).

55. *See* Yu, *The International Enclosure Movement*, *supra* note 2, at 868.

56. *See id.* at 868-69.

57. Panel Report, *United States—Sections 301–310 of the Trade Act of 1974*, WT/DS152/R (Dec. 22, 1999).

countries by restricting how the Agreement is to be interpreted. A textbook example of such provisions is one that requires less developed countries to protect plant varieties by introducing the 1991 Act of UPOV (International Union for the Protection of New Varieties of Plants), notwithstanding the fact that the TRIPS Agreement allows each member state to decide whether it wants to offer protection through patents, *sui generis* protection, or a combination of both.[58]

In sum, the recent bilateral and regional efforts have further enclosed the already very limited policy space available to countries under the TRIPS Agreement. As countries struggle to respond, they begin to explore new alternative fora in their effort to reclaim their lost policy space and roll back the continuous expansion of intellectual property rights. They also have actively pushed for the WIPO Development Agenda to level the playing field and to establish countervailing principles, norms, and rules that they hope can be later incorporated into the international intellectual property regime.[59] It remains to be seen whether these countries will be able to respond successfully to the continuous international enclosure or whether such enclosure will eventually lead to further consolidation that results in what commentators have referred to as "TRIPS II."[60] One thing is for certain: recent efforts by both developed and less developed countries have made the international intellectual property regime highly complex.

II. INTERNATIONAL INTELLECTUAL PROPERTY REGIME COMPLEX

The second notion concerns the "international intellectual property regime complex," a term I coined as the title of this Symposium. The term "regime complex" originally appeared in Kal Raustiala and David Victor's article in *International Organization*, entitled *The Regime Complex for Plant Genetic Resources*.[61] Stephen Krasner defined international regimes as "sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations."[62] Expanding on this definition, Professors Raustiala and Victor defined an international regime complex as "a collective of par-

58. *See* Yu, *The International Enclosure Movement*, *supra* note 2, at 869.

59. For a discussion of WIPO and its new Development Agenda, see generally CHRISTOPHER MAY, THE WORLD INTELLECTUAL PROPERTY ORGANIZATION: RESURGENCE AND THE DEVELOPMENT AGENDA (2007).

60. *See, e.g.*, GERVAIS, *supra* note 36, at 48; Graeme B. Dinwoodie, *The International Intellectual Property Law System: New Actors, New Institutions, New Sources*, 98 AM. SOC'Y INT'L L. PROC. 213, 217 (2004); Dreyfuss, *supra* note 3.

61. Kal Raustiala & David G. Victor, *The Regime Complex for Plant Genetic Resources*, 58 INT'L ORG. 277, 279 (2004).

62. Stephen D. Krasner, *Structural Causes and Regime Consequences: Regimes as Intervening Variables*, *in* INTERNATIONAL REGIMES 1, 2 (Stephen D. Krasner ed., 1983).

tially overlapping and even inconsistent regimes that are not hierarchically ordered, and which lack a centralized decisionmaker or adjudicator."[63] As they explained:

> Regime complexes are marked by the existence of several legal agreements that are created and maintained in distinct fora with participation of different sets of actors. The rules in these elemental regimes functionally overlap, yet there is no agreed upon hierarchy for resolving conflicts between rules. Disaggregated decision making in the international legal system means that agreements reached in one forum do not automatically extend to, or clearly trump, agreements developed in other forums. . . . [R]egime complexes [therefore] evolve in ways that are distinct from decomposable single regimes.[64]

A couple of years earlier, David Leebron also advanced the concept of a "'conglomerate' regime."[65] As Professor Leebron described, conglomerate regimes

> are regimes that remain somewhat separate, in terms of both norms and institutional structures, within an overarching regime. Like corporate conglomerates, they are marked by important institutional relationships and perhaps common policies among the constituent parts, but also by institutional separation. In this sense, the ongoing relationship between the distinct areas might still be characterized as linkage rather than scope, but in terms of the above analysis such conglomerates are hybrids.[66]

In the intellectual property area, a regime complex or a conglomerate regime includes both the traditional international intellectual property regime and those other international regimes or fora in which intellectual property issues play a growing role or with which formal or informal linkages have been established. Examples of these related regimes or fora include those governing public health, human rights, biological diversity, food and agriculture, and information and communications. As the world becomes more globalized and interdependent, other seemingly unrelated issue areas may find their way into this regime complex. In fact, as Professors Raustiala and Victor predicted, "regime complexes will become much more common in coming decades as international institutions proliferate and inevitably bump against one another."[67]

In a recent article, Professor Raustiala described succinctly four important implications of an international regime complex for world politics and the development of legal rules. First, due to the many overlapping rules and institutions in a regime complex, "new international rules and institutions are rarely negotiated on a clean slate. As a result rulemakers are not

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63. Kal Raustiala, *Density & Conflict in International Intellectual Property Law*, 40 U.C. DAVIS L. REV. 1021, 1025 (2007).

64. Raustiala & Victor, *supra* note 61, at 279.

65. David W. Leebron, *Linkages*, 96 AM. J. INT'L L. 5, 18 (2002).

66. *Id.* (footnote omitted).

67. Raustiala & Victor, *supra* note 61, at 306.

able to choose any substantive legal rule(s) they might favor; frequently they are limited by the existing constellation of rules and, most importantly, the political interests these rules have engendered."[68] Second, because of the multiple fora, institutions, and issue areas involved in a regime complex, intensified forum-shopping activities are likely to exist.[69] After all, different "fora have different rules of access, membership, and participation[;] they empower and disempower distinct actors."[70] Third, "[a]s substantive IP rules multiply, they increasingly conflict and compete with one another. [Because t]hese conflicts are sometimes anticipated, and even desired[, countries and institutions have undertaken] . . . deliberate efforts at rule change via competing agreements and conflicting rules."[71] Finally, because of a lack of well-specified doctrines governing the resolution of conflicts between inconsistent international rules, "[r]enegotiation or political resolution of a conflict is . . . often more likely than adjudication" in a regime complex.[72] Negotiators will also "deploy devices such as 'savings clauses' . . . to demarcate boundaries between regimes and disentangle events in one forum from another."[73]

As the international intellectual property regime complex evolves, countries from both the developed and less developed worlds have been actively engaging in what commentators describe as "regime shifting" or "forum shifting."[74] As Laurence Helfer defined it, regime shifting is "an attempt to alter the status quo ante by moving treaty negotiations, lawmaking initiatives, or standard setting activities from one international venue to another."[75] An "intra-regime shift" reflects a move from one venue to another venue situated within the same regime—for example, from bilateral intellectual property agreements to a multilateral intellectual property convention.[76] By contrast, an "inter-regime shift" reflects a move from one venue to another venue located in an entirely different regime—for example, from the intellectual property regime to the public health or human rights regime.[77] While developed countries have recently moved vertically

68. Raustiala, *supra* note 63, at 1026.

69. See text accompanying *infra* notes 74-84 for a discussion of these forum-shopping activities.

70. Raustiala, *supra* note 63, at 1027.

71. *Id.*

72. *Id.* at 1028.

73. Raustiala & Victor, *supra* note 61, at 280.

74. For excellent discussions of "regime shifting" or "forum shifting," see generally JOHN BRAITHWAITE & PETER DRAHOS, GLOBAL BUSINESS REGULATION 564-71 (2000); Laurence R. Helfer, *Regime Shifting: The TRIPS Agreement and New Dynamics of International Intellectual Property Lawmaking*, 29 YALE J. INT'L L. 1 (2004) [hereinafter Helfer, *Regime Shifting*].

75. Helfer, *Regime Shifting*, *supra* note 74, at 14 (footnote omitted).

76. *See id.* at 16.

77. *See id.*

within the regime from multilateral fora to bilateral or regional ones, less developed countries have responded by moving horizontally from the WTO or WIPO to other multilateral fora, most notably the public health, human rights, and biological diversity regimes.[78] As regime-shifting activities continue and accelerate, the regime complex is likely to be enlarged to incorporate new actors, institutions, and issue areas.

Commentators generally believe that less developed countries have limited ability to shift from one regime to another due to power asymmetry in the international trading system. As John Braithwaite and Peter Drahos noted emphatically, "[f]orum-shifting is a strategy that only the powerful and well-resourced can use."[79] However, Professor Helfer's recent research suggests that "regime shifting is a game that both strong and weak actors can play."[80] As he pointed out, less developed countries can benefit from regime shifting in at least four different ways. First, "[r]egime shifting allows state and nonstate actors, particularly those that have been ignored or marginalized in other international regimes, to experiment with alternative ways to achieve desired policy outcomes."[81] Second, regime shifting provides a safety valve that states and interest groups can use to "consign[] an issue area to a venue where consequential outcomes and meaningful rule development are unlikely to occur."[82] Third, regime shifting creates "a 'safe space' in which [governments can] analyze and critique those aspects of TRIPs that they find to be problematic."[83] Finally, regime shifting "function[s] as an intermediate strategy that allows developing countries to generate the political groundwork necessary for new rounds of intellectual property lawmaking in the WTO and WIPO."[84]

Taken together, the development of a regime complex and the proliferation of regime-shifting activities have resulted in a very complicated conglomerate regime that has incorporated not only new actors, institutions, and issue areas, but also divergent principles, norms, rules, and values. From the standpoint of international intellectual property policy, the salient, yet disturbing, characteristics of a regime complex are incoherence, inconsistency, and fragmentation.

In a regime complex, inconsistencies and conflicts can be developed in three different ways. First, they develop inevitably as new actors and institutions emerge and as new issue areas are incorporated into the regime

78. *See* Yu, *Currents and Crosscurrents*, *supra* note 8, at 408-16 (discussing and mapping the regime shifting phenomenon).

79. BRAITHWAITE & DRAHOS, *supra* note 74, at 565.

80. Helfer, *Regime Shifting*, *supra* note 74, at 17.

81. *Id.* at 55 (footnote omitted).

82. *Id.* at 56.

83. *Id.* at 58.

84. *Id.* at 59.

complex. As Professors Braithwaite and Drahos pointed out, "[e]ach international organization has different rules by which it operates and so offers different games and different pay-offs."[85] Thus, "[a]s the number of institutions within the international system grows—and with new international agreements, new organizations, and new actors increasingly engaged in varied aspects of global governance—it is inevitable that some of these agreements, organizations, and actors will overlap and even conflict with one another."[86]

Second, players who are dissatisfied with an earlier rule in an existing regime will intentionally develop inconsistencies within the regime complex in the hope of changing that unfavorable rule. Termed "strategic inconsistencies" by Professors Raustiala and Victor, these inconsistencies "occur[] when actors deliberately seek to create inconsistency via a new rule crafted in another forum in an effort to alter or put pressure on an earlier rule."[87] To many countries, creating such inconsistencies is desirable because they may help pave the way for future rule or regime changes. To compete for dominance in an issue area or to attract new members, some institutions may also actively create conflicting rules and standards within the larger regime complex. Commentators, for example, have noted the growing rivalry, or at least competition,[88] between WIPO and the WTO, even though the two institutions continue to cooperate actively.[89]

Finally, the increased complexity of the international intellectual property regime has upset existing coalition dynamics between actors and institutions within the regime complex. Unlike a single-issue forum, the interests of these countries are less likely to coincide when other issue areas are incorporated into the regime. Countries therefore are less likely to align

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85. BRAITHWAITE & DRAHOS, *supra* note 74, at 565.

86. Raustiala, *supra* note 63, at 1024 (footnote omitted).

87. *Id.* at 1027-28 (footnote omitted).

88. As Graeme Dinwoodie noted:

> The sudden emergence of the WTO as part of the international intellectual property lawmaking process seemed to energize WIPO, resulting in the conclusion of several new treaties in copyright, patent and trademark law, as well as the reorganization mentioned above that was designed to make WIPO fit for the twenty-first century.

Graeme B. Dinwoodie, *The Architecture of the International Intellectual Property System*, 77 CHI.-KENT L. REV. 993, 1005 (2002) (footnotes omitted). In the past decade, WIPO has served as the negotiating forum for the protection of audiovisual performers, broadcasters' rights, and traditional knowledge. It has also been actively involved in the Internet domain name process, in particular in the development of the model policy used in resolving disputes in generic top-level domains.

89. For a discussion of the inter-institutional relationship between WIPO and the WTO, see generally Frederick M. Abbott, *Distributed Governance at the WTO–WIPO: An Evolving Model for Open-Architecture Integrated Governance*, 3 J. INT'L ECON. L. 63 (2000); Samuelson, *supra* note 9.

around the same sets of principles, norms, rules, and values. As Professor Okediji pointed out:

> [T]o the extent regime shifting upsets coalitional dynamics between developing countries, the loss on the development side is actually doubled. Not only is there a dilution of a normative proposition, however subtle, but there is also the political loss resulting from splinters between developing countries whose membership in various regimes may be different, or whose position on issues within the regimes may differ.[90]

In fact, commentators have suggested that the active regime-shifting activities and the growing complexity of the international intellectual property regime may harm less developed countries more than they harm their developed counterparts. In a forthcoming article, Eyal Benvenisti and George Downs describe three ways in which the growing proliferation of international regulatory institutions with overlapping jurisdictions and ambiguous boundaries has helped powerful states to preserve their dominance in the international arena. As they explain:

> First, by creating institutions along narrow functionalist lines and restricting the scope of multilateral agreements, it limits the opportunities that weaker actors have to build the cross-issue coalitions that are necessary to increase their bargaining power and influence. Second, the ambiguous boundaries and overlapping authority created by fragmentation dramatically increase the transaction costs that international legal bodies must incur in trying to reintegrate or rationalize the resulting legal order. Third, by suggesting the absence of design and obscuring the role of intentionality, fragmentation frees powerful states from having to assume responsibility for the shortcomings of a global legal system that they themselves have played a preponderant role in creating.[91]

According to Professors Benvenisti and Downs, "[p]owerful states are drawn to this strategy because they know that weaker states are not only more numerous than they are, but they are also far more diverse with respect to size, wealth, and their level of development."[92]

In recent years, commentators and policymakers have begun to focus on the coherence of intellectual property policies, in addition to the maintenance of balance and flexibility in those policies.[93] For example, the recently released U.K.-commissioned *Gowers Review of Intellectual Property* emphasized the need for developing coherent intellectual property instruments.[94] As it stated:

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90. Okediji, *International Relations of Intellectual Property*, *supra* note 13, at 373.

91. Eyal Benvenisti & George W. Downs, *The Empire's New Clothes: Political Economy and the Fragmentation of International Law*, 60 STAN. L. REV. (forthcoming 2007), *available at* http://ssrn.com/abstract=976930.

92. *Id.* at 19.

93. *See, e.g.*, ANDREW GOWERS, GOWERS REVIEW OF INTELLECTUAL PROPERTY 45 (2006), *available at* http://www.hm-treasury.gov.uk/media/6/E/pbr06_gowers_report_755.pdf.

94. *See id.* at 58-61.

> The IP rights available within the UK must be both internally and externally coherent. They must cover myriad ways in which knowledge is applied and ideas protected, and must also be integrated with other national and international systems of rights, particularly in light of globalisation. Moreover, there should be certainty and consistency in rights. Investment in knowledge-based industries should be grounded in a predictable legal framework for the protection of that knowledge. Finally, rights can only be coherent if they are simple enough to be understood by the general public as well as by IP specialists.[95]

Although commentators and policymakers tend to focus on the coherence of domestic intellectual property policies, the coherence of international intellectual property policies is likely to be more important and more challenging. Today, the intellectual property system is no longer considered a closed system; the principles, norms, rules, and values created in that system have greatly impacted many other systems, including trade, agriculture, health, the environment, education, culture, competition, free speech, democracy, and the rule of law. The converse is also true. Developments in other systems have significantly impacted the intellectual property system. As I noted in the introduction to the Inaugural Annual Intellectual Property and Communications Law Symposium in this *Review*, it is important to take a holistic view of intellectual property developments and consider intellectual property laws and policies as one of the many components of a larger "information ecosystem."[96] In a recent article discussing the access-to-medicines problem, I have also shown how IP-relevant, IP-related, and IP-irrelevant factors affect each other in a complex, symbiotic manner.[97]

These observations are not new. In economic and legal literature, commentators have repeatedly underscored the importance of complementary factors to the causal linkage between intellectual property protection and economic growth and development. Edwin Mansfield, for example, noted that "one should recognize that a country's system of intellectual property protection is inextricably bound up with its entire legal and social system and its attitudes toward private property; it involves much more than

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95. *Id.* at 58.

96. *See* Peter K. Yu, *Intellectual Property and the Information Ecosystem*, 2005 MICH. ST. L. REV. 1, 15-18.

97. IP-relevant factors are factors that are directly affected by intellectual property protection. IP-related factors are factors that are only indirectly affected by such protection. IP-irrelevant factors are factors that are largely unaffected by such protection. *See* Yu, *The International Enclosure Movement*, *supra* note 2, at 852-53; *see also* WORLD HEALTH ORG. COMM'N ON INTELL. PROP. RIGHTS, INNOVATION & PUB. HEALTH, PUBLIC HEALTH, INNOVATION AND INTELLECTUAL PROPERTY RIGHTS 175 (2006) ("The process of drug discovery and development is not only a matter of science. It involves a complex interaction among a wide range of economic, social, and political actors."), *available at* http://www.who.int/entity/intellectualproperty/documents/thereport/ENPublicHealthReport.pdf.

the passage of a patent or copyright law."[98] Paul Heald also stated that "a rational strategy for developing countries must not only consider compliance options, but must also account for institutional competency—legislative, judicial, executive, and diplomatic—in order to make the most of available options."[99]

As intellectual property protection continues to expand and international regimes become more interconnected, a focus on the intellectual property system *alone* is unlikely to fully account for the extent of protection within the system. In an aptly titled article, *Some Things Cannot Be Legislated*, Robert Sherwood reminded us that, "until judicial systems in developing and transition countries are upgraded, it will matter little what intellectual property laws and treaties provide."[100] One therefore needs to better understand the political, economic, social, cultural, technological, and judicial environments that enable effective intellectual property enforcement—something I have described elsewhere as the "enabling environment for effective intellectual property protection."[101] This enabling environment is important because it provides the key preconditions for successful intellectual property law reform, including a consciousness of legal rights, respect for the rule of law, an effective and independent judiciary, a well-functioning innovation and competition system, and a critical mass of local stakeholders. As Keith Maskus, Sean Dougherty, and Andrew Mertha noted in the Chinese context:

> Upgrading protection for IPRs alone is a necessary but not sufficient condition for th[e] purpose [of maximizing the competitive gains from additional innovation and technology acquisition over time, with particular emphasis on raising innovative activity by domestic entrepreneurs and enterprises]. Rather, the system needs to be strengthened within a comprehensive and coherent set of policy initiatives that optimize the effectiveness of IPRs. Among such initiatives are further structural reform of enterprises, trade and investment liberalization, promotion of financial and innovation systems to commercialize new technologies, expansion of educational opportunities to build human capital for absorbing and developing technology, and specification of rules for maintaining effective competition in Chinese markets.[102]

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98. Edwin Mansfield, *Intellectual Property Protection, Foreign Direct Investment, and Technology Transfer* 20 (Int'l Fin. Corp., Discussion Paper No. 19, 1994).

99. Paul J. Heald, *Mowing the Playing Field: Addressing Information Distortion and Asymmetry in the TRIPS Game*, 88 MINN. L. REV. 249, 252 (2003).

100. Robert M. Sherwood, *Some Things Cannot Be Legislated*, 10 CARDOZO J. INT'L & COMP. L. 37, 42 (2002).

101. Peter K. Yu, *Intellectual Property, Economic Development, and the China Puzzle*, *in* INTELLECTUAL PROPERTY, TRADE AND DEVELOPMENT: STRATEGIES TO OPTIMIZE ECONOMIC DEVELOPMENT IN A TRIPS PLUS ERA 173, 213 (Daniel J. Gervais ed., forthcoming 2007) [hereinafter Yu, *Intellectual Property, Economic Development, and the China Puzzle*].

102. Keith E. Maskus, Sean M. Dougherty & Andrew Mertha, *Intellectual Property Rights and Economic Development in China*, *in* INTELLECTUAL PROPERTY AND

In sum, if one is to fully understand the extent and impact of protection of intellectual property rights, one has to look beyond the intellectual property system to examine the various complementary factors that affect the development of an environment that enables effective protection of intellectual property rights. In short, the intellectual property system cannot be viewed in isolation! One must also pay attention to the growing developments in the international intellectual property regime complex, as these developments can affect the type of enabling environment a country can build or is building. As Professor Raustiala has noted: "[B]eing an expert on TRIPS or the Madrid Agreement becomes relatively less useful, and understanding how the broader IP regime complex operates becomes relatively more useful. One must understand the regime complex to understand fully any particular regime."[103]

To help us better understand the regime complex and how different complementary factors operate, this Symposium maps intellectual property-related developments in seven different international regimes or fora—intellectual property, international trade, public health, human rights, biological diversity, food and agriculture, and information and communications. Such mapping is important for two reasons. First, by expanding coverage to include developments in other international regimes or fora, this Symposium better captures the growing developments in the intellectual property area, while maintaining a holistic perspective in assessing those reforms needed to promote creativity and innovation and to improve the overall international framework. Second, by bringing the various developments together, the Symposium enables one to better understand the interactions and policy interfaces among the different regimes, as well as the ramifications of rulemaking in the intellectual property area.

III. INTELLECTUAL PROPERTY SCHIZOPHRENIA

The final notion concerns what I describe here as "intellectual property schizophrenia"—a mental disorder that seems to have struck intellectual property policymakers due to a wide variety of conflicts and competing interests within a country. Symptoms of this disorder include the inability to develop a coherent intellectual property policy; hallucinations about the existence or the expediency of a single, uniform international intellectual property system; and delusions that what works well for one region, sector, or group would work well for another. As the policy focus is broadened and other issue areas are incorporated into the international intellectual property

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DEVELOPMENT: LESSONS FROM RECENT ECONOMIC RESEARCH 295, 297 (Carsten Fink & Keith E. Maskus eds., 2005).

103. Raustiala, *supra* note 63, at 1029-30.

regime complex, more conflicts are likely to arise, and the symptoms will worsen.

In fact, the conflicts and competing interests described in this Part will help explain why coalition dynamics may change significantly as the regime complex expands. As Tai-Heng Cheng noted recently, "[a]n accurate *ex ante* analysis of the strategies of participants in global IP conflicts should . . . account for the interests of internal constituencies and assess each constituency's influence over internal decisionmaking in the particular IP conflict at issue."[104] Because of the varied influence of each of these constituencies and the many different stakes involved, countries may switch their positions as more issue areas are incorporated into the regime complex.

In the introduction to the Inaugural Symposium, I wrote the following:

> Those who are sympathetic to the plight of less developed countries often consider themselves low-protectionists, who favor limited protection of intellectual property. To them, it is very important to have more access to generic drugs, open source software, and non-copyright-protected textbooks. However, as far as traditional knowledge is concerned, this group often finds itself on the side of high-protectionists, along with Big Pharma and multinational agrochemical conglomerates. As much as they want to have free and open access to copyrighted and patented products, they also believe that the same free access to indigenous knowledge and materials would lead to biopiracy that could jeopardize the heritage and culture of indigenous communities—or worse, threaten the very survival of these communities.
>
> Similarly, policymakers in less developed countries often find themselves confronted with contradictory intellectual property policies. A case in point is India. Because of its booming computer software and movie industries, it is logical for policymakers in India to push for stronger protection of computer software and audiovisual works. (They might also be interested in facilitating the development of open source software.) However, this high-protectionist rhetoric has to be toned down dramatically when dealing with patented chemicals, protected drugs, and public health issues. Instead of stronger protection, the country will benefit from weaker protection, or even special exceptions, for pharmaceuticals, chemicals, food, and agricultural products.[105]

This Essay provides me with an opportunity to further develop this observation by exploring the conflicts and competing interests that have made intellectual property policies in many countries rather "schizophrenic."

Intellectual property schizophrenia is generally caused by three different types of conflicts: regional conflicts, sectoral conflicts, and issue-based conflicts. To help illustrate these conflicts, this Part focuses on China, whose intellectual property law developments I have closely observed for close to a decade. Although China is used as an illustration, similar devel-

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104. Tai-Heng Cheng, *Power, Norms, and International Intellectual Property Law*, 28 MICH. J. INT'L L. 109, 117 (2006).

105. Yu, *Intellectual Property and the Information Ecosystem*, *supra* note 96, at 8-9 (footnotes omitted).

opments are likely to take place in many less developed countries, in particular those that are undergoing significant transition in their intellectual property regimes. These countries include Brazil, India, and Russia, which along with China have been grouped together by two Goldman Sachs analysts as the so-called BRIC countries.[106]

A. Regional Conflicts

There is no better country to demonstrate regional conflicts than China. Ever since Westerners first encountered the country many centuries ago, they have become aware that the "Middle Kingdom" is not a homogeneous country. China is large, complex, diverse, and "sometimes internally contradictory."[107] The Chinese speak different languages, enjoy different cuisines, grow up with different cultures, and subscribe to different historical and philosophical traditions. Conditions in Beijing are often very different from those in Guangzhou, intellectual property strategies that are effective in Shanghai are likely to fail in a village in western China, and the trade patterns found in the coastal areas are very different from those found in the inland areas.

To make things more complicated, during the rapid economic development in China in the past two decades, "some regions have been positively encouraged to become wealthy before others."[108] As Deng Xiaoping declared in the early 1980s in response to the country's growing inequality, "some people have to get rich first."[109] As a result of this rapid economic development, there have been enormous disparities across the country in the levels of wealth and income, the purchasing power of local consumers, and the stages of economic and technological development. The goods that are in high demand in the major cities and the more developed coastal areas are often very different from those in the less developed inland and rural areas.

In the latter, limited economic and technological developments have heavily constrained the amount of local resources that can be devoted to research and development (R&D). A regional breakdown of 1995 technology data supplied by the State Science and Technology Commission of China showed that Beijing and Shanghai spent 2.6 and 1.4 percent of the

106. Dominic Wilson & Roopa Purushothaman, *Dreaming with BRICs: The Path to 2050* (Goldman Sachs, Global Economics Paper No. 99, 2003), *available at* http://www.gs.com/insight/research/reports/99.pdf.

107. John J. Hamre & C. Fred Bergsten, *Preface to* C. FRED BERGSTEN, BATES GILL, NICHOLAS R. LARDY & DEREK MITCHELL, CHINA: THE BALANCE SHEET: WHAT THE WORLD NEEDS TO KNOW NOW ABOUT THE EMERGING SUPERPOWER ix (2006).

108. David S.G. Goodman, *The Politics of Regionalism: Economic Development, Conflict and Negotiation, in* CHINA DECONSTRUCTS: POLITICS, TRADE AND REGIONALISM 1 (David S.G. Goodman & Gerald Segal eds., 1995).

109. BERGSTEN, GILL, LARDY & MITCHELL, *supra* note 107, at 31.

local gross domestic product on R&D, as compared to 0.6 percent spent by Sichuan and Liaoning, the two provinces that came next in R&D spending.[110] It is therefore no surprise that, in 2000, "[r]esidents of Guangdong applied for more than 21,000 patents, while people in Hebei applied for only 3,848."[111] If greater R&D efforts can lead to greater improvement of intellectual property protection, the R&D statistics in China certainly hint at the uneven progress made within the country.

Moreover, since the reopening of the Chinese market to foreign trade in the late 1970s, the country has been heavily decentralized. Today, there are considerable differences among protection at the national, provincial, and local levels, due in no small part to the complex bureaucracies related to intellectual property protection and enforcement.[112] The less developed parts of the country are also likely to present considerable structural problems for intellectual property enforcement, including inefficient administration, low penalties, shortage of funds, local protectionism, and severe conflicts of interests.[113] As far as enforcement of intellectual property rights is concerned, the Chinese proverb "the mountains are high, and the Emperor is far away" (*shān gāo huángdì yuǎn*) could not provide a more accurate description. As Former Assistant United States Trade Representative for Japan and China Joseph Massey recounted, shortly after the signing of the 1992 memorandum of understanding between China and the United States, a senior USTR official "was told by a senior provincial government leader that 'Beijing's agreement' with the US was 'mei you guanxi' (irrelevant) in that southern province."[114]

Sadly, despite all the regional differences and the country's heavily decentralized state, intellectual property developments in China are often analyzed as if the country were homogeneous. While it is understandable that policy analysts would swap analytical accuracy for practical convenience, the end result unsurprisingly presents only half of the picture—at times a very misleading, if not inaccurate, half. As the Chinese market expands further away from the major cities and the coastal areas, a more complete and deeper analysis of the country's regional developments is in order.[115]

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110. *See* Maskus, Dougherty & Mertha, *supra* note 102, at 320.

111. *Id.* at 317.

112. *See* ANDREW C. MERTHA, THE POLITICS OF PIRACY: INTELLECTUAL PROPERTY IN CONTEMPORARY CHINA 93-100 (2005).

113. *See* Maskus, Dougherty & Mertha, *supra* note 102, at 309.

114. Joseph A. Massey, *The Emperor Is Far Away: China's Enforcement of Intellectual Property Rights Protection, 1986-2006*, 7 CHI. J. INT'L L. 231, 235 (2006).

115. In June 2006, the Office of the United States Trade Representative altered its decades-old emphasis on country-based assessments in China. Instead of calling for information only about the entire country, for the first time the Office requested information concerning provincial developments. As the announcement in the *Federal Register* stated, "[t]he

In the near future, China is likely to remain what I have described as "a country of countries."[116] Stronger intellectual property protection is likely to appear in Beijing, Shanghai, Guangzhou, and other major cities and coastal regions, due to greater intellectual property reforms and the emergence of intellectual property-based industries. The massive piracy and counterfeiting problems, however, are unlikely to migrate out of the country. Instead, they will spread to the less developed parts of the country, whose conditions are no different from those of the big cities a decade ago when intellectual property protection began to strengthen. To strike a compromise between the divergent regional needs and interests, Chinese leaders are likely to take some rather "schizophrenic," or pragmatic, positions in designing their intellectual property policies. If we are to better understand intellectual property developments in China—or, for that matter, the developments in any heterogeneous country that is undergoing significant transition in its intellectual property regime—we need to better understand the regional conflicts within the country.

B. Sectoral Conflicts

While regional conflicts have greatly affected the analysis of intellectual property protection in China, the country has also experienced divergent sectoral developments that present challenges commonly found in less developed or transition economies. Due to the varied paces at which different industries develop and the fact that not all industrial sectors can simultaneously benefit from strong intellectual property protection, these countries are unlikely to have a coherent national intellectual property policy. As a result, the positions taken by the national governments often vary depending on the impact of the proposed protection on their fastest-growing industries. At times, their positions may seem "schizophrenic," due partly to the different needs and demands of these industries.

For example, based on existing developments, China is likely to prefer stronger protection of intellectual property rights in entertainment, software, semiconductors, and selected areas of biotechnology to increased protection in areas concerning pharmaceuticals, chemicals, fertilizers, seeds, and foodstuffs. Such a position is understandable, because China has fast-growing movie, software, semiconductor, and biotechnology industries. These in-

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goal of this [special provincial] review is to spotlight strengths, weaknesses, and inconsistencies in and among specific jurisdictions." Office of the U.S. Trade Representative, *Special Provincial Review of Intellectual Property Rights Protection in China: Request for Public Comment*, 71 Fed. Reg. 34,969, 34,970 (June 16, 2006). On the benefits of this provincial review, see Yu, *Intellectual Property, Economic Development, and the China Puzzle*, *supra* note 101.

116. Peter K. Yu, *From Pirates to Partners (Episode II): Protecting Intellectual Property in Post-WTO China*, 55 AM. U. L. REV. 901, 963 (2006).

dustries are likely to obtain greater benefits if intellectual property protection is strengthened. Even when policymakers fail to recognize the need for stronger protection, they will provide the information needed to lobby for intellectual property reforms.

By contrast, in fields concerning pharmaceuticals, chemicals, fertilizers, seeds, and foodstuffs, China is unlikely to benefit from greater protection, due to its huge population, continued economic dependence on agriculture, the worries about public health issues, and concerns about its people's overall well-being. Indeed, because stronger intellectual property protection in these areas is likely to drain the country's limited economic resources, local leaders would hesitate to use their hard-earned political capital to introduce reforms that would provide benefits primarily to foreign rights holders and their export countries. The likelihood of success for intellectual property reforms in these sectors is also greatly reduced by the increased frustration among the local people who would bear the costs of increased protection and by the development of organized efforts against increased protection.

Politics aside, it makes good economic sense for policymakers to develop intellectual property protection that is in line with the country's economic development. For example, economists have shown that the "length of protection for a given product should be inversely related to the elasticity of demand and the social rate of discount, and positively related to R&D returns."[117] In his very influential study for the World Bank, Edwin Mansfield found that "[t]here is often little correlation between one industry's evaluation of the strength or weakness of intellectual property rights protection in a particular country and another industry's evaluation of the same country."[118] As he pointed out, intellectual property protection played a major role in the chemical, pharmaceutical, machinery, and electrical equipment industries, but has only marginal significance for the transportation equipment, metal, and food industries.[119] Keith Maskus also found that

> [i]nvestment in lower-technology goods and services, such as textiles and apparel, electronic assembly, distribution, and hotels, depends less on the strength of IPRs and relatively more on input costs and market opportunities. Investors with a product or technology that is costly to imitate may also pay little attention to local IPRs in their decision making.[120]

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117. Claudio R. Frischtak, *Harmonization Versus Differentiation in Intellectual Property Right Regimes*, *in* GLOBAL DIMENSIONS OF INTELLECTUAL PROPERTY RIGHTS IN SCIENCE AND TECHNOLOGY 89, 97 (Mitchel B. Wallerstein, Mary Ellen Mogee & Roberta A. Schoen eds., 1993) (citing WILLIAM NORDHAUS, INVENTION, GROWTH AND WELFARE (1969)).

118. Mansfield, *supra* note 98, at 19.

119. *See id.* at 2.

120. Keith E. Maskus, *The Role of Intellectual Property Rights in Encouraging Foreign Direct Investment and Technology Transfer*, 9 DUKE J. COMP. & INT'L L. 109, 131-32 (1998).

In recent works, Dan Burk and Mark Lemley have shown how policy levers in patent law have allowed courts to take account of the varying types of innovation in different industries.[121] As they noted, "there is no reason to assume that a unitary patent system will optimally encourage innovation in the wide range of diverse industries that it is expected to cover."[122] Likewise, Michael Carroll and Glynn Lunney have each highlighted the problem of uniformity costs in intellectual property law.[123] As these commentators have recognized, the divergence of protection in different industrial sectors will allow a country to better tailor its intellectual property system to the needs of local industries. Such tailoring, in turn, would allow the country to better utilize its comparative and competitive advantages. After all, a country that has a strong pharmaceutical industry is more likely to benefit from an intellectual property system tailored to that industry's needs than one that is designed to support a strong software industry.

As countries continue to fine-tune their intellectual property systems in an effort to better reflect their different needs, interests, and goals, sector-based disparities are likely to become of growing importance. In fact, the international intellectual property regime has already seen increasing demands for sector-based *sui generis* protection, usually from the beneficiary sectors. For example, the wine and spirits industry successfully lobbied for article 23 of the TRIPS Agreement, which offers special protection to geographical indications for wines and spirits.[124] The plant breeding industry successfully obtained special protection in article 27 of the Agreement, which requires member states to "provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof."[125] In addition, the semiconductor industry gained protection through the adoption of the Treaty on the Protection of Intellectual Property in Respect of Integrated Circuits in article 35 of the Agreement.[126] There have also been serious talks about implementing *sui generis* protection of databases and traditional knowledge at the international level, thanks largely to the push by relevant stakeholders.[127]

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121. Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575 (2003).

122. *Id.* at 1577.

123. *See* Michael W. Carroll, *One for All: The Problem of Uniformity Cost in Intellectual Property Law*, 55 AM. U. L. REV. 845 (2006); Michael W. Carroll, *Patent Injunctions and the Problem of Uniformity Cost*, 13 MICH. TELECOMM. & TECH. L. REV. 421 (2007); Glynn S. Lunney, Jr., *Patent Law, the Federal Circuit, and the Supreme Court: A Quiet Revolution*, 11 SUP. CT. ECON. REV. 1 (2004).

124. TRIPS Agreement, *supra* note 1, art. 23.

125. *Id.* art. 27(3)(b).

126. *See id.* art. 35.

127. *See* Yu, *Currents and Crosscurrents*, *supra* note 8, at 379-81 (discussing *sui generis* database protection); *id.* at 389 (discussing *sui generis* protection of traditional knowledge).

C. Issue-based Conflicts

The last type of conflict occurs when intellectual property issues are discussed in the larger context involving other issue areas, such as international trade, human rights, public health, free speech, privacy, democracy, agricultural productivity, biological diversity, cultural patrimony, food security, environmental sustainability, business ethics, global competition, scientific research, sustainable development, and wealth distribution. As Part II has shown, the development and expansion of the international intellectual property regime complex has greatly increased the likelihood of developing these conflicts.

Consider, for example, the tension between intellectual property and human rights.[128] In the early 1990s, there was significant tension between the Clinton administration's foreign intellectual property policy toward China and its foreign human rights policy. During the 1992 presidential election campaign, then-Governor Bill Clinton accused his predecessor of "coddling dictators" and vowed to condition China's most-favored-nation benefits upon improvement in its human rights conditions. Although his administration began its trade policy by linking together the two issues, it eventually reversed the policy by de-linking human rights from international trade (and intellectual property).[129]

On one side of this debate were intellectual property rights holders who lobbied aggressively for stronger protection and enforcement in China, in particular for the protection of computer software and entertainment media products. In response to these lobbying efforts, the United States repeatedly threatened China with economic sanctions, trade wars, nonrenewal of most-favored-nation status, and opposition to China's entry into the WTO.[130] These threats eventually led to the issuance or signing of two memoranda of understanding in 1989 and 1992, an agreement regarding

128. Intellectual property and human rights are not always in conflict. In fact, some attributes or forms of intellectual property rights are protectible under international human rights instruments. *See, e.g.*, Laurence R. Helfer, *Toward a Human Rights Framework for Intellectual Property*, 40 U.C. DAVIS L. REV. 971 (2007); Peter K. Yu, *Reconceptualizing Intellectual Property Interests in a Human Rights Framework*, 40 U.C. DAVIS L. REV. 1039 (2007); Peter K. Yu, *Ten Common Questions About Intellectual Property and Human Rights*, 23 GA. ST. U. L. REV. (forthcoming 2007), *available at* http://ssrn.com/abstract=979193.

129. *See* Peter K. Yu, *From Pirates to Partners: Protecting Intellectual Property in China in the Twenty-first Century*, 50 AM. U. L. REV. 131, 213 (2000) [hereinafter Yu, *From Pirates to Partners I*]. As Andrew Mertha explained, the linkage between international trade and human rights has been particularly difficult in China because, "in the compartmentalized world of Chinese bureaucratic politics, the 'human rights' portfolio does not appear anywhere within the jurisdiction of Chinese trade officials." MERTHA, *supra* note 112, at 11.

130. *See* Yu, *From Pirates to Partners I*, *supra* note 129, at 140-51.

intellectual property rights in 1995, and an "accord" reiterating China's commitment to strengthening intellectual property protection in 1996.[131]

On the other side of the debate were human rights advocates in China who became particularly concerned about the lack of protection of civil liberties and human rights after Tiananmen in 1989. Their worries were compounded when local authorities enlisted tough law enforcers who were notorious for gross human rights violations to clean up pirate factories.[132] As Ted Fishman reminded us in his bestseller, *China Inc.*, raids on piracy and counterfeiting goods can also be attributable to other ulterior motives, such as the suppression of political speech or turf wars:

> The purposes behind the publicized raids are always obscure, and the Chinese who read about them are skeptical about taking the raids at face value. Are they the result of turf wars among the government fiefdoms that are themselves knee-deep in counterfeiting? Did the raided factories push the Party's tolerance of violent and eroticized Western entertainment too far? Did they pirate a movie backed by the Chinese government? Or was that day's demonstration of will just a show for a foreign trade group coming to China to—yet again—express its grave concerns over intellectual-property theft?[133]

In fact, by advocating a foreign intellectual property policy that relies heavily on pressure and ultimata to protect economic interests, the United States has jeopardized its longstanding interests in promoting human rights and civil liberties in China.[134] As William Alford pointed out, that policy not only discredited the very important message that one should respect rights and the legal process, but also provided China with "a convenient legitimization for repressive measures [the Chinese authorities] intended to take in any event while simultaneously constraining America's capacity to complain about such actions."[135]

Thus, when the administration took into account the interests of both sides, finding a workable solution became particularly difficult. As Joseph Massey recalled, the United States decided not to press for criminal penal-

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131. Memorandum of Understanding Between the People's Republic of China and the United States, May 19, 1989, P.R.C.–U.S., *reprinted in PRC Agrees to Push for Copyright Law That Will Protect Computer Software*, WORLD INTELL. PROP. REP. (BNA), July 1989, at 151; Memorandum of Understanding Between China (PRC) and the United States on the Protection of Intellectual Property, Jan. 17, 1992, P.R.C.–U.S., 34 I.L.M. 677 (1995); Agreement Regarding Intellectual Property Rights, Feb. 26, 1995, P.R.C.–U.S., 34 I.L.M. 881 (1995); China Implementation of the 1995 Intellectual Property Rights Agreement, June 17, 1996, P.R.C.–U.S., *available at* http://www.mac.doc.gov/TCC/DATA/index.html.

132. *See id.* at 143.

133. TED C. FISHMAN, CHINA INC.: HOW THE RISE OF THE NEXT SUPERPOWER CHALLENGES AMERICA AND THE WORLD 236 (2005) (footnote omitted).

134. *See* Yu, *From Pirates to Partners I*, *supra* note 129, at 174.

135. William P. Alford, *Making the World Safe for What? Intellectual Property Rights, Human Rights and Foreign Economic Policy in the Post-European Cold War World*, 29 N.Y.U. J. INT'L L. & POL. 135, 143-45 (1997).

ties for intellectual property piracy in the early-to-mid 1990s because of its concern about political repression in China.[136] Although many in the administration considered that approach appropriate at that time, it eventually backfired by creating considerable intellectual property enforcement problems down the road. Today, criminal enforcement remains one of the thorniest issues involved in the U.S.-China bilateral intellectual property dispute. In the United States' recent WTO complaint against China, for example, the lack or inadequacy of criminal enforcement and procedures in intellectual property laws was listed as a key item to be addressed through the mandatory dispute resolution process.[137]

Similar tension between intellectual property and human rights exists elsewhere. Increasingly, countries, especially those in the less developed world, are asked to offer stronger intellectual property protection at the expense of equally important interests in protecting privacy, free speech, and other individual liberties. In a recently released consultation document on digital copyright reform, the Hong Kong government advanced proposals to increase protection of copyrighted works in the digital media.[138] Unfortunately, many of those proposals also threaten to undermine the protection of privacy, free speech, and other individual liberties in the region. As I noted in a recent opinion piece in the *South China Morning Post*, "some of the medicine prescribed in the [consultation] paper is, unfortunately, worse than the diseases it claims exist."[139]

One proposal, for example, offers to "provide a specific mechanism under the law for copyright owners to compel [Internet service providers] to disclose their clients' information and to impose a requirement under the [Copyright] Ordinance for [these providers] to keep logs."[140] This proposal is particularly problematic in light of Yahoo's recent release to the Chinese authorities of the personally-identifying information of Shi Tao, a Hunan newspaper reporter who provided to a pro-democracy website a government

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136. *See* Massey, *supra* note 114, at 234.

137. *See* Request for Consultations by the United States, *China—Measures Affecting the Protection and Enforcement of Intellectual Property Rights*, WT/DS362/1 (Apr. 16, 2007); Request for the Establishment of a Panel by the United States, *China—Measures Affecting the Protection and Enforcement of Intellectual Property Rights*, WT/DS362/7 (Aug. 21, 2007).

138. COMMERCE, INDUS. & TECH. BUREAU, HKSAR GOV'T, COPYRIGHT PROTECTION IN THE DIGITAL ENVIRONMENT (2006), *available at* http://www.cedb.gov.hk/citb/ehtml/pdf/consultation/Consultation_document.pdf. For the author's response to the Hong Kong government's consultation paper, see PETER K. YU, DIGITAL COPYRIGHT REFORM IN HONG KONG: PROMOTING CREATIVITY WITHOUT SACRIFICING FREE SPEECH (2007), *available at* http://jmsc.hku.hk/cms/images/stories/jmscdigitalcopyright.pdf.

139. Peter K. Yu, *The Digital Divide*, S. CHINA MORNING POST, May 10, 2007, at A15.

140. COMMERCE, INDUS. & TECH. BUREAU, *supra* note 138, at 24.

document on press restrictions.[141] That journalist was subsequently arrested and was harshly sentenced to ten years in prison.

From the larger policy standpoint, it is hard to overlook the catch-22 situation in which the Hong Kong government found itself. If it does not offer stronger copyright protection, the Western press is likely to criticize the government for inadequate response to the massive file-sharing activities conducted online by local Internet users. Unsurprisingly, such criticisms would resonate well with those who are concerned about the lack of respect for the rule of law and intellectual property rights in China. However, if the government increases copyright protection, the Western press is likely to criticize Hong Kong for its lack of protection of privacy, free speech, and other individual liberties. Such criticisms were particularly troublesome in light of the heightened media scrutiny following the tenth anniversary of China's resumption of sovereignty over Hong Kong. Regardless of the action it takes, the Hong Kong government is likely to become a target of criticism by the Western press—ironically, for its efforts to respond to Western concerns.

While tension exists between intellectual property and human rights, due partly to the inherent tension between the different policy goals, conflicts arise even when the issues are narrowed down to trade alone. On the surface, trade issues go hand in hand with intellectual property protection. Today, information and high-technology goods make up a considerable part of the economy of developed and emerging economies. To promote growth in the area, intellectual property industries have lobbied heavily and successfully for the "marriage" of intellectual property and international trade through the TRIPS Agreement.

In reality, intellectual property policies tend to benefit one group of industries at the expense of another. In an earlier work, I discussed how the Chinese leaders were able to respond to the United States' threat of intellectual property-related trade sanctions by switching from U.S. products to European and Japanese ones. In 1996, for example, Chinese Premier Li Peng went to France to sign a $1.5 billion order for thirty short-haul Airbus planes following the United States' threat of trade sanctions against China over its lack of intellectual property protection.[142]

From the standpoint of international trade, the move by the Chinese leaders was ingenious. While the U.S. intellectual property industries claimed that trade sanctions were needed to protect them from a *potential*

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141. *See, e.g.*, Nicholas D. Kristof, *China's Cyberdissidents and the Yahoos at Yahoo*, N.Y. TIMES, Feb. 19, 2006, § 4, at 13; Clive Thompson, *Google's China Problem (and China's Google Problem)*, N.Y. TIMES, Apr. 23, 2006, § 6 (Magazine), at 64; Tom Zeller Jr., *Internet Lions Turn Paper Tiger in China*, N.Y. TIMES, Feb. 6, 2006, at C3.

142. *See* Yu, *From Pirates to Partners I*, *supra* note 129, at 168.

loss of $2 billion of intellectual property-based goods and services,[143] Boeing registered an *immediate* loss of $1.5 billion worth of contracts to its European archrival, Airbus. In the end, the response by the Chinese leaders skillfully transformed the issue from a bilateral intellectual property dispute to a domestic cross-industry trade dispute concerning the United States' *overall* interests. As executives from the powerful Boeing Company would ask following the Airbus deal, "The importance of protecting intellectual property rights is undeniable, but why should we suffer to help reduce the loss by the entertainment industries?"[144]

Indeed, similar concerns arose when the United States imposed trade sanctions against Brazil. As Robert Bird recounted:

> [D]rug companies in the 1980s cited Brazil for its failure to provide intellectual property rights for patents in the pharmaceutical sector. After continued negotiations between Brazilian and U.S. representatives proved unfruitful, the United States imposed economic sanctions against numerous Brazilian products, including paper products, pharmaceuticals, chemicals, microwave ovens, television cameras, telephone answering machines, tape recorders, moccasins, pistols, and jewelry. Once the government announced the trade sanctions, General Electric protested the tariffs against imported electrical breakers, Xerox opposed the inclusion of copy paper, Dow Chemical objected to the tariffs on carbon tetrachloride, Ford Motor called for the removal of amplifiers and windshield wipers, and Carrier sought the removal of air conditioners from the tariffs target list. Each of these companies claimed that the sanctions harmed their economic interests because they relied on the importation of the targeted products to satisfy consumer needs.[145]

In sum, countries have internal conflicts and competing interests, and policymakers face varying pressure from different regions, sectors, and interest groups. When more issue areas are incorporated into the international intellectual property regime complex, the inconsistent interests and policy goals are likely to become apparent, creating what I have described here as intellectual property schizophrenia. While regional and sectoral conflicts occur primarily within those countries that seek to undertake intellectual property reforms, issue-based conflicts occur not only in those countries, but also in the more developed ones that seek to pressure others to accelerate their intellectual property reforms. As the international intellectual property regime continues to expand, the three types of conflicts described in this Part will make the already very complicated conglomerate regime even more complex.

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143. The potential loss in the intellectual property area is likely to be much lower than the figures reported by the industry, as these figures tend to overstate the ability or interest of the local people to purchase foreign products at stated retail prices. *See id.* at 175-76; WILLIAM P. ALFORD, TO STEAL A BOOK IS AN ELEGANT OFFENSE: INTELLECTUAL PROPERTY LAW IN CHINESE CIVILIZATION 129 n.13 (1995).

144. Yu, *From Pirates to Partners I*, *supra* note 129, at 168.

145. Robert C. Bird, *Defending Intellectual Property Rights in the BRIC Economies*, 43 AM. BUS. L.J. 317, 335-36 (2006).

CONCLUSION

A few decades ago, intellectual property was not perceived as a major topic in the national and international policy debates. As commentators have noted *ad nauseum*, intellectual property was the backwater in the legal field. Susan Sell compared intellectual property law to the Catholic Church when the Bible was in Latin. As she wrote, "IP lawyers are privileged purveyors of expertise as was the Latin-trained clergy."[146] Similarly, Andrew Gowers noted in his U.K.-commissioned review, "For many citizens, Intellectual Property . . . is an obscure and distant domain—its laws shrouded in jargon and technical mystery, its applications relevant only to a specialist audience."[147]

Today, the field of intellectual property has come of age, and the international intellectual property regime has become increasingly complex. As more interests and policy goals are taken into consideration, this regime complex is confronted with a wide variety of conflicts and inconsistencies. Understanding the developments within the regime has become particularly difficult. Fortunately, with the growing understanding and appreciation of intellectual property laws and policy and the enlargement of the national and international policy debates, the growing complexity of the international intellectual property regime can be seen in a new light and can be analyzed more deeply.

To help us better understand this international intellectual property regime complex, the Intellectual Property & Communications Law Program at Michigan State University College of Law and the *Michigan State Law Review* co-organized a two-day conference on April 7–8, 2006. This conference brought together academics, development specialists, international relations scholars, trade experts, economists, political scientists, and policymakers to explore the interactions and policy interfaces among the various international regimes in which intellectual property issues play a growing role. The conference also explored issues concerning international relations, public international law, enforcement and compliance, and the recent proliferation of bilateral and regional trade and investment agreements. This Symposium Issue collects some of the papers presented at the conference. I hope you will enjoy them.

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146. SUSAN K. SELL, PRIVATE POWER, PUBLIC LAW: THE GLOBALIZATION OF INTELLECTUAL PROPERTY RIGHTS 99 (2003).

147. GOWERS, *supra* note 93, at 1.