Compliance with the TRIPS Agreement: Introduction to a Scholarly Debate

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The first symposium held on the proposals to include intellectual property rights within the Uruguay Round of multilateral trade negotiations was published by The Vanderbilt

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Journal of Transnational Law in 1989. It seemed only fitting to return to this same Journal with a retrospective evaluation of the finished product by members of the American Association of Law Schools' (AALS) Intellectual Property Section in 1996. That product is Annex 1C of the Marrakesh Agreement Establishing the World Trade Organization (WTO Agreement), better known as the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement or Agreement). This Agreement has already spawned a voluminous literature, including other symposiums, which attests to its cardinal importance and to the


3. The articles collected here were originally presented to the Annual Meeting of the Intellectual Property Section, American Association of Law Schools (AALS), San Antonio, Texas, on January 4, 1996. As outgoing Chair of the Section. I wish to express the gratitude of all its members to Rochelle Cooper Dreyfuss, current Chair, to Jessica Litman, a past Chair, and to Marshal Leaffer, current Secretary, for their invaluable assistance in planning and organizing this event. The Section is also indebted to Wendy J. Gordon, current Chair-Elect, for serving with me as co-moderator of the program.


new departure it represents for international intellectual property relations.

However, no previous symposium has sought to gauge the responses to these developments of the professors who teach intellectual property law at U.S. universities. In planning this year's meeting of the AALS Intellectual Property Section, therefore, the officers felt the time had come to rectify this imbalance. The provisions of the TRIPS Agreement will set a new research agenda for the foreseeable future. At the compliance stage, the opinions of publicists\(^6\) will play a role in interpreting these provisions and, especially, in applying the WTO Agreement's new dispute-resolution machinery to actual disputes between member states.\(^7\) By acquainting legislators, administrators, and industrialists with the spectrum of scholarly opinion in this country, we hope to better prepare them for the challenges and risks of the coming transitional period\(^8\) and the tensions it seems certain to elicit.\(^9\)

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8. See TRIPS Agreement, supra note 4, arts. 65-66. During the transitional period, developing countries may postpone implementing most of the required standards for a period of at least five years, and they may wait ten years before fully protecting fields of technology that were previously excluded under their domestic patent laws. Least-Developing Countries (LDCs) obtain a general reprise for ten years, while a showing of hardship may qualify them for further delays and other concessions. See, e.g., J.H. Reichman, Universal Minimum Standards of Intellectual Property Protection Under the TRIPS Component of the WTO Agreement, 29 Int'l L. Rev. 345, 353 (1995) [hereinafter Universal Minimum Standards] (citing authorities and noting pipeline provision for pharmaceutical and agrochemical patents). See also id. at 383 (noting that LDCs may obtain
The officers, therefore, invited a representative sampling of U.S. intellectual property scholars to explain and assess the TRIPS Agreement for the benefit of the many colleagues who gathered at the San Antonio meeting on January 4, 1996. Their stimulating, often passionate, and thoroughly heterogenous contributions comprise the bulk of this special Symposium Issue. In the introductory remarks that follow, I will try to fit the panelists' observations into a larger framework and to distill some of their findings and insights concerning the future prospects for successful implementation of the TRIPS Agreement.

I. NATURE AND SCOPE OF THE AGREEMENT

The TRIPS Agreement is the most ambitious international intellectual property convention ever attempted. The breadth of subject matters comprising the "intellectual property" to which specified minimum standards apply is unprecedented, as is the

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future waivers to alleviate hardships stemming from their obligations under the WTO Agreement as a whole, by virtue of article X(2) of that agreement).


10. See supra note 3.


12. Besides imposing national treatment and most-favored-nation clauses of its own, see TRIPS Agreement, supra note 4, arts. 3(1), 4, this Agreement identifies seven categories of "intellectual property" that are subject to the international minimum standards it directly establishes, in addition to standards arising from prior international conventions. See supra note 11. These categories include (1) copyrights and related rights; (2) trademarks; (3) geographical
obligation of all WTO member states to guarantee that detailed "enforcement procedures as specified in this [Agreement] are available under their national laws." In addition, each member state pledges its willingness to incur liability in the form of cross-collateral trade sanctions for the nullification and impairment of benefits owed other member states under the Uruguay Round's package deal. For the first time in history, as I have elsewhere pointed out, these provisions "make it likely that states will lodge actions against other states before duly constituted international bodies, with a view to vindicating the privately owned intellectual property rights of their citizens against unauthorized uses that occur outside the domestic territorial jurisdictions."

The first question that comes to mind is how a young and still untested international organization like the WTO can hope to manage the complexities of the TRIPS Agreement (and the pitfalls it contains) when so many of its constituent members lack the legal infrastructure, technical skills, and philosophic commitment to make it work. To find out, we invited the two administrators most directly concerned with this problem, viz., Adrian Otten, Director of the WTO's Intellectual Property and Investment Division, and his deputy, Hannu Wager, Legal Affairs Officer in the same Division, to give us a sense of how the task of securing "compliance with TRIPS" looked from their unique vantage point. Their helpful and revealing article builds on the earlier and important contribution of their GATT colleagues, David Hartridge and Arvind Subramanian, to the Vanderbilt Symposium in 1989.

indications; (4) industrial designs; (5) patents; (6) integrated circuit designs; and (7) trade secrets or confidential information. See TRIPS Agreement, supra note 4, arts. 1(2), 3(1), 4, 9-40. An eighth subject-matter category mentioned in Part II of the Agreement (but not included within the definition of "intellectual property") is entitled "Control of Anti-Competitive Practices in Contractual Licenses." See id. art. 40. See generally Universal Minimum Standards, supra note 8, at 347-51. 379-81; 2 THE GATT URUGUAY ROUND—A NEGOTIATING HISTORY 2241-2313 (Terence P. Stewart ed., 1993).
13. See TRIPS Agreement, supra note 4, arts. 41-50; see also Monique L. Cordray, GATT u. WIPO, 76 J. PAT. TRADEMARK OFF. SOC'Y 121, 135 (1984) (stating that "[p]erhaps the most significant milestone in TRIPS is the enforcement provisions").
14. See supra note 7. For the "package deal," see Final Act, supra note 4, art. 4 (requiring acceptance of the WTO Agreement "as a whole").
15. Universal Minimum Standards, supra note 8, at 385.
Messers. Otten and Wager indicate at least four directions in which a subtle and diplomatic policy of mediation may soothe sensibilities that prior negotiations had ruffled in order to foster a more positive climate for future intellectual property relations within the Council for TRIPS (Council) and other WTO forums. First, they emphasize the importance of the old GATT principle of “transparency” during the early implementation stages, especially the “transitional phases,” in which developing countries are allowed five years to meet their basic substantive obligations and least-developing countries (LDCs) are given at least eleven years, and perhaps more, if they show progress in the face of hardship. This principle requires member countries to report on the state of their legislative progress toward full compliance with the TRIPS provisions, and these reports become a proper focus of attention for the Council for TRIPS.

Emphasis on transparency thus spurs all states to avoid nonconforming legislation that might become a subject of Council deliberations. It also provides states having the biggest stake in international intellectual property protection with a relatively nonconfrontational mode of maintaining their momentum, without triggering actual litigation before dispute-settlement panels or conducting unilateral “trials” under their domestic trade laws. However, the restraint of the United States in this regard remains to be demonstrated.

Second, Otten and Wager stress the “enforcement” provisions that member states are expected to implement in their domestic laws, and they shed considerable light on how the WTO

18. See TRIPS Agreement, supra note 4, art. 71(2) (providing for two-year reviews of the implementation of the TRIPS Agreement); WTO Agreement, supra note 4, art. IV(9) (establishing Council for TRIPS). In principle, “the periodic reviews of the council for TRIPS should . . . substitute for the unilateral policy reviews currently undertaken by the trade representatives of leading developed countries.” Universal Minimum Standards, supra note 8, at 384 (citing authorities). But see Judith H. Bello & Alan F. Holmer. GATT Dispute Settlement Agreement: Internationalization or Elimination of Section 301?, 26 Int'l. L Rev. 795, 800-01 (1992).


20. See supra note 18. "The Uruguay Round Agreements Act of 1994, which amends section 301 ostensibly to conform to the WTO Agreement, continues to regard a failure to provide adequate and effective protection of intellectual property rights as an unreasonable act, policy, or practice, notwithstanding the fact that the foreign country may be in compliance with the specific obligations of the [TRIPS] Agreement.” Universal Minimum Standards, supra note 8, at 384 (citing URRA, supra note 4, § 314 (c)(1), amending Trade Act of 1974).
Secretariat will interpret these provisions.\textsuperscript{21} Once the member states put the requisite enforcement measures in place under the gentle spur of transparency, the unstated inference is that private enforcement actions by rightsholders under the domestic laws will, at least for a time, relieve the pressure for "top down" administrative action at the international level. Private actions of this kind will also produce a body of empirical evidence that can better inform future consultations within the Council for TRIPS. In this regard, particular attention will be paid to the border-control measures that states must employ against counterfeit trademarked and copyrighted goods,\textsuperscript{22} an area of enforcement that is as likely to trouble certain developed countries as it is the developing countries.\textsuperscript{23}

Third, Otten and Wager recognize the potential importance of technical assistance for developing and least-developing countries seeking to reform their intellectual property systems, and they suggest that the Council for TRIPS intends to monitor the extent to which developed countries fulfill their obligations in this respect.\textsuperscript{24} Finally, they stress the collaborative arrangements under way with sister organizations, especially the World Intellectual Property Organization (WIPO) and the United Nations Conference on Trade and Development (UNCTAD), whose participation in and out of the Council for TRIPS could help to ensure a smoother implementation process. "The aim is, whenever possible, to resolve differences between states without the need for formal recourse to dispute settlement."\textsuperscript{25}

Despite the level-headed and gradualist approach outlined above, which seems consistent with general principles of international economic law,\textsuperscript{26} disinterested observers still worry

\begin{flushleft}
\textsuperscript{21} See Otten & Wager, supra note 16, at 409-11; supra note 13 and accompanying text.
\textsuperscript{22} See Otten & Wager, supra note 16, at 404.
\textsuperscript{24} See Otten & Wager, supra note 16, at 410.
\textsuperscript{25} Id. at 411.
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about the very different attitudes of the member states toward intellectual property protection and about the lack of consensus that continues to plague international intellectual property relations notwithstanding the TRIPS Agreement.\footnote{27} During the nineteenth century, as Stephen Ladas taught, states first experimented with different intellectual property approaches at the local level, and a gradual upward evolution followed thereafter on the basis of a consensual evaluation of the interests at stake and of the empirical results of these experiments.\footnote{28} According to the second panelist, Professor Sam Oddi, the opposite was true of the TRIPS Agreement, which rests on no solid theoretical or empirical foundations whatsoever.\footnote{29}

Professor Oddi's profound and searching monograph considers whether any of the established theories of protection—including newer, economic theories that have gained attention in the United States—can possibly justify the imposition of universal standards of patent protection under the TRIPS Agreement. To this end, he notes the irony of over-emphasizing the natural rights thesis, as U.S. trade representatives and industry spokespersons often did in the heat of the negotiations, while official U.S. doctrine and practice reject it as a foundation for our domestic intellectual property laws.\footnote{30} Despite the inadequacies of this thesis, which Oddi identifies, it remains very much alive in the European Union and has recently been used to justify proposals for new and highly anticompetitive intellectual property rights that the U.S. authorities seem only too eager to emulate.\footnote{31}


\footnote{30} See id. at 424 (citing authorities).

Professor Oddi subjects the standards of patent protection that the TRIPS Agreement requires to the refined tests of economic analysis that he has helped to develop in recent years. He finds it impossible to justify such a high level of protection either under the older "social welfare" theory or under more recent theories, such as Grady and Alexander's "rent dissipation theory," Merges and Nelson's "race to invent" theory, or Kitch's "prospect theory."

Of these latter approaches, Kitch's "prospect theory" could, perhaps, bolster the developed countries' arguments a bit more than Oddi allows, if only because it factors economies of scale into the overall calculus of incentives to invest that Professor Kitch has admirably explored. However, Kitch's recent application of his own theories to the developing countries is less persuasive for at least two reasons. One, which Oddi points out, is that developing countries that lag behind the newly industrialized countries usually lack the infrastructure to benefit from local usage of the patent system for the foreseeable future. These structural impediments are aggravated by low per-capita gross domestic product (GDP) figures, which some investigators deem a critical obstacle to technological progress. The second objection


is that Kitch is too obsessed with patents as the sole instrument for triggering the efficiencies of his prospect theory.

Under the modern conditions that define the so-called "information age," the patent paradigm tends to become obsolete and counterproductive the more it is used to protect relatively small and incremental applications of know-how to industry that are characteristic of important new technologies. What the developing countries need for the immediate future is not strong, nineteenth-century-type patent protection, but rather, more appropriate intellectual property regimes to stimulate investment in new technologies and in various forms of subpatentable innovation that lie within their limited technical reach. Whether the developing countries opted for a "utility model" regime or a "patents of importation" regime, as Oddi and I have, at different times, suggested, or for a general purpose innovation law built on modified liability principles that I deem more promising, they could arguably accelerate their catch-up time notwithstanding their obligations to recognize foreign patents under the TRIPS Agreement.

When criticizing other theories that fail to justify strong patent protection in developing countries, Professor Oddi also takes me to task for what he construes as a "portable fence" theory of international patent protection. In this regard, he refers to my observation in 1989 that states can no longer afford to disrespect aliens' intangible property rights for many of the

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39. See, e.g., Oddi, supra note 29; TRIPS and Developing Countries, supra note 9, at 39-40.


42. See Oddi, supra note 29, at 452-54.
same reasons that ultimately impelled public international law to require states to prevent the uncompensated confiscation of aliens' tangible property within their territorial jurisdictions. I demur, however, on the grounds that I made no assertion either that strong patent protection followed from an international obligation to respect property rights in intellectual creations or that there was only one standard of compensation even for public-purpose takings of tangible property.

On the contrary, in advocating "an even-handed approach" to international intellectual property relations, I argued that it would violate fundamental precepts of international economic law if the developed countries failed to differentiate between developing and least-developing countries (LDCs) when formulating minimum standards under the TRIPS Agreement. Although a spokesman for the U.S. Trade Representative (USTR) scoffed at this claim, the Final Act did, indeed, establish a two-tiered approach that distinguished between the obligations of developing countries, which mature five years after the TRIPS Agreement takes effect, and those of LDCs, which are postponed for a decade or more depending on the problems these countries encounter along the way.

Despite Professor Oddi's long-standing belief that patents are bad for developing countries, his assessment of the future is more optimistic than one might expect. He admits that the developing countries' present difficulties may not adequately foretell the future benefits they could derive from the domestic patent systems as their technical prowess improves. He also believes that these countries can limit even the immediate social costs of these systems by a suitable mix of doctrinal ploys drawn from existing state practices. In this respect, he and I have reached some common findings and recommendations.

Professor Fred Abbott's commentary on the articles by Oddi, and Otten and Wager echoes this realpolitik theme of moderate optimism. Abbott also participated in the Vanderbilt Symposium of 1989, in which context he defended the theme of "protecting First World assets in the Third World." Since then,

43. See GATT Connection, supra note 26, at 795-827, 864-75, 887-91.
45. See supra note 19 and accompanying text.
46. Compare Oddi, supra note 29, at 455-69, with Reichman, Pro-Competitive Strategy, supra note 41.
he has written widely on international trade and its new interface with intellectual property law, and the Section awaits his latest publications with considerable interest.49

For present purposes, Professor Abbott concedes that the TRIPS standards may be higher than is good for the developing countries as a class, but he emphasizes the quid pro quo of trade concessions, which gave these countries greater access to developed country markets, especially in the agricultural and textile sectors.50 While opinions differ about the overall value of these concessions, I would add that the growing ability of the developing countries to penetrate developed markets for manufactured goods of all kinds should not be underestimated. Even if the developing countries gave up considerably more than they received with respect to intellectual property, they may obtain considerably more than they bargained for from the lowering of tariffs and nontariff barriers generally under GATT 1994.51

If, as Professor Abbott augurs, the developing countries also produce more technology over time, owing in part to the incentives that the TRIPS Agreement will make available, then their part of the bargain may turn out very well in the end. Meanwhile, both Abbott and Oddi stress the continued importance of the doctrine of international exhaustion, which the TRIPS Agreement leaves intact, as a helpful safeguard in limiting some of the ill effects of too much protection too soon.52

II. THE INTERFACE WITH COMPETITION LAW

While opinions differ as to whether higher standards of intellectual property protection will stimulate more direct
investment in developing countries and more transfers of technology from developed countries.\textsuperscript{53} Any country's over-reliance on imported technology must sooner or later become a dead end. The real challenge for developing countries is to increase their own capacity to learn from each new infusion of imported technology and from the relevant technical knowledge that expert circles in developed countries take for granted.\textsuperscript{54}

These efforts to lessen dependence on foreign suppliers of technological goods, however, conflict with the countervailing policies of developed countries to restrict the flow of technical knowledge and to enhance the appropriability of technical yields.\textsuperscript{55} One such tendency that has received insufficient attention is for governments in the developed countries to relax their antitrust laws in favor of horizontal collaborative practices, including joint research among natural competitors and pooled licensing agreements. These and other practices, coupled with strong market power and high levels of transnational intellectual property protection, make it harder for firms in developing countries to gain access to the most valuable new technologies.\textsuperscript{56}

The developing countries will logically have to formulate appropriate legal responses to these problems. The question this poses is whether—or at what point—such responses risk undermining the interests of intellectual property rightsholders, as guaranteed by the TRIPS Agreement. A second question is whether new international minimum standards of competition law are needed to regulate this area and to maintain a proper


\textsuperscript{54} See, e.g., Soete, supra note 37, at 11-24; P. Cohendet et al., Technological Learning, Economic Networks and Innovation Appropriability, in TECHNOLOGY AND THE WEALTH OF NATIONS 66-77 (Dominique Foray & Christopher Freeman eds., 1993).

\textsuperscript{55} See, e.g., Paolo Bifani, The New Mercantilism and the International Appropriation of Technology, in TECHNOLOGY, TRADE POLICY AND THE URUGUAY ROUND, supra note 37, at 145, 160-64.

balance. The debate has become heated because some scholars who see antitrust law as a “new international trade remedy” want it to curb the protectionist thrust of higher Intellectual property standards, whereas another group of equally distinguished scholars has proposed a countervailing Draft Antitrust Code for the “World Trade and Legal System,” which would circumscribe such policies.

Against this background, Professor Eleanor Fox has contributed a brilliant article to the Symposium, which illuminates this field as a whole and seeks to avoid the pitfalls inherent in the relatively ambitious proposals already on the table. Professor Fox emphasizes that while the TRIPS Agreement permits states to regulate abuses of intellectual property rights, subject to certain duties of cooperation and consultation, it does not endorse any particular view of, or approach to, this thorny topic. “TRIPS calls for a concept of the limits of antitrust; it does not call for formulation of the core and normal scope for antitrust.”

In principle, the right of a state to adopt and enforce antitrust laws should not violate or undermine that state’s obligations under the TRIPS Agreement; but in practice, there is no consensus about where such lines are to be drawn or even about the best policy moves to promote competition. To demonstrate just how strong the disagreement really is, Professor Fox analyzes three of the hardest issues concerning alleged misuse of

57. See, e.g., Ulrich, supra note 56, at 193-210; Eleanor M. Fox, Competition Law and the Agenda for the WTO: Forging the Links of Competition and Trade. In ANTITRUST AS TRADE REMEDY, supra note 56, at 1-38.


61. Id.
patents—monopoly pricing, refusals to deal, and contracts to limit parallel imports—and concludes that European and U.S. courts would reach opposite conclusions under their respective competition laws.\footnote{62}

Although the TRIPS Agreement contains a rudimentary "positive list" of measures that states may implement to curb abuse of intellectual property rights, Professor Fox believes that "[w]riting interface rules in advance would be a daunting and probably unwise enterprise," given the lack of consensus.\footnote{63} She recommends, instead, a case-by-case or "common law" evolutionary approach, buttressed by a core group of guiding principles. Paramount among these are the notions that "existing developed systems of antitrust are presumptively legitimate, even though they may function as a limitation on intellectual property rights,"\footnote{64} and that states are free to pick and choose from among the doctrines in use under these systems when formulating their own approaches. At the same time, adversely affected states should remain free to appeal to the TRIPS mediatory and dispute-settlement mechanisms in an effort to rebut the presumption of validity.\footnote{65}

Professor Fox points out that the interest of developing countries in more competition, fairness in licensing, and market access—at the expense of strengthened intellectual property rights—was a position that the United States once shared.\footnote{66} In this connection, I have elsewhere proposed that developing countries can and should formulate their own "jurisprudence of licensing" under their domestic laws, and that they should legislatively impose a contractual rider on transfers of technology that automatically invokes principles of fairness, the preservation of competition, and due regard for the role of the scientific and educational communities in national economic development.\footnote{67}


\footnote{63} Fox, supra note 60, at 491.

\footnote{64} Id. at 491-92.

\footnote{65} Id. at 493.

\footnote{66} Id. at 490.

\footnote{67} See Pro-Competitive Strategy, supra note 41; see also J.H. Reichman, From Free Riders to Fair Followers: Global Competition Under the TRIPS Agreement (Mar. 1, 1996) (unpublished paper presented to the Conference on the Culture and Economics of Participation in an International Intellectual Property Regime, Engelberg Center on Innovation Law and Policy, NYU Law School) [hereinafter From Free Riders to Fair Followers].
Because “there is no set of rules and principles . . . that would be acceptable to all,” Professor Fox rejects the rule-making format of the Draft International Antitrust Code, even though she participated (with a quasi-dissenting voice) in its formulation. In contrast, she proposes to limit the search for universal standards to two basic norms: (1) to preserve market access and prevent anticompetitive exclusions, and (2) to prevent anticompetitive collaborations of competitors designed to raise prices (for example, “pooling and crosslicensing as a cover for a cartel”). In her view, these twin principles of market access and anticartelization should become the cornerstones of a minimalist international convention on competition law. Such a convention would allow participating states great leeway in formulating domestic statutes; it would keep the evolution of the misuse doctrine firmly within the bounds of general antitrust theory, with its focus on market power; and it would provide a forum within the WTO where patterns of systematic nonenforcement of intellectual property rights could be challenged.

III. IMPACT OF THE TRIPS AGREEMENT ON SPECIFIC DISCIPLINES

In the second part of the Symposium, we asked the participants to address the impact of the TRIPS Agreement on the three main fields of intellectual property law, viz., patents, copyrights, and trademarks. Their responses elaborate on themes heard earlier. They also raise hard questions for which the empirical data, when available at all, provide ambiguous answers; and, not surprisingly, their diverse theoretical viewpoints continue the passionate debate opened in part one.

A. Patentable Inventions

Professor Martin Adelman and his co-author, Sonia Baldia, take issue with Professor Oddi by arguing that economic analysis does justify strong international minimum standards of patent

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68. See Draft International Antitrust Code. supra note 58; Fox. supra note 60, at 498; supra note 59 and accompanying text.
69. Fox, supra note 60, at 502.
70. Id., at 503-05.
71. For discussion of trade secrets, unfair competition, integrated circuits, and industrial designs, see, e.g., Universal Minimum Standards, supra note 8, at 374-79, 381-82 (citing authorities).
protection. In their view, a universal patent system will, on the whole, benefit the world community by eliminating the free-riders’ disincentives to innovate in all market structures and by increasing the supply of needed inventions that would otherwise not have been made. Even if “those who pay monopoly prices for products that for one reason or another would have been invented in the absence of a patent system . . . [are] apparent losers[,] . . . they also benefit from products that are off-patent, but which may not have been developed in the absence of a patent system. Therefore, there may not be many losers, indeed, there may not be any.”

In the specific context of the pharmaceutical industry, for example, the dilemma for free-riders is that they leave “the cost of the development of new drugs” to the developed world “and hope that the failure to participate will not stunt so many drugs’ development that the strategy backfires.” Moreover, technological development to meet the free-riding country’s special needs, such as cures for locally endemic diseases, may not be forthcoming if these needs are not shared by countries with patent systems that encourage investment in research and development.

To support their thesis that the reduction of free-riding under the TRIPS provisions concerning patents will benefit everyone, Adelman and Baldia present India as an empirical case in point. Before the TRIPS Agreement, the Indian government had deliberately taken the pharmaceutical industry out of its patent system and built a tariff wall to protect it. The result was that “Indian manufacturers of bulk drugs and formulations not only dominate the Indian market but are among the most fiercely competitive in the world,” especially with regard to the production of generic drugs. At the same time, Indian investment in pharmaceutical research and development was extremely low, and local firms contributed nothing to the development of new drugs.

This will change under the TRIPS Agreement, however, as indicated by rising investment in research and development and


73. Id. at 510. For analogous views concerning potential long-term gains to developing countries from the reduction of free-riding in technology driven economies, see, e.g., Carlos A. Primo Braga, The Economics of Intellectual Property Rights and the GATT: A View from the South, 22 Vand. J. Transnat’l L. 243, 26-64 (1989).

74. Adelman & Baldia, supra note 72, at 510.

75. Id. at 525.
by the stipulation of joint research ventures with major foreign companies. With stronger patent norms in place, Adelman and Baldia expect India to develop "a vigorous and thriving [research-and-development] based drug sector," with particular focus on diseases of local importance, and they predict that Indian pharmaceutical companies will rival those in the developed countries within a few decades.76

The optimism of Adelman and Baldia contrasts not only with the views of Professor Oddi and the pessimists he cites77 but also with the pessimistic conclusions of F.M. Scherer, based on his recent study of the pharmaceutical industry in Italy.78 That industry, well positioned as it was, has so far failed to capitalize on the introduction of strong patent protection for pharmaceutical products in 1978.79 Professor Scherer has publicly expressed the doubt that, if the Italians cannot make it work, the prospects for developing countries appear even dimmer.80

In this context, I wonder if the empirical evidence marshalled by Adelman and Baldia does not tell a slightly different story from the one they propose. According to today's prevailing view, the bad old policies of import substitution could only hurt the developing countries, and the castor oil of free trade is what they really needed to jump start their economies.81 And yet, by a combination of weak patents, strong tariff protection, and other measures favoring infant industries, the price of drugs in India remains among the lowest in the world, while "Indian manufacturers of generic drugs and formulations not only


77. See Oddi, supra note 29.

78. See F.M. Scherer & Sandy Wetsurst, Economic Effects of Strengthening Pharmaceutical Patent Protection in Italy, 26 IIC 1009, 1023-24 (1995) (concluding that "the legitimization of drug product patents in Italy did not induce a market shift in Italian pharmaceutical manufacturers' strategic emphasis from emulating drugs developed elsewhere to developing innovative drugs"; research and development "expenditure growth . . . did not accelerate after the patent regime transition" and "the number and character of new product launches did not change significantly").

79. Id.

80. Id. at 1024 (stating that "one must remain skeptical whether significantly increased drug development efforts are likely in the nations required under the . . . [TRIPS Agreement] to offer drug product patents for the first time").

81. See, e.g., ROBERT E. HUDEC, DEVELOPING COUNTRIES IN THE GATT LEGAL SYSTEM 210-20 (1987) ("The Case Against Preferential Treatment").
dominate the Indian market but are among the most fiercely competitive in the world.\textsuperscript{82} All this was the direct result of policies that allowed these companies to "access the latest drugs all over the world, re-engineer them through new processes, and sell them in the domestic market."\textsuperscript{83} In other words, Oddi might find this a rare but demonstrably successful case of import substitution.

Perhaps the truth lies in the different time frames of analysis and in the ensuing growth of per capita GDP, which Professor Soete believes must reach a certain point before sustained technological development becomes feasible.\textsuperscript{84} In other words, a weak patent system may have stimulated the growth of India's pharmaceutical base at phase one, when per capita GDP was low, while a strong patent system may favor the future growth and maturity of that same industry. But this hypothesis would make Professor Oddi's concerns about other developing countries still in their initial phase more relevant, and it would reinforce the need for measures to limit the adverse effects of higher levels of patent protection in most developing countries, which both he and I have independently recommended.\textsuperscript{85}

In contrast, Professor Harold Wegner shows how the patent provisions of the TRIPS Agreement can boomerang even against leading developed countries, some of whose comfortable protectionist habits will have to give way before the subtle combination of national treatment and "TRIPS treatment" that has become universal law.\textsuperscript{86} Wegner retraces the rocky road to patent harmonization among the developed countries and shows the extent to which U.S. interests have recently derailed it.\textsuperscript{87} In his view, United States implementation of the TRIPS provisions has so far been halfhearted and inadequate because the patent authorities are reluctant to abandon long-standing discriminatory advantages built into the domestic law. He identifies at least two sections of the patent law and one regulation that still fail to meet the TRIPS standards, although these may be used as bargaining chips in a future harmonization exercise that Wegner hopes will

\begin{itemize}
\item \textsuperscript{82} Adelman & Baldia, \textit{supra} note 72, at 525.
\item \textsuperscript{83} \textit{Id.} at 527.
\item \textsuperscript{84} \textit{See} Soete, \textit{supra} note 37, at 11-24. \textit{See also} Bifani, \textit{supra} note 55, at 159 (stating that newly industrialized countries, especially Korea, Taiwan, China, Brazil, and Mexico "have . . . increased substantially the research and development component of their exports and imports").
\item \textsuperscript{85} \textit{See supra} note 46 and accompanying text.
\item \textsuperscript{86} Harold C. Wegner, TRIPS Boomerang—Obligations for Domestic Reform.
\item \textsuperscript{87} \textit{Id.; see generally} Harold C. Wegner, Patent Harmonization 37-42 (1993).
\end{itemize}
produce the ingenious “patent worksharing” arrangement he advocates.88

One wonders, meanwhile, whether the example set by the United States halfhearted legislative response will not prove contagious and thus weaken the resolve of other countries to fulfill both the letter and the spirit of the Agreement. At the same time, it raises the prospects that other countries may sue the United States for noncompliance, and their success would disturb the complacency that currently reigns in official circles. Let us return to this theme in the context of copyright law.

B. Copyrightable Literary and Artistic Works

Four panelists commented on the copyright provisions of the TRIPS Agreement, and they may be split into two camps that more or less parallel the divisions expressed earlier. On the one side, Eric Smith, President of the International Intellectual Property Alliance (IIPA), and Professor Hugh Hansen both championed the high-protectionist cause. On the other side, Professors Peter Jaszi and Marci Hamilton questioned the social costs to users of the copyrighted culture under universal minimum standards of protection.

Smith’s article identifies the empirical necessity of stemming the losses to publishers in developed countries from free-riding uses of copyrighted works in developing countries as a driving force behind the TRIPS negotiations, and he marshals an array of statistical evidence to back the publishers’ demand for relief.89 These losses represent lost jobs and growth for the U.S. economy, which already suffers other, more legitimate losses due to the comparative advantages of the developing countries in a growing number of manufacturing sectors.

Accordingly, Smith stresses the publishers’ need for strict compliance with the enforcement provisions of the TRIPS Agreement,80 a sentiment echoed in Otten and Wager’s outline of the initial approaches to compliance within the WTO framework.81 The publishers will also claim that, because the national treatment requirement of TRIPS is not subject to transitional

89. See id.
90. See supra note 21 and accompanying text.
delay on a par with other substantive provisions, developing
countries must immediately end discrimination against foreigners 
in the application and enforcement of their domestic copyright 
laws. 92

Looking to the future, Smith foresees that the WTO’s dispute-
settlement machinery may be engaged to resolve tensions over 
retroactive protection, bootlegged recordings, the scope of 
protection for computer programs, the scope of public 
performance and communication rights, and the continued 
legitimacy of private copying exceptions. 93 Although he evidently 
foresees that publishers would win such disputes, I do not 
altogether share his optimism.

With regard to computer programs, in particular, if the 
publishers truly wish to define the scope of protection in the 
course of a WTO dispute proceeding, I have elsewhere advised the 
developing countries to join the issue and vindicate their rights to 
reimplement functional behavior in independently generated 
code. 94 The same precedents that have limited the scope of 
software protection in the U.S. federal appellate courts would 
almost certainly cause publishers to lose again at the 
international level. 95 What remains to be seen is how the United 
States will react when “beefed-up WTO panels make decisions 
that . . . become binding internationally,” even though these 
decisions are inconsistent with the views of the Chamber of 
Commerce or of our legislative and administrative authorities. 96 
Are citizens of the United States really willing to have such 
important questions affecting domestic intellectual property law 
decided by WTO panels?

Professor Hugh Hansen provides a theoretical foundation for 
Eric Smith’s empirical arguments by extolling the very natural 
rights philosophy 97 that Professor Oddi so vigorously castigated. 98 
Hansen mocks both the “secular priesthood” of the pre-

92. See TRIPS Agreement, supra note 4, arts. 3, 65-66; Smith, supra note 
89, at 573-74.
93. Smith, supra note 89, at 576-77.
94. See Retchman, Pro-Competitive Strategy, supra note 41.
95. See Know-How Gap in TRIPS, supra note 40, at 779-84; Samuelson et 
al., supra note 38, at 2330-43, 2347-61; see also Pamela Samuelson, Computer 
Programs, User Interfaces, and Section 102(b) of the Copyright Act of 1976: A 
96. Universal Minimum Standards, supra note 8, at 398. For the view that 
gap-filling precedents by such international tribunals are desirable, see Geller, 
supra note 7, at 107-14.
97. Hugh Hansen, International Copyright: An Unorthodox Analysis, 29 
98. See supra note 30 and accompanying text.
technological academy and the "agnostics and atheists" who have sacrificed the cause of authors' rights to the generic category of "users," including "Internet (net) users, developing nations, consumers, small competitors, and creators of derivative works." While acknowledging that the "copyright crusade in large part has been driven by trade considerations" and overzealous "missionaries," he believes the uninitiated will inevitably convert to the high-protectionist cause, either voluntarily (because they see some self-interest in copyright protection) or involuntarily (because they fear unilateral trade pressures).

Professor Hansen acknowledges that U.S. ownership of most exported intellectual property "seems to upset people throughout the world." But they will simply have to get used to the remaking of international copyright law in our image, including such indispensable expedients as the protection of computer programs for 50 to 100 years or more, preferably under Whelan, but at least under Altai.

I have elsewhere expressed the view that copyright law cannot effectively protect computer programs or other forms of industrial property without serious anticompetitive results. The "high protectionist" program that many advocate today could contribute to the technological decline of the United States and the European Union vis-à-vis more competitive developing countries in the not too distant future. There is also a risk that today's high-protectionists will themselves become upset when more and more foreign intellectual property owners routinely begin to demand tribute from users and second comers in the United States under the national treatment clause of the TRIPS Agreement.

Certainly, the cause of users and second comers is uppermost in the minds of Professors Jaszi and Hamilton. For

99. Hansen, supra note 97, at 584.
100. Id. at 584-93.
102. See Samuelson et al., Manifesto, supra note 38, at 2356-64 (case of computer programs); Legal Hybrids, supra note 38, at 2486-90 (case of industrial designs). See also Jerome H. Reichman, Electronic Information Tools—The Outer Edge of World Intellectual Property Law, 24 IIC 446, 455-75 (1993) [hereinafter Electronic Information Tools].
103. See From Free Riders to Fair Followers, supra note 67.
104. See TRIPS Agreement, supra note 4, art. 3.
example, Professor Jaszi contends that new U.S. legislation implementing the TRIPS Agreement, especially the provisions that protect live musical performances and that restore foreign copyrights from the public domain, represents a radical transformation of the purposes of copyright law that undermines its constitutional foundations in the United States. In the past, U.S. legal theory typically justified copyright protection only to the extent that it stimulated progress in the arts and sciences by enriching the store of literary and artistic works that would enter the public domain and thereby become freely available to users of the copyrighted culture. But this "cultural bargain" theory has now given way to the new, trade-driven goal of copyright law, which seeks to "enhance... the wealth and overall financial well-being of companies which invest in the production and distribution of copyrighted works."

Professor Jaszi develops new constitutional arguments to limit this approach. In so doing, he queries the wisdom of the United States rapid conversion from its historically tepid support for copyright protection to the maximalist vision enshrined in the Uruguay Round Agreements Act (URAA); and he fears that our historical emphasis on the public interest has been eclipsed in the process. For Jaszi, indeed, the scholar's most pressing task is to devise new vocabularies for defending user interests and to articulate why the public domain matters, and he foresees some expansion of competition law to redress the balance.

Like Professor Jaszi, Professor Marci Hamilton believes that the traditional balance between private and public interests in the domestic copyright laws has been skewed too far toward single-minded protectionist goals under the TRIPS Agreement. Like

105. See URAA, supra note 4, §§ 512, 514 (codified as 17 U.S.C. §§ 1101, 104A (1994)).
110. See Jaszi, supra note 106, at 599-601; supra notes 4 & 105.
Oddi, Hamilton sees the universalization of these minimum standards as a form of cultural imperialism. However, she does not think it all bad that undemocratic states are forced to come to terms with the human rights dimension that historically underlies the cultural policy of mature copyright systems.113

Professor Hamilton's main concern is that the TRIPS Agreement, which arrives at a turning point in the history of communications, ignores new information technologies and thereby stacks the deck too much in favor of private rather than public interests. Although she continues to believe that authors' rights are more important than ever to sustain the quality of cultural contributions to an on-line universe of discourse, she advocates the need to reformulate the public interest in a "free-use zone" and to implement that zone within the global information infrastructure. This would recreate cyberspace parallels to the fair use and personal use exceptions in the print dimension. Otherwise, "the limited monopoly currently afforded copyright owners has the potential to become an 'absolute monopoly over the distribution of and access to copyrighted information,' once such information is routinely transmitted on-line."114

Like Professor Hamilton, I, too, believe that the principle weakness of the TRIPS Agreement is its backward-looking character, which "stems from the drafters' technical inability and political reluctance to address the problems facing innovators and investors at work on important new technologies in an Age of Information."115 I also share her concerns about the newfound ability of on-line publishers to charge what the market will bear for each and every use (owing to the enhanced contractual power that on-line distribution confers),116 a power that will be magnified by the European Communities new Directive on databases.117 Against this background, Professor Hamilton's call

114. Hamilton, supra note 112, at 628-29 (quoting ASS'N OF RESEARCH LIBRARIES, INTELLECTUAL PROPERTY: AN ASSOCIATION OF RESEARCH LIBRARIES STATEMENT OF PRINCIPLES 1 (May 1994)).
116. See Reichman, Electronic Information Tools, supra note 102, at 465-68 ("Public Interest at Odds with the Two-Party Deal"); see also GOLSTEIN, supra note 107, at 224, 230 (stressing importance of exemptions for research and educational uses in on-line universe).
for a renewal of the copyright balance, and for new instruments of transnational collection to implement it, merits careful attention.

C. Trademarks and Geographical Indications of Origin

It is not widely known that, for all its weaknesses with respect to patents, the Paris Convention already contained a relatively well-developed set of international minimum standards pertaining to trademarks. 118 Perhaps this is why Professor Paul Heald wryly observes that writers on the TRIPS Agreement act as though its upgraded trademark provisions lack "sex appeal" when compared to the patent and copyright provisions. 119 This relative lack of controversy shifts the main focus of attention to enforcement measures, especially the mandatory border controls. As to the developing countries, Heald emphasizes that trademark protection "prevents marketplace confusion that is detrimental to the interests of consumers in every nation" and "increases consumer wealth by improving consumer information." 120

More controversial are the provisions concerning geographical indications in general and the special provisions for wines and spirits. 121 These measures reflect some of the tradeoffs that U.S. interests had to make in order to secure European support in other areas, and they open a path that, sooner or later, may lead either to the dispute-resolution table or to the negotiating table, if not both.

Professor Heald criticizes the tepid adjustment that U.S. law has so far made to the technical requirements of the relevant TRIPS standards, which could set a bad example for other countries. 122 He also criticizes the failure of the negotiators to deal with the problem of exhaustion, and he presents a well-reasoned defense of the right to import genuine "gray-market" goods. (In this regard, the wide differences of opinion among all the panelists on the general question of exhaustion should not pass unremarked.) Professor Heald also faults the drafter for omitting to require the actual use of registered marks.

On the whole, however, he finds the TRIPS provisions on marks and geographical appellations "a significant improvement over prior ineffectual regimes." The net result should be a

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118. Paris Convention, supra note 11, arts. 6-10ter.
119. Heald, supra note 23, at 637.
120. Id. at 655.
121. See id. at 651-52 (citing authorities).
122. Id. at 650-55.
transnational system that looks more and more like that with which U.S. businesses are already familiar.\textsuperscript{123}

IV. THE FUTURE OF THE TRIPS AGREEMENT

When all the panelists had finished their spirited presentations to our annual meeting, I began to wonder what impressions the first presenters—Adrian Otten and Hannu Wager\textsuperscript{124}—would draw from this event in the privacy of their WTO offices. Until now, I suspect, they had heard mostly the chorus of voices emanating from the USTR, the USPTO, and the various U.S. lobbying groups, all cheering together for ever higher levels of intellectual property protection. Here, instead, was a group of eminent U.S. scholars worried about competition, the public interest, users' rights, and other concerns normally attributed to developing countries (who, it is sometimes said, do not really know their own interests).

I asked myself what this debate, and the serious theoretical conflicts it revealed among U.S. intellectual property scholars, portends for future efforts to achieve universal compliance with the TRIPS Agreement. Is it all just sound and fury, some sterile theological controversy out of touch with political and economic realities, as some suggest? I think not. On the contrary, the tensions generated by the TRIPS Agreement portend a major realignment of interests that will cross national boundaries and will ultimately shift the balance between incentives to create and free competition to the global marketplace and away from the territorial legal and economic jurisdictions.\textsuperscript{125}

In the past, the United States and the European Community preached the virtues of competitive markets to developing countries that were mired in command economies. The collapse of these command economies means that the developing countries will now take the developed countries at their word and demand to compete in the world market. The real question is not whether these countries can compete, even in markets for technological and information goods, but whether the developed countries still have the stomach for stiff global competition once it becomes a legal and economic reality. Contrary to what they preach, the

\textsuperscript{123} Id. at 660.
\textsuperscript{124} See Otten & Wager, supra note 16.
\textsuperscript{125} Cf. TRIPS Agreement, supra note 4, art. 7 (The object of the Agreement is to "contribute to the promotion of technological innovation . . . [,] to the mutual advantage of producers and users of technological knowledge . . . [,] and to a balance of rights and obligations.").
developed countries have embarked on such a sustained protectionist path with respect to technological goods that it may well compromise their future standing in the emerging—and very competitive—global market place.\textsuperscript{126}

For the foreseeable future, in other words, "the logical task of the developing countries is to shoulder the pro-competitive mantle abandoned elsewhere when implementing obligations under the TRIPS Agreement in their domestic laws."\textsuperscript{127} To the extent that these countries systematically adhere to lower levels of protection than their more developed counterparts, their firms may become ever more competitive with respect to those in the developed countries.

If the developing countries do become bastions of free competition, they will increasingly represent the interests of consumers, users, second comers (and, more generally, of small- and medium-sized entrepreneurs) in developed countries as well. Over time, in other words, a small pharmaceutical company in India may have more in common with its small U.S. counterparts than with the big Indian pharmaceutical companies discussed in Adelman and Baldia's article.\textsuperscript{128} This transnational commonality of interests should, in turn, stabilize the TRIPS dispute resolution process. It will make it harder for a coterie of oligopolists to capture their respective trade representatives,\textsuperscript{129} and fewer countries will be able to speak with a single voice as a result.

Until this new equilibrium of public-private interests emerges on a global scale, however, there will be tensions and sometimes even turmoil within the organizations charged with securing compliance with the TRIPS Agreement and with the other components of the Uruguay Round. If the institutions hold and the WTO survives a period of uncertainty, this new balancing of interests at the international level should gradually reveal who the real winners and losers under TRIPS will be or if, indeed, there have to be any losers at all, as Adelman and Baldia augur.\textsuperscript{130}

I predict that those countries that maintain a competitive posture, that aggressively seek to master technical knowledge, and that continue to rationalize their national innovation systems will do well over time. By the same token, those countries that

\textsuperscript{126} See supra notes 55-56 and accompanying text: From Free Riders to Fair Followers, supra note 67.

\textsuperscript{127} Pro-Competitive Strategy, supra note 41.

\textsuperscript{128} See Adelman & Baldia, supra note 72.

\textsuperscript{129} See, e.g., Petersmann, supra note 59 (noting tendency of trade representatives to respond primarily to narrow lobbying groups).

\textsuperscript{130} See Adelman & Baldia, supra note 72, at 510.
seek to preserve short-term, highly vulnerable technological advantages behind anticompetitive, high-protectionist barriers of one kind or another risk losing out in the end.

With this meditation, I commend the panelists to the wider audience that publication of this Symposium makes possible. And I thank them warmly for their spirited contributions and provocative insights, which should illuminate the process of securing compliance with the TRIPS Agreement for years to come.