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Intellectual Property in International Trade: Opportunities and Risks of a GATT Connection

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Intellectual Property in International Trade: Opportunities and Risks of a GATT Connection

J. H. Reichman*

ABSTRACT

Professor Reichman uncovers a paradox at the heart of the debate about bringing international intellectual property relations within a GATT Code of Conduct. On the one hand, the industrialized countries that subscribe to free-market principles at home want to impose a highly regulated market for intellectual goods on the rest of the world, one in which authors and inventors may "reap where they have sown." On the other hand, the developing countries that restrict free competition at home envision a totally unregulated world market for intellectual goods, one in which "competition is the lifeblood of commerce." To unravel this paradox, he identifies a set of postulates for negotiators on both sides. Included in this list is the lack of an international norm against misappropriation; a long-term need to assimilate intangible alien property to the international law of state responsibility; the duty to respect sovereign rights of both rich and poor states to control their own economic desti-

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nies; and the emergence of preferential treatment for developing countries as a principle of international economic law.

Armed with these postulates, Professor Reichman derives a set of analytical propositions to guide a TRIPs negotiation conducted in the spirit of cooperation and good faith. A crucial move in this analysis is to distinguish between defensive proposals to institute transnational legal barriers to imports of nonqualifying intellectual goods and offensive proposals to establish universal standards of protection that could limit the development strategies even of states that do not export intellectual goods to major markets. As regards proposals for a defensive alliance bolstered by common border control measures and by the dispute settlement machinery of the GATT, Professor Reichman offers a new interpretation of Article XX(d) that minimizes conflict with the basic GATT disciplines. However, Contracting Parties that participate in a defensive alliance must strictly respect their obligations to provide national treatment under the Paris, Berne, and Geneva (U.C.C.) Conventions, and they may find the transaction costs of implementing the scheme too high in the end.

As regards offensive proposals that pit universal standards of protection against national development strategies, Professor Reichman finds that basic GATT rules cannot be overcome unless preferential measures favoring the developing counties are combined with trade concessions offsetting the costs of economic dislocation. Given such an approach, Professor Reichman suggests that Contracting Parties that already adhere to intellectual property conventions can be persuaded to provide adequate, not maximum, levels of protection for the traditional subject matters of those Conventions, and they should renounce systematic misappropriation of applied scientific know-how. Contracting Parties that do not adhere to one or more intellectual property conventions pose a harder case, but Professor Reichman argues that these states cannot expect indefinitely to exploit the most valuable alien property of all without paying compensation in one form or another.

Professor Reichman fears, however, that maximalist illusions will cause the Uruguay Round to produce fewer positive results than could have been attained in a spirit of moderation and compromise. He warns that continued insistence on universalist theses unacceptable to the developing countries risks provoking these countries to form a "Union" of their own in order to curtail rights that the industrialized countries currently enjoy under existing intellectual property conventions. He points out that the real losers in such a confrontation would be those authors, inventors and trademark proprietors whose livelihood depends on the day-to-day operations of the international system that the Paris and Berne Conventions set in place over a century ago.

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I. Introduction: Contrasting Theses of the Major Protagonists

A worldwide coalition of intellectual property owners¹ has successfully lobbied for the inclusion of intellectual property rights on the agenda for the Uruguay Round of Multilateral Trade Negotiations (MTN) being conducted within the framework of the General Agreement on Tariffs and Trade.² This group underscores the losses that industrialized coun-

2. See General Agreement on Tariffs and Trade, opened for signature Oct. 30, 1947, 61 Stat. A3, T.I.A.S. No. 1700, 55 U.N.T.S. 187 [hereinafter GATT], reprinted in 4 GENERAL AGREEMENT OF TARIFFS AND TRADE, BASIC INSTRUMENTS AND SELECTED DOCUMENTS [GATT, BISD] (1969); Ministerial Declaration of Punta del Este of September 20, 1986, GATT Doc., MIN. DEC. No. 86-1572 (Sept. 20, 1986), reprinted in Law and Practice Under the GATT, III. A.3, at 25 (K. Simmonds & B. Hill eds. 1989). See generally Bradley, Intellectual Property Rights, Investment, and Trade in Services in the Uruguay Round: Laying the Foundations, 23 STAN. J. INT'L L. 57, 59 (1987). The Uruguay Round of Multilateral Trade Negotiations (MTN) was launched at a special ministerial session of the Contracting Parties to the General Agreement on Tariffs and Trade, held at Punta del Este, Uruguay, on September 20, 1986. The ministerial declaration refers to "Trade-related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods," Bradley, supra, at 58, and sets down the following mandate for negotiation:

In order to reduce the distortions and impediments to international trade, and taking into account the need to promote effective and adequate protection of intellectual property rights, and to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade, the negotiations shall aim to clarify GATT provisions and elaborate as appropriate new rules and disciplines.

Negotiations shall aim to develop a multilateral framework of principles, rules and disciplines dealing with international trade in counterfeit goods, taking into account work already undertaken in the GATT.

Bradley, supra, at 57-61.

^{1.} See, e.g., Intellectual Property Committee [IPC], Keidanren, UNICE, Basic Framework of GATT Provisions on Intellectual Property: Statement of Views of the European, Japanese and United States Business Communities (1988) [hereinafter Basic Framework]. UNICE is the Union of Industrial and Employers' Confederations of Europe, which represents 33 member federations from 22 European countries. Keidanren is the Japan Federation of Economic Organizations, which represents "virtually all branches of economic activities in Japan" and "maintains close contact with both public and private sectors." Id. at 4. IPC is a coalition of thirteen major United States corporations "dedicated to the negotiation of a comprehensive agreement on intellectual property in the current GATT round of multilateral trade negotiations." IPC members include Bristol-Meyers, E.I. DuPont, FMC Corp., General Electric, General Motors, Hewlett-Packard, IBM, Johnson & Johnson, Merck, Monsanto, Pfizer, Rockwell International, and Warner Communications. Id. at 5. For the role of other business organizations, see Turnbull, Intellectual Property and GATT: TRIPs at the Midterm, 1 J. Proprietary Rights 9, 11 (1989).

tries suffer from the wholesale appropriation of intellectual property in countries that do not adequately protect foreign authors, inventors, and trademark proprietors,³ and it stresses the need to eliminate the distortions to international trade said to result from these practices.⁴ In order

^{3.} See, e.g., Basic Framework, supra note 1, at 12-13 (citing United States International Trade Commission estimates of worldwide losses to 193 firms "due to inadequate intellectual property protection in 1986 at \$23.8 billion; . . . losses to all of U.S. industry [for the same year] ranged from \$43 billion to \$61 billion"). A proliferation of regional arrangements in the field of intellectual property rights thus appears not to have slowed the unprecedented growth of unauthorized and unregulated use, on an international scale, of the very intellectual property rights that are increasingly recognized at the regional level. See, e.g., Y. Plasseraud & F. Savignon, L'ÉTAT ET L'Invention: HISTOIRE DES BREVETS 91-94, 137-38, 142-43 (1986) [hereinafter Plasseraud & SAVIGNON (1986)] (noting rise of regional organizations dealing with patents); H. STAL-SON, INTELLECTUAL PROPERTY RIGHTS AND U.S. COMPETITIVENESS IN TRADE 28 (1987) (discussing the Buenos Aires Convention on Literary and Artistic Copyright of 1910). Transnational commercial activities based on unauthorized reproduction or use affect every form of intellectual property, whether artistic or industrial in nature, whether pertaining to traditional subject-matter categories or to new technological products that fit imperfectly within the established legislative frameworks. See generally H. STALSON, supra, at v-vi, 1, 41-44, 64-69; BASIC FRAMEWORK, supra note 1, at 12-13. That some or all of these products are copied on domestic markets without permission of the rights holders and without payment of royalties is hardly a new phenomenon. What seems both new and alarming to rights holders is the scale on which local copying occurs today in single countries; the total number of states in which significant unauthorized use now occurs; and the extent to which unauthorized products manufactured in one locality now enter the stream of international commerce, where they compete on export markets with higher priced originals that appear the same in form and function. See, e.g., BASIC Framework, supra note 1, at 12-13; International Intellectual Property Alli-ANCE [IIPA], PIRACY OF U.S. COPYRIGHTED WORKS IN TEN SELECTED COUN-TRIES-A REPORT BY THE INTERNATIONAL INTELLECTUAL PROPERTY ALLIANCE TO THE UNITED STATES TRADE REPRESENTATIVE [USTR] (Aug. 1985); R. Oman, Register of Copyrights, Copyright Piracy in the Western Pacific Rim: Update '86, (paper presented to the International Anticounterfeiting Coalition, San Diego, California, May 29, 1986) [hereinafter Statement of Oman], reprinted in Intellectual Property and Trade—1987, Oversight Hearings before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the Comm. on the Judiciary, 100th Cong., 1st Sess. 164, 168, 171 (1987) [hereinafter 1987 Oversight Hearings]. The harm inflicted on intellectual property owners in any given country is thus magnified by imports of unauthorized competing products from abroad, which are usually stigmatized as "counterfeit and pirated" goods. See, e.g., Piatti, Measures to Combat International Piracy, 11 Eur. In-TELL. PROP. REV. [E.I.P.R.] 239 (1989); Levin, What Is the Meaning of Counterfeiting?, 18 Int'l Rev. Indus. Prop. & Copyright L. [IIC] 435 (1987).

^{4.} See, e.g., BASIC FRAMEWORK, supra note 1, at 8; Status of Intellectual Property Protection, Hearing Before the Subcomm. on Int'l Economic Policy and Trade of the Comm. on Foreign Aff., 99th Cong., 2d Sess., app. 4, at 84 (1986) (statement of Kenneth W. Dam representing IPC) [hereinafter Statement of Dam]. But see, e.g., Meesen, Intel-

to induce governments to take remedial action, however, the private and public entities pressing this cause tend to adopt a polemical stance imbued with one-sided appeals to natural justice and national self-interest.⁵ The initial success of this aggressive campaign⁶ has fostered a climate that is not conducive to disinterested, scientific investigation of the underlying issues.⁷ The purpose of this Symposium was therefore to elicit a collection of papers that would present a more balanced view of the subject as a whole while stimulating a constructive dialogue between specialists in two fields that have not heretofore found it necessary to speak

lectual Property Rights in International Trade, 21 J. WORLD TRADE L. 67 (1987). According to Professor Meesen, it is not clear that the aggregate incentives for technological development are too low, nor is it given that quantitative expansion of trade necessarily suffers from uneven protection. Id. at 67. What seems clear is that "benefits will in part accrue to others than those that have made the investment," which presents the problem of "a distortion of fair trade." Id. Compare Administration's Statement on Protection of U.S. Intellectual Property Rights Abroad, Draft Bill Entitled "Intellectual Property Rights Improvement Act of 1986," and Section-by-Section Analysis of Draft Bill, Released by Office of the U.S. Trade Representative, April 7, 1986, reprinted in 31 Pat. Trademark & Copyright J. (BNA) 506 (Apr. 10, 1986) [hereinafter Administration's 1986 Statement] ("Technological progress is a critical aspect of U.S. competitiveness as well as freer and fairer global trade.").

- 5. See, e.g., Administration's 1986 Statement, supra note 4, at 506; United States Proposal for Negotiations on Trade-Related Aspects of Intellectual Property Rights, GATT. Doc. MTN.GNG/NG11/W/14 (Oct. 20, 1987), reprinted in 34 Pat. Trademark & Copyright J. (BNA) 667 (Oct. 29, 1987) [hereinafter 1987 U.S. Proposal]; United States Proposal for Negotiations on Trade-Related Aspects of Intellectual Property Rights, reprinted in 35 Pat. Trademark & Copyright J. (BNA) 357 (Mar. 3, 1988) [hereinafter 1988 U.S. Proposal]; Suggestion by the United States for Achieving the Negotiating Objective, GATT Doc. MTN.GNG/NG11/W/14 Rev. 1 (Oct. 17, 1988) [hereinafter Revised 1988 U.S. Proposal], reprinted in GATT or WIPO?: New Ways In the International Protection of Intellectual Property 187 (F.-K. Beier & G. Schricker eds. 1989) [hereinafter GATT or WIPO]; see also supra note 4. For recognition of how effective private interests in the United States have been in "mov[ing] the government and, indeed, . . . [the] governments of the world, forward . . ." on these issues, see Remarks of Professor John H. Jackson, 22 Vand. J. Transnt'l L. 343-44 (1989) [hereinafter Remarks of Jackson] (Symposium Part I).
- 6. See, e.g., Turnbull, supra note 1, at 9-12; Remarks of Mr. Emery Simon, 22 VAND. J. TRANSNAT'L L. 367-71 (1989) [hereinafter Remarks of Simon] (Symposium Part I) (Mr. Simon is Director for Intellectual Property, Office of USTR.).
- 7. A more scientific literature has nonetheless begun to emerge. See, e.g., GATT or WIPO, supra note 5; Intellectual Property Rights—Global Consensus, Global Conflict? (R.M. Gadbaw & T. Richards eds. 1988) [hereinafter Global Consensus]; R. Benko, Protecting Intellectual Property Rights: Issues and Controversies (1987); Primo Braga, The Economics of Intellectual Property Rights and the GATT: A View from the South, 22 Vand. J. Transnat'l L. 243 (1989) (Symposium Part I).

a common language.

Complaint of the Industralized Countries

The contrasting theses concerning the use of international trade law to strengthen intellectual property rights are easily summarized at the extremes. At one extreme, studies suggest that the prospects for the industrialized countries to retain a major share of the global market in the 21st century depend not only on their ability to stimulate technological innovation, but also on efforts to ensure an orderly diffusion of that technology through appropriate international legal machinery.8 This follows from an increasingly integrated world market in which import substitution and cheap, nontraditional exports from developing countries will cause the industrialized countries to lose ground on sectors they traditionally dominated.9 As the developing countries profit from improved manufacturing skills and from trade concessions devised to stimulate their exports, 10 the ability of the industrialized countries to maintain healthy trade balances will increasingly depend on exports of intellectual goods, in the production of which the industrialized countries retain significant comparative advantages. 11

Trade in intellectual goods is hampered, however, by the limited capacity of the world's intellectual property system to protect the proprietary rights of creators, inventors, and trademark owners in non-OECD markets.12 The deficiencies in this system, real or perceived, reduce the

^{8.} See, e.g., H. STALSON, supra note 3, at 41-44; R. BENKO, supra note 7, at 36-44 (discussing the difficulty of controlling information); Gadbaw & Richards, Introduction, in GLOBAL CONSENSUS, supra note 7, at 1-18; Gadbaw, Intellectual Property and International Trade: Merger or Marriage of Convenience, 22 VAND. J. TRANSNAT'L L. 223, 232, 232 n.30 (1989) [hereinafter Gadbaw, Merger or Marriage] (noting that, by 1986, over 27% of United States exports contained an intellectual property component) (Symposium Part I).

^{9.} See, e.g., R. Hudec, Developing Countries in the GATT Legal System 40-46 (1987) [hereinafter R. Hudec, Developing Countries] (emphasizing new focus on exports); R. Benko, supra note 7, at 27-30 (dimensions of the North-South conflict).

^{10.} See, e.g., Gadbaw & Richards, supra note 8, at 2-8. For efforts to improve market access for goods from the developing countries, see generally R. HUDEC, DEVELOP-ING COUNTRIES, supra note 9, at 40-67. For the challenge to industrialized countries from increasing Third-World competition, see generally HARD BARGAINING AHEAD: U.S. TRADE POLICY AND DEVELOPING COUNTRIES 1-20 (E. Preeg ed. 1985). See also United Nations Conference on Trade and Development [UNCTAD], Multilateral Trade Negotiations: Evaluation and Further Recommendations Arising Therefrom, at 12-13, U.N. Doc. TD/227 (1979).

^{11.} See, e.g., Gadbaw & Richards, supra note 8, at 3-6.

^{12.} See, e.g., Basic Framework, supra note 1, at 15; Statement of Dam, supra

share of intellectual goods that industrialized countries legitimately sell in developing country markets to a level far below that of the total quantum of intellectual goods originating from industralized countries that are actually absorbed by the developing countries in one form or another.¹³ These systemic deficiencies also render the OECD markets and those of third countries vulnerable to exports of nontraditional products related to intellectual property that are, in effect, subsidized by the uncompensated efforts of authors, inventors, and trademark proprietors in the OECD countries.¹⁴

An international market for "counterfeit and pirated" goods has emerged from these activities, which operates parallel to and in competition with the legitimate market for products distributed in conformity with national and international intellectual property laws. ¹⁵ While these unauthorized activities occur everywhere, and to a surprising degree in the very industrialized countries that claim to have suffered the most economic harm from them, ¹⁶ the non-OECD countries, especially Third World countries, have become the principle beneficiaries of this parallel

note 4, at 84. The Organization for Economic Cooperation and Development (OECD) is the economic arm of the NATO alliance. Its membership consists of the leading industrialized countries, including Japan, Australia, and New Zealand.

^{13.} See supra note 3 and accompanying text; for the factors favoring increased absorption of unauthorized intellectual goods in recent years, see Gadbaw & Richards, supra note 8, at 3-5; Gadbaw, Merger or Marriage, supra note 8, at 227-28.

^{14.} See, e.g., Statement of Dam, supra note 4, at 88; Piatti, supra note 3, at 239-43.

^{15.} See, e.g., Statement of Oman, supra note 3, at 168, 171 (stating that "Singaporean counterfeits show up routinely . . . in Southeast Asia, . . . the Middle East, Africa, . . . Latin America . . . [e]ven Europe," and noting the case of Korea, where legitimate publishers are in a difficult position and the "pirate industry now has tremendous clout with the government"); Piatti, supra note 3, at 239, 240-41. Madame Piatti states that "whole countries, and not just individuals, [now] . . . benefit[] . . . from counterfeiting activities, while whole national economies are being damaged by the counterfeiters." Id. at 239.

^{16. &}quot;Although the debate over adherence to reasonable norms of protection usually pits the developing world against the industrial countries, the latter have not only had a colorful past of illegal activities but also continue to tolerate piracy." H. STALSON, supra note 3, at 28. Stalson reports that the United Kingdom was a major producer of counterfeit goods and that the United States accounted for as much as 20% of the world market for imitation goods. Id. Of considerable interest is the report that counterfeiting in the United States affects some of the high-tech industries, such as computers (having foreign parts), electronic components, and aircraft parts, for which the lack of protection abroad has become a major issue. Id. at 28-29. Other OECD states in which significant "counterfeiting" occurs include Japan, Italy, Canada, Spain, and France. Id. at 29. The OECD states were also major offenders in regard to cultural products that affect publishing, motion pictures, television, and prerecorded entertainment. Id. at 29.

market.¹⁷ Arguably, operations on the parallel market exact a form of private foreign aid from investors in the OECD countries who defray the underlying costs of innovation.¹⁸

Although the OECD countries characterize this problem as a distortion of international trade, they cannot stem their losses by recourse to the standard GATT rules that govern the world's multilateral trading system. This follows because the Contracting Parties to the original Agreement decided to place intellectual property rights on the list of subjects that article XX(d) excepted from the GATT's overall legal regime. While the precise meaning of article XX remains ambiguous to the present day, this decision effectively relegated intellectual property to the Great Conventions that have governed international relations in this field since the 1890s, namely: the Paris Convention for the Protection of Industrial Property, the Berne Convention for the Protection of Literary and Artistic Works, and, of more recent vintage, the Universal Copyright Convention. The ability of Third World producers to free ride on intellectual goods originating in the industrialized countries thus

^{17.} See, e.g., Gadbaw & Richards, supra note 8, at 2-3; Statement of Oman, supra note 3, passim.

^{18.} See, e.g., Gadbaw & Richards, supra note 8, at 2-3 & n.3 (noting that "international price levels" for pharmaceutical products in Latin American states are often calculated in terms of copied products that disregard foreign patent rights).

^{19.} See GATT, supra note 2, art. XX(d) quoted in text accompanying note 358, infra; J.H. JACKSON, WORLD TRADE AND THE LAW OF GATT 511-12, 741-45 (1969). "Although the ITO [International Trade Organization] Draft Charter had an entire chapter devoted to restrictive business practices that included provisions relating to rights under patents, trademarks, and copyrights, the General Agreement on Tariffs and Trade does not include such a chapter and in general was intended to apply only to goods." Id. at 511. See also infra text accompanying notes 359-94.

^{20.} See, e.g., J.H. JACKSON, supra note 19, at 743; infra text accompanying notes 359-84. "Articles XX and XXI... contain a series of exceptions that may be the most troublesome and most subject to abuse of all GATT exceptions." J.H. JACKSON, supra note 19, at 741.

^{21.} Paris Convention for the Protection of Industrial Property, done Mar. 20, 1883, as last revised, July 14, 1967, 21 U.S.T. 1583, T.I.A.S. No. 6923, 828 U.N.T.S. 305 [hereinafter Paris Convention].

^{22.} Berne Convention for the Protection of Literary and Artistic Works, Sept. 1886, as revised at Paris, July 24, 1971, _____ U.S.T. ____, T.I.A.S. No. ____, 3 WIPO & UNESCO, COPYRIGHT LAWS AND TREATIES OF THE WORLD [CLTW], Berne Conv. (Item H) (1987) [hereinafter Berne Convention]; see also Berne Implementation Act of 1988; Pub. L. 100-568, 102 Stat. 2853 (1988).

^{23.} Universal Copyright Convention, done Sept. 6, 1952, 6 U.S.T. 2731, T.I.A.S. No. 3324, 216 U.N.T.S. 132, as last revised July 24, 1971, 25 U.S.T. 1341, T.I.A.S. No. 7868 [hereinafter U.C.C.].

arises in part from the lacunae in, and limits of, the Great Conventions²⁴ and from the fact that these matters are not susceptible of direct recourse to the GATT's own machinery for settling disputes.²⁵

The OECD countries contend, nevertheless, that the cumulative impact of these free-riding practices destabilizes the international trading system and alters the terms of trade existing at the time the General Agreement on Tariffs and Trade was originally conceived. Since that time, the role of intellectual property in stimulating economic growth has become of supreme importance to advanced industrialized countries, while the vulnerability of innovative products to new technologies of reproduction has made them easy targets in countries that do not recognize or strictly enforce the relevant legal disciplines as applied to foreign proprietary rights. The resulting losses add to the trade imbalances of the industrialized countries and foster growing resistance to trade concessions, especially those tending to increase market access for the offending countries. These losses have also elicited a coordinated attack on "counterfeiting and piracy" at both the national and international levels, with increasing resort to unilateral and bilateral measures.

Private and public entities in the industrialized countries have accordingly promulgated a succession of bulletins and ultimatums depicting an

^{24.} See, e.g., BASIC FRAMEWORK, supra note 1, at 15; infra text accompanying notes 85-129.

^{25.} See, e.g., K.W. DAM, THE GATT: LAW AND INTERNATIONAL ECONOMIC ORGANIZATION 351-75 (1970) (dispute settlement); J.H. JACKSON, *supra* note 19, at 163-89.

^{26.} See, e.g., Gadbaw, Merger or Marriage, supra note 8, at 232 (stating that less than 10% of United States exports were tied to intellectual property when the GATT was negotiated, while these industries are now among the fastest growing sectors of the United States economy).

^{27.} See, e.g., R. Benko, supra note 7, at 35-45; Reichman, Computer Programs as Applied Scientific Know-How: Implications of Copyright Protection for Commercialized University Research, 42 VAND. L. Rev. 639, 656-62 (1989) (incremental innovation bearing know-how on its face) [hereinafter Reichman, Programs as Know-How]; see also infra text accompanying notes 195-201, 604-21.

^{28.} See, e.g., Gadbaw & Richards, supra note 8, at 3-5.

^{29.} See, e.g., Statement of Alice Zalik, Former Asst. General Counsel, U.S. Trade Representative [hereinafter Statement of Zalik], in 1987 Oversight Hearings, supra note 3, at 45, 61 (stating that countries harming United States trade have little to complain about if the United States withdraws some economic benefits until the harm ceases).

^{30.} See, e.g., Basic Framework, supra note 1, at 16. For a review of unilateral and bilateral initiatives undertaken by the United States, see Gadbaw & Richards, supra note 8, at 5-8. For an authoritative opinion that reliance on such measures will continue if multilateral negotiations fail to alleviate the problem, see Remarks of Simon, supra note 6, at 367.

ideal universe of international intellectual property relations in which high standards of protection would receive universal application and respect.³¹ To achieve this goal, a set of international minimum standards for the protection of inventions, trademarks, literary and artistic works, and related forms of intellectual creation has been proposed, with a view to defining the level of "adequate and effective protection" expected, initially, of all Contracting Parties willing to participate in a GATT Code of Conduct regulating trade in intellectual goods.³² The proposed standards would either reflect levels of protection already available under existing international conventions, as in the case of the Berne Convention, ³³ or levels of protection broadly available in the industrialized coun-

A major US objective, being pursued bilaterally as well as multilaterally, is greater protection of intellectual property owned by US nationals, i.e. application of the same standards in foreign jurisdictions as are applied in the United States. This United States goal, therefore, is not national treatment, but harmonization with US laws and practice, i.e. reciprocity.

Hart, The Mercantilist's Lament: National Treatment and Modern Trade Negotiations, 21 J. World Trade L. 37, 59 (1987). This in turn forms part of a larger drive towards reciprocity in trade relations generally that has preoccupied the United States in the 1980s. See, e.g., Meesen, supra note 4, at 69-70; Hay & Sulzenko, U.S. Trade Policy and "Reciprocity," 16 J. World Trade L. 471 (1982). This approach remains controversial. For example, Leonard Weiss summarized his views on United States emphasis on reciprocity as follows: "Unilateral judgments as to fairness and reciprocity, and unilateral actions to correct alleged lack of reciprocity, are inconsistent with the maintenance of an orderly and productive system of international trade and other economic conditions." L. Weiss, Reciprocity, in Managing Trade Relations in the 1980's 165 (S. Rubin & T. Graham eds. 1983) [hereinafter Managing Trade Relations]; see also Gadbaw, Reciprocity and Its Implications for U.S. Trade Policy, 14 Law & Pol'y Int'l Bus. 691 (1982); Simon, U.S. Trade Policy and Intellectual Property Rights, 50 Albany L.R. 501 (1986).

^{31.} See supra notes 1, 4-5; Guidelines Proposed by the European Community for the Negotiations on Trade-Related Aspects of Intellectual Property Rights, GATT Doc. MTN.GNG/NG11/W16 (Nov. 20, 1987), reprinted in GATT or WIPO, supra note 5, at 203 [hereinafter 1987 EC Guidelines].

^{32.} See, e.g., 1988 U.S. Proposal, supra note 5; Revised 1988 U.S. Proposal, supra note 5; Guidelines and Objectives Proposed by the European Community for the Negotiations on Trade Related Aspects of Substantive Standards of Intellectual Property Rights, GATT Doc. MTN. GNG/NG11/W/26 (July 7, 1988) [hereinafter 1988 EC Proposal], reprinted in GATT on WIPO, supra note 8, at 321 (1989); BASIC FRAMEWORK, supra note 1, at 8; see also Note, Intellectual Property Rights and the GATT: United States Goals in the Uruguay Round, 21 VAND. J. TRANSNAT'L L. 367, 391-97 (1988). Although these proposals formally deny that uniform or harmonized intellectual property laws are the desired goal, see, e.g., BASIC FRAMEWORK, supra note 1, at 8, there is little doubt that United States initiatives in this area are part of a larger drive for reciprocity undertaken in the 1980s:

^{33.} See supra note 22; infra text accompanying notes 449-51.

tries but not necessarily codified in the Paris Convention, to which nearly one hundred countries belong.³⁴ The future Code of Conduct would also require internal legal and administrative machinery, includ-

34. See supra notes 1, 4, 21; infra text accompanying notes 456-62. The ability to combine the principle of national treatment with the gradual elevation of minimum standards through periodic revision conferences has made the International Unions and the Great Conventions from which they arose into something of a paradigm for the progressive development of all international law. See, e.g., Bogsch, The First Hundred Years of the Paris Convention for the Protection of Industrial Property, 1983 INDUS. PROP. 191-244; Bogsch, The First Hundred Years of the Berne Convention for the Protection of Literary and Artistic Works, 22 COPYRIGHT 291 (1986). Since the mid-1960s, however, this process of orderly development has broken down, owing to conflicts of interest between the industrialized countries that founded the system embodied in the Conventions and the developing countries whose allegiance to that system was to some extent co-opted as a condition of their emancipation from colonial rule after the Second World War. See, e.g., Plasseraud & Savignon (1986), supra note 3, at 80-83; infra text accompanying notes 312-16, 334-48. As a result, efforts to revise and modernize the Great Conventions themselves have either ended in failure or produced compromises that can be viewed as regressive in spirit as well as practice. See, e.g., S. RICKETSON, THE BERNE CONVEN-TION FOR THE PROTECTION OF LITERARY AND ARTISTIC WORKS: 1886-1986, at 590-664 (1987); Plasseraud & Savignon (1986), supra note 3, at 83 (mentioning failure of Paris Revision Conferences at Geneva, Nairobi, and again at Geneva in 1980-1983 and the interest of other organizations, including GATT, UNIDO, and UNCTAD, in the application of the New International Economic Order to intellectual property issues); Kunz-Hallstein, The Revision of the International System of Patent Protection in the Interest of Developing Countries, 10 I.I.C. 649, 658-64 (1979) [hereinafter Kunz-Hallstein, Revision of International System; see also Kish, Impact in the Developing Countries of the On-going Revision of the Paris Convention Relating to the Protection of Industrial Property Rights, in International Chamber of Commerce [ICC], Erosion of Industrial Property Rights: Report on the Symposium 61-73 (1980) [hereinafter ICC, Erosion]. "Practically every proposal . . . discussed at the [Paris Revision] Conference, if adopted, would result in the further erosion of industrial property protection, particularly patent protection, by internationally sanctioning measures which member countries will be permitted to take to restrict the patentee's rights" Id. at 62.

The failure of the Paris Revision Conference has aggravated the theoretical and political controversies surrounding the proper role of the patent system in the world economy, and it may also have made it easier for both developed and developing countries to adopt legislative measures or to introduce administrative practices that violate the spirit if not the letter of the Convention. See, e.g., Plasseraud & Savignon (1986), supra note 3, at 105-06; see generally Oddi, The International Patent System and Third World Development: Reality or Myth?, 1987 Duke L.J. 831. These developments have, in turn, motivated the industrialized countries to press for a change of venue from the World Intellectual Property Organization (WIPO), infra note 274 (which administers the Paris and Berne Conventions) and UNESCO (which administers the Universal Copyright Convention) to the GATT, a forum in which the developing countries as a group exert less effective power.

ing border control measures, that would enforce the minimum standards in ways that no international convention governing intellectual property currently requires.³⁵ At the same time, the Code of Conduct would establish multilateral consultation and dispute settlement procedures to ensure that signatories fulfilled their obligations under the Code.³⁶ In the long run, incentives provided within the GATT framework, together with external incentives and pressures of various kinds, would serve to persuade all GATT Contracting Parties to adhere to the Code of Con-

^{35.} See, e.g., 1988 U.S. Proposal, supra note 5; Geller, International Copyright: An Introduction, in M. NIMMER & P. GELLER, INTERNATIONAL COPYRIGHT LAW AND PRACTICE, INTRODUCTION § 5[5] (1989) [hereinafter Geller, International Copyright]; Meesen, supra note 4, at 72 (stating that national treatment clauses under the Great Conventions are not necessarily applied to procedural matters pertaining to infringement of intellectual property). Border measures are modelled on section 337 of the U.S. Tariff Act of 1930, 19 U.S.C. § 1337 (1988) as amended by Omnibus Trade and Competitiveness Act of 1988, Pub. L. 100-418, § 1342, 102 Stat. 1107, 1212; see generally D. YARN, INTERNATIONAL PROTECTION OF INTELLECTUAL PROPERTY RIGHTS UNDER THE UNITED STATES TRADE LAWS 1-5, 13-23 (1986). The procedures and standards for the enforcement of patent rights under section 337 were criticized by a domestic finding in 1982, see id. at 5, and were found inconsistent with the nondiscrimination requirement of the GATT by a GATT panel in 1989. See, e.g., Kastenmeier & Beier, International Trade and Intellectual Property: Promise, Risks, and Reality, 22 VAND. J. TRANSNT'L L. 285, 298 (1989) (Symposium Part I); infra notes 383, 678 and accompanying text.

^{36.} Proponents of this initiative are particularly anxious to have violations of any new code of conduct trigger the mandatory consultation and dispute resolution mechanisms of the GATT, which would be strengthened as part of the Uruguay Round's overall work product. See, e.g., GATT, supra note 2, arts. XXII-XXIII; Statement of Dam, supra note 4, at 91; Results of the GATT Ministerial Meeting, Hearing before the Subcomm, on Trade, House Comm. on Ways and Means, 99th Cong., 2d Sess. 8-9 (1985) (statement of Hon. Clayton Yeutter, United States Trade Representative) [hereinafter Statement of Yeutter] (improving dispute settlement machinery of "immense importance" to United States, because it is "one of the major shortcomings of the GATT"). Whether this dispute resolving machinery, even if revised, would deliver the desired results is uncertain. See, e.g., Hudec, GATT Dispute Settlement After the Tokyo Round: An Unfinished Business, 13 CORNELL INT'L L.J. 145, 160-61 (1980) [hereinafter Hudec, GATT Disputes]. Compare, e.g., Remarks of Jackson, supra note 5, at 346-48 (expressing guarded optimism) with Note, supra note 32, at 385-390 (expressing reservations) and Remarks of Professor Suman Naresh, 22 VAND. J. TRANSNAT'L L. 357, 360-62 (1989) [hereinafter Remarks of Naresh]. In any event, the GATT machinery would undoubtedly prove more efficacious than the hypothetical possibility of resorting to the International Court of Justice (I.C.J.), as provided in the Great Conventions. See infra notes 100-03 and accompanying text; see generally J. Charney, Disputes Implicating the Institutional Credibility of the Court: Problems of Non-Appearance, Non-Participation, and Non-Performance, in THE INTERNATIONAL COURT OF JUSTICE AT A CROSSROADS 288 (L. Damrosch ed. 1987).

duct established for Trade-Related Aspects of Intellectual Property (TRIPs).³⁷

B. Response of the Developing Countries

At the other extreme, studies show that the developing countries derive significant advantages from the lax regulation of foreign intellectual property rights that occurs—de lege or de facto—under existing international conventions.³⁸ Whether or not encouraged at the governmental level,³⁹ systematic appropriation of foreign intellectual property has enabled developing countries to import or otherwise exploit foreign cultural products, finished goods, and technical know-how without draining their reserves of hard currency, while advancing their own drive for import substitution.⁴⁰ These practices thus reduce domestic dependence on for-

^{37.} See, e.g., Basic Framework, supra note 1, at 25-28; Gadbaw & Richards, supra note 8, at 20-31. Incentives within the GATT could include: 1) the replacement of bilateral and unilateral measures with a multilateral discipline; 2) the extension of benefits under the Intellectual Property Code to signatory or otherwise complying states; and 3) increased technical assistance programs. External incentives could include: 1) the risk of concerted actions against recalcitrant states; 2) denial of new or existing benefits affecting access to markets, especially voluntary benefits such as the Generalized System of Preferences; 3) enhanced access to technology; and 4) increased lending facilities from international sources, such as the World Bank. Beyond these direct and indirect forms of leverage, a basic characteristic of the MTN is that countries may compensate concessions in one area, such as intellectual property, with offsetting concessions in other areas already covered by the GATT or under negotiation (i.e., services, direct investment, and agriculture). See, e.g., Remarks of Professor Robert Hudec, 22 Vand. J. Transnat'l L. 321, 323 (1989) [hereinafter Remarks of Hudec] (Symposium Part I); infra notes 637-38 and accompanying text.

^{38.} See, e.g., Foyer, Problemes internationaux contemporains des brevets d'invention, in 171 De L'Acadamie de Droit International, Recueil des Cours 340, 378-402 (1981); R. Benko, supra note 7, at 28-30; Oddi, supra note 34, at 832 & n.4 (citing classic authorities on both sides of the issue); Gadbaw & Richards, supra note 8, at 2-3. See generally M. Hiance & Y. Plasseraud, Brevets et Sous-Développement: La Protection des Inventions Dans le Tiers-Monde 101-174 (1972); U. Anderfelt, International Patent Legislation and Developing Countries 137-39 (1971); Primo Braga, supra note 7 (giving an illuminating economic perspective).

^{39.} For evidence that developing country governments consciously pursue a development strategy based on making foreign technology available within the domestic economy at the lowest possible short term prices, see Gadbaw & Richards, *supra* note 8, at 2, 12, 13-17. For the problem of attribution in seeking to engage a state's international responsibility when private acts are at issue and there is no apparent government collusion, see Meesen, *supra* note 4, at 69, 73; *infra* note 279 and accompanying text.

^{40.} See, e.g., R. BENKO, supra note 7, at 27-29; Primo Braga, supra note 7, at 256, 259-60; Oddi, supra note 34, at 843-46. Professor Oddi deduces that the "most cost-effective manner for a developing country to obtain any benefits associated with an inven-

eign intellectual goods by stimulating real, if limited, transfers of both technology and cultural products at an affordable cost.

This contrasts with the always expensive and often illusory transfers effected through authorized channels.⁴¹ For example, evidence shows that foreign patents typically become vehicles for import monopolies in the developing countries, while locally-worked patents seldom produce the desired diffusion of technical knowledge needed to permit future competition by local firms and agencies.⁴² Arguably, domestic recognition of foreign intellectual property rights can thus inhibit rather than stimulate local innovation,⁴³ and it can further enhance the comparative advantages of the industrialized countries in the production of both new and old technologies.⁴⁴

Industrial property in particular as it relates to inventions, should constitute an element in the process of the transfer of technology and should contribute to the achievement of new technological advances. It should serve the goals of a new economic order, in particular through the industrialization of the developing countries.

Final Summary Minutes of the Fourth Session of the Diplomatic Conference on the Revision of the Paris Convention, Geneva, February 27 to March 24, 1984, WIPO Doc. PR/SM/12, at 14 (May 31, 1985) (statement of Mr. Mtango, Spokesman for the Group of 77) (quoting the Declaration of the Ad Hoc Group of Governmental Experts on the Revision of the Paris Convention in December 1975) [hereinafter Statement of Mtango].

42. See, e.g., Foyer, supra note 38, at 380-81; Oddi, supra note 34, at 847, 850-55. Developing countries complain that the transfer policies of foreign corporations as implemented in restrictive licensing agreements and the strategic withholding of know-how deprive the receiving countries of control over technology at the end of the royalty period, whether supported by patents or not. See, e.g., id.; Foyer, supra note 38, at 380; Statement of Mtango, supra note 41, at 15 (stressing particular needs of the developing countries to ensure a balance of interests between the recipient state and foreign patent owners; to promote actual working of inventions in the recipient countries; to improve the conditions for the transfer of technology on fair terms; and to prevent abusive practices). For ongoing efforts to regulate restrictive business practices and the transfer of technology at the international level, and their relation to the regulation of intellectual property rights, see Fikentscher & Lamb, The Principles of Free and Fair Trading and of Intellectual Property Protection in the Legal Framework of a New International Economic Order, in 1 Reforming the International Economic Order: German Legal COMMENTS 81-98 (T. Oppermann & E.U. Petersmann eds. 1987); infra text accompanying notes 578-86.

tion is . . . to be free of any restraints—patent or otherwise." Id. at 845.

^{41.} See, e.g., Primo Braga, supra note 7, at 259-60; Oddi, supra note 34, at 843-55; Foyer, supra note 38, at 380-81. An official statement by the Group of 77 recently declared:

^{43.} See, e.g., Foyer, supra note 38, at 380 (explaining thesis of UNCTAD).

^{44.} See, e.g., Primo Braga, supra note 7, at 260; Ullrich, GATT: Industrial Property Protection, Fair Trade and Development, in GATT on WIPO, supra note 5, at

The ability of local entrepreneurs freely to duplicate foreign intellectual goods stimulates activities that are less sophisticated than those of foreign originators but better adapted to local needs and conditions. 45 The low cost of technology or of cultural goods acquired by such means allows the resulting products to be marketed locally at prices consumers can afford, notwithstanding the imperfections of the products in question or the existence of foreign competition.⁴⁶ Once rooted in the local economy, the entrepreneurial skills and machinery needed to produce even copycat products may grow more refined over time. Opportunities for exports to other countries, especially other developing countries, may arise, owing to the lack of either research and development costs or of licensing royalties to be covered in the export price.⁴⁷ Successful operations of this kind then strengthen the medium and long-term ability of Third World producers to compete on all markets by parlaying today's "piratical" practices into stable institutions for less derivative forms of industrial output in the future.48

Systematic copying of foreign cultural and technological products does introduce costs and disadvantages of its own, however, such as the destabilization of domestic industries that depend on local creativity and innovation. It also discourages authorized transfers of technology in conjunction with direct foreign investments.⁴⁹ Whether these costs are unacceptably high in relation to the benefits remains a much-debated thesis without empirical verification.⁵⁰ Nor is it clear that a mature intellectual

^{127, 155 (1989) [}hereinafter Ullrich, GATT].

^{45.} See, e.g., Oddi, supra note 34, at 847.

^{46.} See, e.g., Gadbaw, Merger or Marriage, supra note 8, at 227-28 ("In some cases, local nationals who had previously worked for foreign companies played key roles in promoting the development of indigenous industries whose business model was buil[t] around copying and piracy of intellectual property rights of their former employers."). See also Primo Braga, supra note 7, at 256 & n.58 (discussing loss of consumer surplus owing to higher prices resulting from "the 'monopolization' process," but noting the offsetting factor of price controls in developing countries).

^{47.} See, e.g., Gadbaw & Richards, supra note 8, at 2-3; Primo Braga, supra note 7, at 259.

^{48.} See, e.g., Ullrich, GATT, supra note 44, at 155 (stressing importance of third countries' access to cheap sources of supply that result from these practices); Piatti, supra note 3, at 241 (criticizing these activities in regard to trademarked goods and protected designs).

^{49.} See, e.g., R. Benko, supra note 7, at 28; Statement of Dam, supra note 4, at 89; see generally MacLaughlin, Richards, & Kenny, The Economic Significance of Piracy, in Global Consensus, supra note 7, 89-108.

^{50.} See, e.g., R. Benko, supra note 7, at 27-29, 47-50; Statement of Oman, supra note 3, at 168 (Korean Publishers Association split on attitude towards piracy; publishers of domestic works want to eliminate pirates and unfair competition, while publishers of

property system modelled on current OECD practice would sufficiently stimulate economic growth in Third World countries as to warrant the political and social costs of instituting it, even if better intellectual property laws could in principle speed the process of innovation in these countries.⁵¹

For these reasons, the developing countries as a group prefer to maximize opportunities afforded by their present freedom of action under a loosely regulated international system⁵² and to adjust their intellectual property laws to their own development needs,⁵³ as the industrialized countries appear to have done at earlier stages of their development.⁵⁴ Accordingly, government officials in developing countries tend to deemphasize the natural rights philosophy that underpins traditional arguments for the protection of intellectual creations as private property. These officials stress, instead, that intellectual products are the common heritage of all mankind,⁵⁵ a thesis once dear to conservative economists.⁵⁶

foreign works without permission or payment get free ride); Chong, Should Developing Nations Grant Proprietary Rights to Foreign Works?, 1 SOFTWARE L.J. 541, 541-44, 555-57 (1987); see generally Primo Braga, supra note 7, at 258-64.

- 51. See, e.g., Ullrich, GATT, supra note 44, at 152 (stressing that industrial property protection benefits the long term interests of developing countries only if adapted to their needs); Primo Braga, supra note 7, at 254-64.
- 52. See, e.g., Gadbaw & Gwynn, Intellectual Property Rights in the New GATT Round, in GLOBAL CONSENSUS, supra note 7, at 63-64; Bradley, supra note 2, at 68-69, 78-80. Overall objectives of the developing countries in this regard are to make progress in meeting their own needs "under conditions of lesser dependence on industrialized countries, in order that the distance separating the two in respect of technology should no longer be so prejudicial." Statement of Mtango, supra note 41, at 16.
- 53. See, e.g., Foyer, supra note 38, at 384-86; Kunz-Hallstein, Patent Protection, Transfer of Technology and Developing Countries: A Survey of the Present Situation, 6 I.I.C. 427 (1975) [hereinafter Kunz-Hallstein, Present Situation]; see also Gansser, Restrictions of Patent Protection on Legislative and Jurisdictional Levels, in ICC, EROSION, supra note 34, at 21-40.
- 54. See, e.g., Y. Plasseraud & F. Savignon, Paris 1883: Genèse du Droit Unioniste des Brevets 67-99 (1983) [hereinafter Plasseraud & Savignon, Paris 1883]; see infra text accompanying notes 542-46, 599-600.
- 55. See, e.g., R. Benko, supra note 7, at 28; Greenwald, The Protection of Intellectual Property Rights in the GATT and the Uruguay Round: The US Viewpoint, in Conflict and Resolution in US-EC Trade Relations at the Opening of the Uruguay Round 227, 238-39 (S. Rubin & M. Jones eds. 1989); Primo Braga, supra note 7, at 263.
- 56. See, e.g., E. Penrose, The Economics of the International Patent System 12-18, 135-36, 223-33 (1951). Neither the natural rights thesis nor the common heritage thesis comes to grips with the "public goods" problem at the core of today's more positive reevaluation of intellectual property rights by free-market economists. See, e.g., R. Benko, supra note 7, at 16-18; infra text accompanying notes 232-63.

At the same time, representatives of the developing countries challenge the GATT's authority to deal with intellectual property matters at all. They argue that specialized agencies in which developing countries carry more weight, especially WIPO and UNESCO, retain exclusive jurisdiction over these matters.⁵⁷ They contend that international minimum standards affecting intellectual property can be negotiated only within the framework of conferences to revise existing international conventions, in which forums the developing countries have repeatedly sought, and sometimes obtained, special and preferential treatment.⁵⁸

The fact that certain newly industrialized countries acquiesced in the decision to bring intellectual property within the Uruguay Round under threat of unilateral and bilateral sanctions⁵⁹ hardly means that the Group of 77 has softened its previous stand. Their assent to these negoti-

^{57.} See, e.g., GATT Activities: Developing Nations Should Have Concessions in GATT, India Says, 3 World Intell. Prop. Rep. (BNA) 199-200 (Sept. 1989) [hereinafter India Says]; Greenwald, supra note 55, at 237-38; see also supra note 34. Besides a positive insistence on WIPO and UNESCO as the legitimate forums for intellectual property matters, the developing countries look to UNCTAD, rather than the GATT, to represent their trade interests. Indeed, UNCTAD was formed because these countries distrusted the GATT. See, e.g., R. Hudec, Developing Countries, supra note 9, at 39-40; K.W. Dam, supra note 25, at 376-85. See generally B. Gosovic, UNCTAD: Conflict and Compromise 3-6, 8-14, 28-59 (1972). When negotiating as a bloc in diplomatic forums, the developing countries that look to UNCTAD for leadership are usually designated as the "Group of 77." See R. Hudec, Developing Countries, supra note 9, at 40.

^{58.} For amendments to the copyright conventions (Berne and U.C.C.) establishing preferential treatment for developing countries that adhere to these conventions, see infra notes 340-48 and accompanying text; see generally Tocups, The Development of Special Provisions in International Copyright Law for the Benefit of Developing Countries, 29 J. COPYRIGHT Soc'y 402 (1982). For proposals to institute a preferential regime within the framework of the Paris Convention that were debated but not adopted at the Conference to Revise the Paris Convention, held between 1979 and 1985, see, e.g., WIPO, Synoptic Tables Concerning Articles 1, 5A and 5Quater of the Paris Convention for the Protection of Industrial Property, WIPO Doc. No. PR/DC/INF/51 (1984); Kunz-Hallstein, Revision of International System, supra note 34, at 658-70; infra text accompanying notes 312-16. See also The International Patent System: The Revision of the Paris Convention for the Protection of Industrial Property, UNCTAD Doc. TD/B/ C.6/AC.3/2 (1978); The Role of the Patent System in the Transfer of Technology to Developing Countries, UNCTAD Doc. TD/B/AC.11/19/Rev. 1 (1974). Demands for preferential treatment, including provisions for compulsory licensing and other exceptions in favor of developing countries, were also responsible for the failure to negotiate an international treaty concerning semiconductor chip designs at a diplomatic conference held in Washington in 1989. See, e.g., Gadbaw, Merger or Marriage, supra note 8, at 239-41; infra note 604.

^{59.} See generally Bradley, supra note 2.

ations remains conditioned on demands that special and preferential treatment should be incorporated into any Code of Conduct likely to emerge from the exercise. 60 These demands parallel those that the developing countries successfully advanced during the Tokyo Round of Multilateral Trade Negotiations, which culminated in structural amendments to the basic GATT instrument in 1979. 61 The developing countries are thus unlikely to retreat from proposals already put forward in established intellectual property forums, notably the aborted Conference to Revise the Paris Convention held between 1979 and 1985. 62

C. Scope of the Present Inquiry

The ability of both sides to muster refined counterarguments based on social and economic tenets that stubbornly defy empirical verification renders the conflict more acute.⁶³ The developing countries' reiteration of the most controversial proposals tending to erode existing levels of protection for industrial property,⁶⁴ and the hardline resistance of private interests in the industrialized countries to the very notion of preferential treatment for developing countries within the framework of a GATT Code regulating intellectual property,⁶⁵ further exacerbate the resulting

^{60.} See, e.g., Turnbull, supra note 1, at 13; India Says, supra note 57.

^{61.} Differential and More Favourable Treatment, Reciprocity and Fuller Participation of Developing Countries, Decision of 28 November 1979, GATT, BISD: TWENTY-SIXTH SUPP. 203-05 (1980) [hereinafter Enabling Clause], in Agreements Relating to the Framework for the Conduct of International Trade, GATT, BISD: TWENTY-SIXTH SUPP. 203-18 (1980), reprinted separately as GATT, AGREEMENTS RELATING TO THE FRAMEWORK FOR THE CONDUCT OF INTERNATIONAL TRADE (1979) [hereinafter Framework Agreements]. See, e.g., O. Long, Law and Its Limitations in the GATT Multilateral Trade System 100-04 (1985); R. Hudec, Developing Countries, supra note 9, at 84-88; Yusuf, Differential and More Favorable Treatment: The GATT Enabling Clause, 14 J. World Trade L. 488, 496-98 (1980); see further infra text accompanying notes 319-33.

^{62.} See, e.g., India Says, supra note 57 (Indian position paper presented to Uruguay Round Negotiating Group demands right of developing countries to exclude key economic sectors from patent protection, shorten periods of protection, and grant "licenses of right" to promote local working of foreign patents.) Compare Foyer, supra note 38, at 394-401 (earlier proposals to the same effect); see supra note 34; infra notes 314-15 and accompanying text.

^{63.} Compare MacLaughlin, Richards & Kenny, supra note 49, with Primo Braga, supra note 7, and Oddi, supra note 34. See also R. Benko, supra note 7, at 47-50.

^{64.} See supra note 62 and accompanying text.

^{65.} See, e.g., BASIC FRAMEWORK, supra note 1, at 8. This view is officially endorsed by high-level representatives of the United States. See, e.g., Kastenmeier & Beier, supra note 35, at 306 ("A GATT agreement should not adopt special and differential standards for developing countries with respect to intellectual property standards."); Remarks

tensions. Still more alarming are the prospects that the United States and other industrialized countries may augment unilateral and bilateral sanctions in the name of "reciprocity" if multilateral negotiations concerning intellectual property fail to yield the desired levels of protection. ⁶⁶ Such a policy could trigger an era of lawlessness and disorder in international intellectual property relations not seen since the period that preceded the signing of the Great Conventions over a hundred years ago. ⁶⁷

Meanwhile, intellectual property specialists familiar with the gradual process heretofore accompanying the formation of consensually recognized international standards watch this attempt to accelerate that process with misgivings. They point out that present international standards were seldom implemented until preexisting impediments rooted in different economic and social policies were first removed from the relevant domestic laws. They also stress that the goals of uniformity and harmonization that eluded the founders of the International Unions at the end of the nineteenth century till pose a daunting task even for states with a common cultural heritage and shared economic goals. Ac-

of Simon, supra note 6, at 368-69.

^{66.} See, e.g., Gadbaw & Richards, supra note 8, at 21-26; Gadbaw & Gwynn, supra note 52, at 64-67; Remarks of Simon, supra note 6, at 367, 370 (stating that "[f]or those of you who think bilateralism is a bad thing, a bad thing will come about" if current negotiations fail).

^{67.} See infra notes 122-25, 443-448, 687-90 and accompanying text.

^{68.} See generally 1 S. Ladas, Patents, Trademarks, and Related Rights: National and International Protection 59-94 (1975) [hereinafter S. Ladas, Industrial Property] (tracing the gradual evolution of these norms); S. Ricketson, supra note 34, 41-125.

^{69.} See, e.g., Ullrich, GATT, supra note 44, at 156-59; Remarks of Professor Paul Goldstein, 22 VAND. J. TRANSNAT'L L. 363-65 (1989) (Symposium Part I) [hereinafter Remarks of Goldstein]; see also Plasseraud & Savignon, Paris 1883, supra note 54, at 255-58 (stressing that the Paris Convention reflected the predominance of technology exporting interests, which has led to a revolt of the technology importing countries); Foyer, supra note 38, at 401 (stressing difficulties of modifying the rules of the game in favor of one side only and warning that the adherence of many developing countries to the Paris Union has triggered a reversal of prior tendencies to evolve toward higher states of protection); Meesen, supra note 4, at 70-71.

^{70.} See, e.g., S. RICKETSON, supra note 34, at 41, 919-21; infra text accompanying notes 122-25, 272, 559-63.

^{71.} See, e.g., 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 62-68; S. RICK-ETSON, supra note 34, at 40-41.

^{72.} See, e.g., Meesen, supra note 4, at 74 ("Universality seems more remote now than a century ago when the conclusion of the Paris and Berne Conventions gave rise to high expectations."); Remarks of Professor Donald Chisum, 22 VAND. J. TRANSNAT'L L. 341-42 (1989) (Symposium Part I) ("[I]t is an oversimplification to talk about levels of protection being on a single scale of high to low."); Remarks of Mr. Michael Reming-

cordingly, there is reason to fear that any attempt to stimulate radical systemic improvement through trade pressures⁷³ may end by precipitating a long-simmering crisis that could compromise the fragile arrangements that have taken over one hundred years to settle into place.⁷⁴

This Article examines the prospects for strengthening international protection of intellectual property rights by means of a trade-based initiative. It first elaborates a set of neutral premises that could facilitate a more constructive discourse between international trade law and international intellectual property law than has so far appeared in the early stages of the current negotiations. The Article will then derive a series of analytical propositions for a trade-based approach to intellectual property rights from these premises in a nonpartisan spirit and with due regard for the lessons of history. Finally, the Article will use these propositions to assess the overall opportunities and risks inhering in a project that attempts to shift international intellectual property law away from its traditional moorings in the Great Conventions and to anchor it in a major reform of international trade law.

ton, 22 VAND. J. TRANSNAT'L L. 383-84 (1989) (Symposium Part I). see also Harmonization of Industrial Property and Copyright Law in the European Community, 18 I.I.C. 303 (1987) [hereinafter Harmonization Report] (report of a symposium held at Tegernsee, FRG, July 1-5, 1985 by the Max Planck Institute for Foreign and International Patent, Copyright, and Competition Law). In the opening remarks of this symposium Professor Beier stated:

For over thirty years efforts have been made towards the harmonization of industrial property and copyright law in Europe. Important achievements have been made in patent law; progress is being made in trademark law, but much remains to be done in this field as well as in other fields of intellectual property law.

- Id. That this progress is impeded by trade issues not qualitatively different from those pending at the GATT level is well known. See, e.g., Ullrich, Opening Report in Harmonization Report, supra, at 306 (summarizing a report by Ivo Schwartz and stating that the "substantive criticism of some plans for legal harmonization is in many cases based on desires for national protectionism . . .").
- 73. Officially, the industrialized countries disavow any intent to impose uniform law. See, e.g., 1988 EC Guidelines, supra note 32, art. II; supra note 32. But the proposals put foward mirror OECD practices, while the United States proposals, supra note 5, project domestic standards. See, e.g., Hart, supra note 32, at 59.
- 74. See, e.g., Foyer, supra note 38, at 401; infra notes 311-16, 334-52, 671-90 and accompanying text. The collapse of the international copyright system under similar pressures was barely avoided in the period 1967-1971. See, e.g., S. RICKETSON, supra note 34, at 124-25.
 - 75. See infra text accompanying notes 78-352.
 - 76. See infra text accompanying notes 353-647.
 - 77. See infra text accompanying notes 648-90.

II. Premises and Postulates for an Even-Handed Analysis

A. Nonexistence of an International Norm Against Misappropriation

Free riders operating in states that inadequately protect foreign intellectual property rights in their domestic laws can injure foreign authors and inventors on at least three different levels. Initially, free riders make competition by foreign originators in the former's local markets more difficult by pricing unauthorized copies of foreign products lower than the originators' own marginal costs. 78 Second, once these unauthorized products become good enough to satisfy local demand, free riding producers can introduce them into the stream of international trade and compete on favorable terms with exporters selling the genuine articles at higher prices. In effect, free riders thus re-export local versions of foreign creations and innovations that were "imported" without the consent of the proprietary rights holders. 79 Finally, unauthorized producers operating from sanctuary countries that permit such activities may attempt to invade the originators' home territories with unauthorized versions of the original products. Unless specifically excluded by border measures or enjoined by domestic intellectual property laws, these lower priced imports can drive originators out of their home markets altogether.80

Efforts to stem these activities through concerted international trade leverage have understandably given rise to much loose talk about "coun-

^{78.} See, e.g., BASIC FRAMEWORK, supra note 1, at 12-13; Dam, The Growing Importance of International Protection of Intellectual Property, 21 INT'L LAW. 627, 627-28 (1987) [hereinafter Dam, International Protection]. Besides subtracting a market the proprietor considers within the legitimate scope of return on his investment, this form of competition is said to reduce the economies of scale that influence future risk-taking in general and investment in research and development in particular. It can also harm the reputation of the foreign producer if the imitated goods are defective or inferior. See, e.g., Dam, International Protection, supra, at 630. But see Oddi, supra note 34, at 844-46 (denying that the existence of developing-country markets significantly affects the research and development investment calculus of most domestic firms). In any event, the loss to the originating state may be viewed as a gain to the state in which free-riding occurs, since products like those produced abroad are made available locally without loss of foreign exchange or without adverse effect on the trade balance, and with some corresponding gain in employment. See, e.g., R. Benko, supra note 7, at 20 (regarding effect of patents on national economies).

^{79.} See, e.g., BASIC FRAMEWORK, supra note 1, at 14; Dam, International Protection, supra note 78.

^{80.} The United States is reportedly the largest market for foreign counterfeit versions of domestic products. See R. Benko, supra note 7, at 34.

terfeiting and piracy" and about unspecified "infringements" of intellectual property rights.⁸¹ This talk tends to convey the impression that free riders who make unauthorized reproductions of foreign intellectual property violate existing international legal norms. In reality, even a cursory examination of the applicable norms suffices to show that the opposite is usually the case.⁸² The terminology used to score polemical points with domestic audiences thus muddles an already difficult subject⁸³ and begs the fundamental question of what makes the free riders' activities illegal.⁸⁴

1. Technical Definitions of Counterfeiting and Piracy

a. Counterfeiting

The English word "counterfeiting," which translates ambiguously into other important languages, 85 seems best confined to trademark law and

- 81. See, e.g., BASIC FRAMEWORK, supra note 1, at 14 (talking of unspecified "willful infringements" that deceive the consuming public and of the harmful effect of "infringing activities" on local innovation in countries with inadequate intellectual property laws); Administration's 1986 Statement, supra note 4, at 506 ("Foreign violations of U.S. intellectual property rights, through piracy, counterfeiting, misappropriation and infringement, severely distort international trade and deprive innovators, creators and inventors of rewards and opportunities that are rightfully theirs."); 1988 U.S. Proposal, supra note 5, at 357 (stressing that the existing Conventions are unable "to stop the extensive worldwide trade losses to economies caused by counterfeiting and piracy"). See also Piatti, supra note 3, at 241 ("Whether they are specialists in counterfeiting . . . or only occasional operators, these new pirates are hard to identify because the products are marketed a long way from the place where they are made") (emphasis supplied).
- 82. Loose talk of this kind vents the frustration of proprietary rights holders at finding no adequate and effective legal defenses against free riders who operate beyond the reach of the proprietors' own territorial laws. See, e.g., R. Benko, supra note 7, at 4; Meesen, supra note 4, at 68; infra text accompanying notes 106-20.
- 83. See, e.g., Levin, supra note 3, at 435-36. Such terminology blurs important distinctions between the kinds of treatment that different forms of intellectual property obtain under existing international conventions and under the domestic laws with which they interact. See, e.g., id. at 442-43; see also Simone, Protection of American Copyrights in Books on Taiwan, 35 J. Copyright Soc'y 115, 116 n.1 (1988) (three definitions of piracy).
- 84. See, e.g., H. STALSON, supra note 3, at 11-12; Simone, supra note 83, at 116 n.1 (rejecting the rhetorical abuse of the term piracy when used in reference to all takings, whether or not in violation of positive law, and recognizing that "countries which do not take legal measures to protect foreign copyrights are not strictly [speaking] 'pirating' foreign copyrights").
- 85. See, e.g., Levin, supra note 3, at 445-46 (The French word contrefaçon, though often used to translate the English word "counterfeiting," actually refers to any unlawful imitation that violates applicable provisions of an intellectual property law.).

to related branches of unfair competition law that aim to repress "passing off" and false labeling. This term typically refers to the practice of simulating brand-name products down to the last detail, including the originator's own trademarks, and then offering these products for sale as authentic goods on both domestic and export markets. The may also denote the simulation of product configurations or packaging with intent to confuse or deceive consumers even when no registered trademarks are involved and no outright mislabelling has occurred.

When used this way, the term "counterfeiting" describes practices that are already prohibited by most developed legal systems⁸⁹ and that may conflict with norms of positive international law as well. For example,

^{86.} See 2 S. Ladas, Industrial Property, supra note 68, at 967 (stressing relation of trademarks to unfair competition and the common law tort of passing off. "The fundamental rule was that no man has the right to offer his goods for sale as the goods of another trader."). For the crucial distinction between passing off and misappropriation, see, e.g., P.J. Kaufmann, Passing Off and Misappropriation 3-4 (1986); infra text accompanying notes 130-87.

^{87.} See, e.g., Warner Bros. v. Dae Rim Trading, Inc., 677 F. Supp. 740 (S.D.N.Y. 1988) (distinguishing trademark counterfeiting from copyright infringement); H. STALSON, supra note 3, at 11; Levin, supra note 3, at 445 (reviewing definitions of counterfeiting endorsed by the United States International Trade Commission (ITC)).

^{88.} This broader notion of counterfeiting as the "intentional imitation of the outward appearance of a product in addition to its mark (or other distinguishing characteristics . . .)" with a view to making the copy appear to be an original reportedly conforms to usage of the term counterfeiting in the United Kingdom, the Federal Republic of Germany, and the Nordic countries. Levin, supra note 3, at 454-55. Some international organizations, notably the GATT and the European Communities, have in the past confined the term counterfeiting to unauthorized use of registered trademarks, but the OECD has reportedly moved toward the broader usage indicated in the text. Id. at 448-49, 454. A more recent tendency, favored by a number of OECD countries, is to define counterfeiting so as to include "intentional imitations of industrial designs, copyrighted works and patents." Id. at 449. Professor Levin recommends the use of piracy to cover all forms of exploiting intellectual property rights in a manner inconsistent with the legally protected interests, whether or not related to the counterfeiting of marks or unfair competition in the narrow sense. Id. at 455-56. But it seems misleading, and it may be counterproductive, to invest any single term with overarching importance if it conveys the false notion that intellectual property can be uprooted from its territorial foundations and transplanted to some mysterious realm in which misappropriation as such is broadly prohibited. See infra text and authorities accompanying notes 114-210.

^{89.} See, e.g., Levin, supra note 3, at 443-55. Formally, at least, developing countries that adhere to the Paris Convention are obliged to resist such practices, including acts of unfair competition, under article 10bis. See G. Bodenhausen, Guide to the Application of the Paris Convention for the Protection of Industrial Property (As Revised at Stockholm in 1967) 143 (1968); infra, notes 90-91 and accompanying text. See also 2 S. Ladas, Industrial Property, supra note 68, at 969 (finding no basis for approaching trademark law differently in developed or developing countries).

the Paris Convention for the Protection of Industrial Property imposes detailed obligations upon signatory states concerning the regulation of trademarks, service marks, trade names and false labeling;⁹⁰ it also requires member states to repress certain acts of unfair competition tending to confuse or deceive the public.⁹¹ Even the GATT contains some provisions concerning the treatment of marks and geographical appella-

90. Numerous provisions of the Paris Convention deal directly with the protection of

marks. Article 6, for example, confers national treatment on trademarks in each country of the Union and recognizes the independence of marks registered in one country from those registered in other countries. See G. Bodenhausen, supra note 89, at 87-83. Article 6bis provides for the refusal or invalidation of marks infringing on well-known trademarks that belong to foreigners. Id. at 89-91; 1 S. Ladas, Industrial Property, supra note 68, at 274. Article 6quinquies promotes special rules that override national treatment when necessary to ensure acceptance of a registered mark by other countries of the Union in the form that it was registered in the country of origin (as is provision), except in certain specifically defined cases. Id. at 274; G. Bodenhausen, supra note 89, at 107-109, 111. Article 6sexies commits member countries to undertake to protect service marks, without obligating them to register such marks. Id. at 122-23. Article 7 provides that the nature of the goods to which a mark is applied cannot constitute an obstacle to registration. 1 S. Ladas, Industrial Property, supra note 68, at 274. Article 8 obligates member states to protect trade names, whether or not registered and whether or not they form parts of trademarks. Id. at 275; G. Bodenhausen, supra note 89, at 133-34.

In addition, article 9 recommends border measures to repress trafficking in goods bearing illegal trademarks or trade names, and article 10 requires border measures to exclude goods bearing false indications of source or false appellations of origin. In effect, only national treatment is guaranteed under these articles. 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 275; G. BODENHAUSEN, supra note 89, at 135-36, 138-39. See generally 2 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1196-1240, 1250-68.

91. See, e.g., Paris Convention, supra note 21, arts. 10bis and 10ter. Paragraph 1 of article 10bis obligates Member States to assure "effective protection" against unfair competition to nationals of member countries and paragraph 2 declares that "[a]ny act of competition contrary to honest practices in industrial or commercial matters constitutes an act of unfair competition." Id. While these provisions leave room for each country to determine the nature of "unfair competition," the standard invoked in article 10bis(2) is understood to refer to "honest practices established in international trade," not merely the practices in the country where protection is sought. G. BODENHAUSEN, supra note 89, at 144. Paragraph 3 of article 10bis then sets out specific acts of unfair competition that must be prohibited within the meaning of paragraphs 1 and 2. Id. at 154; 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 275. Under this provision, acts tending to produce confusion either by similar marks or other means, such as packaging, must be prohibited, as must acts of disparagement and allegations tending to mislead the public as to the nature, manufacturing process, characteristics, and suitability of purpose or quantity of the goods concerned. G. Bodenhausen, supra, note 89, at 145-46. Article 10ter then obligates member states to "assure to nationals of other countries of the Union appropriate legal remedies effectively to repress all acts covered by Articles 9, 10, and 10bis." Id. at 147.

tions of origin.⁹² To the extent that States Members of the Paris Union countenance the systematic counterfeiting of foreigners' trademarked goods on their territories, it can, therefore, be argued that such acts should engage these states' international responsibility under existing law.⁹³ Even official tolerance of the systematic importation of goods counterfeited outside the territory could violate the spirit if not the letter of these norms.⁹⁴

Some of the countries in which the most flagrant counterfeiting activities take place, however, do not yet belong to the Paris Convention, 95

- 92. See GATT, supra note 2, art. IX. Article IX imposes a type of Most-Favored-Nation [MFN] clause on marks; urges Contracting Parties to minimize administrative inconveniences that hinder the recognition of foreign marks; and pledges the Contracting Parties to prevent local trade names from harming geographical appellations protected by other Contracting Parties. See, e.g., Piatti, supra note 3, at 242-43; Hartridge & Subramanian, Intellectual Property Rights: The Issues in GATT, 22 VAND. J. TRANSNAT'L L. 893, 900-01 (1989) (Symposium Part II). Article IX also attempts to ensure that "marking requirements are not used to hamper international trade unnecessarily." Id.
- 93. See, e.g., supra notes 90-91; Piatti, supra note 3, at 242 (stating that the Paris Convention "provides a high degree of protection for trademarks, insofar as it is compatible with respecting the diversity of interests and concepts involved"). But non-use of the mark in the territory in question can be a defense. See Paris Convention, supra note 21, art. 5(C)(1); 2 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1268-71. The developing countries have exerted considerable pressure towards expanding both the compulsory obligation to use and the right of states to cancel the mark for non-use. See, e.g., id. at 1268, 1270; Piatti, supra note 3, at 242.
- 94. See, e.g., Paris Convention, supra note 21, arts. 9, 10, 10bis, 10ter; supra note 91. However, the principle that goods unlawfully bearing a trademark or trade name should be seized on importation (art. 9(1)) was watered down in successive revisions of the Convention, with the result that it actually affords foreigners little more than national treatment. See, e.g., G. Bodenhausen, supra note 89, at 136, 139; Piatti, supra note 3, at 242. The current provisions lay down "the principle that legislation which does not permit seizure on importation should be amended, but without specifying any time limit." Id. See generally 2 S. Ladas, Industrial Property, supra note 68, at 1277-82. Ladas notes that article 9, which could deter transnational traffic in goods bearing infringing marks, is hampered by the fact that "in most countries there is a disinclination to give power for administrative action to the customs authorities." Id. at 1284. Compare Remarks of Simon, supra note 6, at 369 (enforcement measures likely to be a sticking point of TRIPs negotiations).
- 95. According to Piatti, these include key originating countries in Southeast Asia, Latin America, and the Middle East. Piatti, supra note 3, at 242. For the case of India, see Gadbaw & Kenny, India, in Global Consensus, supra note 7, at 186, 225 (widespread copying of United States trademarks "with near impunity"). Even if members of the Paris Convention, the states concerned may adhere to less protective versions of the text, as appears to be the case with Brazil. Piatti, supra note 3, at 242. For current practices in seven newly industrialized countries (NICs), see generally Global Consensus, supra note 7.

while the GATT recommendations concerning marks under article IX are said to lack teeth. Moreover, states adhering to the Paris Convention have historically discharged its obligations merely by enacting the pertinent legislation. They appear subject to no further duties to peg the scope of protection at any given level nor have they pressed one another to undertake the administrative and judicial measures needed to secure effective compliance with agreed international standards. A state whose laws were otherwise formally in order would not necessarily violate the Convention by failing to make sufficient efforts to repress traffic in goods bearing counterfeit marks.

Whether this reading of the Convention accurately reflects the text or merely a gloss that lax state practice has put upon it may be questioned. The fact remains that States Members of the Paris Union have

[T]he opinion which holds that the Paris Convention is lacking any enforcement measure is obviously not well-founded in law. There is a possibility, at least in principle, for the member states . . . to apply the traditional enforcement system of reprisal and retorsion, although reprisal may be resorted to among a number of member states only after the dispute settlement procedure of Article 28 has been exhausted.

In practice, however, . . . the member states of the Paris Union do not use this traditional enforcement procedure. We know of no example of a measure of reprisal having been applied during the hundred years the Paris Convention has been in force.

^{96.} The GATT procedures for dispute resolution in conjunction with disputes that might arise under article IX are limited to the states concerned and cannot be invoked by parties to a private dispute. Little use has been made of article IX(6), which calls on the Contracting Parties to collaborate in eliminating certain abusive practices. See Piatti, supra note 3, at 242.

^{97.} See Paris Convention, supra note 21, art. 25 (in which all countries of the Union undertake to adopt the measures necessary to ensure application of the Convention); Kunz-Hallstein, The United States Proposal for a GATT Agreement on Intellectual Property and the Paris Convention for the Protection of Industrial Property, 22 VAND. J. TRANSNAT'L L. 265, 278 (1989) [hereinafter Kunz-Hallstein, U.S. Proposal] (Symposium Part I).

^{98.} See supra note 5; Kunz-Hallstein, U.S. Proposal, supra note 97, at 268; Piatti, supra note 3, at 242-43 (stating that member states are free to determine the scope of protection, nature of the offenses, burden of proof, and appropriate sanctions). It is also unclear whether foreigners are necessarily entitled to national treatment concerning "the procedure applicable in case of an infringement of domestic law." Meesen, supra note 4, at 72.

^{99.} See generally, Piatti, supra note 3, at 242-43. But see infra note 100 and accompanying text.

^{100.} See supra notes 90-91; Kunz-Hallstein, U.S. Proposal, supra note 97, at 282. Kunz-Hallstein states:

not used either the dispute resolving procedure available under article 28¹⁰¹ or the traditional remedies of reprisal and retorsion to ensure compliance with existing norms that address the problem of counterfeit goods. ¹⁰² Nor have they heretofore chosen to institute any mandatory process of consultation through which laggard member states could be prodded into complying more strictly with these norms. ¹⁰³

b. Piracy

"Piracy", in contrast, is a vague term that has no settled legal definition. 104 In the broadest sense, it can signify any unauthorized and uncompensated reproduction or simulation of a creative intellectual product that deprives the originator of the economic or moral benefits accruing from his or her creative undertaking. This meaning implicitly emphasizes the need to treat intellectual property like other forms of property in the recognition that "ownership... is created by production, and the producer becomes the owner." 105

At a very early period, however, positive intellectual property law cut loose from this natural-law mooring in favor of the thesis that the pro-

^{101.} The Paris Convention, supra note 21, art. 28 permits states party to a dispute concerning the interpretation or application of the Convention that is not settled by negotiation to bring the matter before the I.C.J., provided that none of the parties to the dispute has disclaimed the application of article 28 at the time of its accession to or ratification of the treaty. See, e.g., Kunz-Hallstein, U.S. Proposal, supra note 97, at 278-79 (noting that 72 states are currently bound by article 28, while 26 states have opted out of I.C.J. jurisdiction). Cf. Berne Convention, supra note 22, art. 33.

^{102.} See supra note 100.

^{103.} While the industrialized countries are currently drawn to the GATT's dispute settlement machinery, which includes a consultation process, see supra note 36 and accompanying text, nothing excludes the introduction of such machinery into the framework of the Paris Convention by the kind of special agreement contemplated for the GATT in the Uruguay Round. See Kunz-Hallstein, U.S. Proposal, supra note 97, at 282. The impact on non-signatory states raises the same kinds of questions in either case. See infra text accompanying notes 622-47.

^{104.} See, e.g., Simone, supra note 83, at 116 n.1. Simone observes three current definitions of piracy, including one that "refers to all uncompensated and unauthorized reproductions [of literary and artistic works], regardless of whether they violate applicable law. This essentially non-legal usage accords with the natural law approach"

^{105.} E. Drone, A Treatise on the Law of Property in Intellectual Productions in Great Britain and the United States Embracing Copyright in Dramatic and Musical Compositions 5 (1879); see also 1 S. Ladas, The International Protection of Literary and Artistic Property 3, 4 (1938) [hereinafter S. Ladas, Artistic Property] (natural law theory of copyright based on the "idea of creation through labor"); M. Plaisant, Traité de Droit Conventionnel International Concernant la Propriété Industrielle 3-4 (1949) (stressing roots of patent law in natural justice).

tection of authors and inventors was an "artificial right" that legislators create for the promotion of certain public policy goals. On this view, which has long been the official position in the United States, 107 authors and inventors are entitled only to those rights expressly granted by the intellectual property laws in force, whether or not the applicable statutory scheme conforms to the dictates of natural justice. Anti-piracy norms thus find expression in domestic intellectual property systems and in ancillary criminal and unfair competition laws that reinforce these systems in most industrialized countries.

The territorial nature of these intellectual property laws deprives them of any "anti-piratical" effect beyond the national frontiers, 109 absent overriding treaty obligations or the application of other principles of

- 107. See, e.g., 1 P. GOLDSTEIN, COPYRIGHT 8 (1989) ("In resting United States copyright laws on a utilitarian foundation of social benefit, Congress and the courts have explicitly rejected natural rights theory as a premise for copyright protection."). But see id. at 7, 9 (evidencing ineradicable traces of natural rights philosophy in actual practice).
- 108. In the United States, the natural law theory, based on the idea of creation through labor, persisted in common-law copyright, which recognized perpetual ownership in unpublished works. See 1 S. LADAS, ARTISTIC PROPERTY, supra note 105, at 4. This was greatly abridged by the 1976 Act, which drew the line between federal and state protection at fixation rather than publication, and which brought all fixed, unpublished works within the purview of the limited times clause of the Constitution. See 17 U.S.C. §§ 101 (fixation), 301, 303 (1988).
- 109. See, e.g., 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 12; id. at 20 (stating that the Paris Convention "does not purport to do away with the protection and regulation of industrial property through national law, but tends only to remove the difficulties and risks in the way of protection of foreigners' rights, and to superimpose an international regulation on the national regulation of industrial property in each state"); E. ULMER, INTELLECTUAL PROPERTY RIGHTS AND THE CONFLICT OF LAWS 9 (1978) (noting underlying principle of territoriality in copyright and industrial property laws and stressing that effect of statutory regulation of copyright is limited to national territory in which statute was promulgated).

^{106. &}quot;The chief question to be determined is, whether copyright is a natural right of property, based on and governed by the same general principles which underlie all property; or whether it is an artificial right,—a monopoly which has been created by the legislature, and may at any time be swept away by the same power." E. DRONE, supra note 105, at 2. See also 1 S. LADAS, ARTISTIC PROPERTY, supra note 105, at 3-5. (Anglo-American conception of copyright); id. at 5-12 (describing evolution away from natural law basis in continental countries and emergence of intellectual property as a distinct legal category in its own right; and stressing a balancing of private and public interests, including "the social interest in the advancement of culture or the progress of arts and letters"); 3 P. ROUBIER, LE DROIT DE LA PROPRIÉTÉ INDUSTRIELLE 3 (1954) (recognizing that the institution of patents responds to both a concern for natural justice and a social interest in obtaining disclosures of inventions in order to advance progress).

public international law.¹¹⁰ As a result, the use of intellectual property in ways that do not violate the laws of the place where protection is sought¹¹¹ would not normally constitute either "piracy" or "infringement" in any technical legal sense, even if some moral wrong arises from the undertaking.¹¹² As Drone observed in 1879, these very principles permitted the unauthorized "republication in the United States of the work of a foreign author," which was neither "piracy, because no law [was] violated" nor "plagiarism . . . without misrepresentation as to authorship."¹¹³

The tendency of publicists promoting a trade-based initiative to condemn "piracy" and wholesale "infringements" is conducive to rhetorical abuse precisely because it fails to distinguish between violations of positive laws and notions of natural justice imperfectly implemented in these laws. This terminology facilitates a vision of the law as victims of free riding believe it ought to be without acknowledging the legitimacy of existing laws and regulations that actually permit free riders to operate with impunity. It glosses over the fact that states may neglect the intellectual property rights of their own citizens or provide inadequate measures to protect foreign intellectual property owners without committing acts of piracy or infringement in any technical, legal sense. By obscur-

^{110.} See infra text accompanying notes 117-20, 211-31, 264-93.

^{111.} The weight of authority holds that intellectual property is governed generally by the law of the place where protection is sought, unlike other forms of property, especially material property, which are governed by the law of the place where the property is located. See, e.g., 1 S. LADAS, ARTISTIC PROPERTY, supra note 105, at 7-8; E. Ulmer, supra note 109, at 13-14; Geller, International Copyright Law, supra note 35, § 3[1][a]. There is, however, contrary authority, which surfaces from time to time. See, e.g., id. at 42 n.208 (citing authorities).

^{112.} See, e.g., E. DRONE, supra note 105, at 383.

^{113.} Id. See also Wheaton v. Peters, 33 U.S. (8 Peters) 591 (1834) (In passing the Copyright Statute of 1790, Congress did not affirm an existing right but created a new right.); 1 S. LADAS, ARTISTIC PROPERTY, supra note 105, at 21 (no protection for foreigners under the common law by virtue of decision in Wheaton v. Peters). Elsewhere, efforts to extend the protection of foreign authors' rights were made in the early 1800s, either on the condition of reciprocity or through attempts to negotiate treaties for reciprocal protection of citizens. Belgium and the United States, however, stood apart from these efforts and refused to protect foreign authors. Id. at 24, 26-27; see also Note, supra note 32, at 373.

^{114.} See, e.g., Simone, supra note 83, at 116 n.1. Simone sought to avoid this "rhetorical abuse" by using piracy to refer to the situation "where laws against unauthorized reproduction exist in a given jurisdiction, but formalities and enforcement difficulties preclude injured parties from asserting their legal rights." Id. He recognizes that this usage remains ambiguous but deems it convenient.

^{115.} In many developing countries there will be no provision making the unautho-

ing the fact that such practices do not violate norms against piracy operating at the international level, the loose terminology currently in vogue¹¹⁶ promotes the illusion that signatories to the GATT need only set their dispute resolving machinery behind such phantomatic norms to drive the bulk of the pirates out of business.

Appeals to some inchoate, transcendental norm against piracy are thus conceptually unsound and empirically at odds with the free-market ethos prevalent in the industrialized countries. Conceptually, depicting national and international laws governing intellectual property as operating in separate and to some extent competing spheres is inaccurate. The rights that international intellectual property law confers represent derogations from territorial sovereignty that states have voluntarily incurred under the Great Conventions and related instruments. Where international law applies, it derives its authority solely from these agreements and from the different texts to which the sovereign states have seen fit to adhere. Absent the express consent of states, no customary international law of intellectual property has evolved to fill the gaps in existing treaties, and no universal or "peremptory" norms of intellectual property law can override territorial legislation.

The case might have been different, to be sure, if the proponents of uniform law had prevailed in the period that led up to the signing of the Paris and Berne Conventions in the 1880s.¹²¹ Uniform laws can partake

rized use in question an infringement under local intellectual property law. For example, in India, which does not belong to the Paris Convention, product patents for pharmaceuticals are unavailable, and the Government bans the import of consumer goods bearing foreign trademarks. See, e.g., Gadbaw & Kenny, supra note 95, at 186, 188, 192. In other developing countries, foreigners are directly or indirectly discriminated against when they attempt to protect their creations under local law. In still other situations involving developing countries, foreigners may not have availed themselves of opportunities for protection that formally exist under local law (such as publication in the country where copyright protection is sought), but which may not in fact be feasible. See, e.g., Simone, supra note 83.

- 116. See supra notes 81-84 and accompanying text.
- 117. See supra note 109.
- 118. See, e.g., I. Brownlie, Principles of Public International Law 109-10, 287-97 (1979) (principles of territorial sovereignty and equality of states); Restatement (Third) of the Foreign Relations Law of the United States § 102 (1987)
- 119. See, e.g., Berne Convention, supra note 22, arts. 32, 34; S. RICKETSON, supra note 34, 748-49; Paris Convention, supra note 21, art. 27; G. BODENHAUSEN, supra note 89, at 212-15.
 - 120. See supra note 118. But see infra text accompanying notes 264-93.
- 121. See, e.g., Plasseraud & Savignon, Paris 1883, supra note 54, 119-87; 2 S. Ladas, Industrial Property, supra note 68, at 62 (stating that "the dream of union

of a coercive element that reflects the imposition of norms by stronger states on weaker states.¹²² But the founders of the International Unions ultimately abandoned this approach in favor of the principle of national treatment, a principle that implied a commitment to developing minimum standards from the bottom up rather than from the top down.¹²³ As a result, the adoption of minimum standards as amendments to the Great Conventions almost always reflects a predisposing consensus in the domestic laws of major participating states;¹²⁴ and it customarily requires domestic legislation to implement new points of law or procedure arising from such a consensus.¹²⁵ In regard to patents and copyrights, moreover, these same Conventions prescribe no detailed standards con-

would remain a dream" because the "French members of the Congress, more numerous than those of other nations, wished that the uniform universal rules should be taken from . . . French law, while foreign delegates stood by their own laws").

- 122. "Generally, unification involves a forced imposition on a country of the law of another... or a deliberate reception or copying of the law of one country by another," which contrasts with the progressive harmonization carried out under successive revisions of the Great Conventions. 1 S. Ladas, Industrial Property, supra note 68, at 14-15. See also Hay & Sulzenko, supra note 32, at 477 (bilateral harmonization of trade laws may imply interference in the setting and achievement of national goals). Ladas depicts the harmonization of intellectual property laws as a process in which "uniformity of legal solutions is brought about through a slow and gradual process and in a spontaneous way on the basis of recommendations and directives internationally agreed upon." 1 S. Ladas, Industrial Property, supra note 68, at 15.
- 123. See, e.g., supra note 122; 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 64 (stating that "no reciprocity was to be required" and "[n]ational treatment was to be accorded"); see also id. at 262-75; Vaver, The National Treatment Requirements of the Berne and Universal Copyright Conventions, (Pts. 1 & 2) 17 I.I.C. 577, 715 (1986).
- 124. "Amendments of the [Paris] Convention embodying harmonization on new points of law or procedure have been successfully carried out when two factors were present: (a) a real practical interest of removing serious or unreasonable obstacles to international trade; (b) a sufficiently close similarity of law in the various countries so that this could be stabilized for the future and ensure certainty." 1 S. Ladas, Industrial Property, supra note 68, at 15. See also supra note 122; S. Ricketson, supra note 34, at 39-41. Professor Ricketson states that the pressure of the universalists, combined with the "modifying influence of pragmatists, has ensured that changes [in the Berne Convention] generally enjoyed the widest possible support, an approach which (to the universalists' dismay) has often meant the dilution or even emasculation of such measures." Id. at 41; see also id. at 917-21 (concept of "guided development" of international practice).
- 125. In theory, the Great Conventions are to some extent self-executing in states where this is constitutionally possible; but state practice has usually required confirmatory legislation. See, e.g., G. Bodenhausen, supra note 89, at 13-16; WIPO, Guide to the Berne Convention for the Protection of Literary and Artistic Works (Paris Act 1971) 5, 141 (1978) [hereinafter WIPO Guide] (discussing article 36).

cerning either the substantive prerequisites of eligibility¹²⁶ or the effective scope of protection (as distinct from the bundle of rights a state must confer).¹²⁷ The basic determinants of "piracy" or "infringement" in particular cases are thus still left to domestic law, usually that of the place where protection is sought.¹²⁸

It follows that unauthorized use of foreign-owned intellectual property rights permissible under domestic laws will not normally engage the international responsibility of States Members of the Paris and Berne Unions. Only if a state's domestic law provided less protection than its treaty obligations required could that state clearly be said to violate international law because of so-called piratical acts committed on its territory. A fortiori, states that remain outside the Unions are subject to no international intellectual property norms at all except insofar as they voluntarily enact such norms in domestic legislation, perhaps in fulfillment of bilateral treaty obligations. ¹²⁹ In either case, there is no conflict between the municipal and international legal spheres that could support some transcendental conception of "piracy" that differs from specific constraints on free riders in the various domestic legal systems.

2. Imitation as a Paradox of International Economic Law

Territorial limitations on domestic intellectual property laws, however, would not altogether preclude the quest for a transnational legal

^{126.} See, e.g., Berne Convention, supra note 22, arts. 2, 2bis (setting down the subject matter categories that must be protected, without reference to the standard of eligibility, and invoking national treatment); Paris Convention, supra note 21, arts. 1-3 (not even specifying subject-matter categories that must be protected or legal institutions that must be adopted and relying on national treatment).

^{127.} See, e.g., Berne Convention, supra note 22, arts. 6bis, 7, 7bis, 8-14ter (specifing the rights to be granted and the duration of protection, but not otherwise touching the scope of protection afforded by those rights); Paris Convention, supra note 21, arts. 1-5 (failing to specify the patent rights to be granted, the duration of protection, or the scope of protection to be afforded). See also, Kunz-Hallstein, U.S. Proposal, supra note 97, at 268 (stating that the level of protection under the Paris Convention remains "rather rudimentary . . . and low," its main advantages being "national treatment and the right of priority"); Remarks of Mr. Ralph Oman (Register of Copyrights) in 22 VAND. J. Transnat'l L. 379 (1989) (noting that "the copyright treaties, unlike the Paris Convention, do provide fairly high standards of protection") [hereinafter Remarks of Oman] (Symposium Part I).

^{128.} See supra note 111.

^{129.} See, e.g., 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 199-201 (noting that bilateral treaties between members and nonmembers of the Paris Union, or even between nonmembers, often embody both the principle of national treatment and specific advantages granted by the Convention); see also S. RICKETSON, supra note 34, at 27-38.

obligation restraining the unauthorized duplication of innovative cultural and industrial products if the unfair competition laws of states adhering to the Paris Convention broadly condemned "misappropriation" in addition to "passing off" and other wrongful commercial acts committed with intent to confuse or deceive consumers. 130 On the one hand, article 1 of the Paris Convention makes protection against acts of unfair competition "a right of industrial property." 131 On the other hand, unfair competition law "forms the background, and constitutes the general principle of which the laws protecting the . . . branches of industrial [and artistic] property are only special aspects or particular applications."132 If one could therefore show that "piracy" in the sense of systematic, unauthorized reproductions of intellectual goods on the territory of Paris Union members violated customary international unfair competition law, articles 10bis and 10ter of that Convention might come into play regardless of the legitimacy of these practices under national and international intellectual property laws. 133

a. Anomalies of the misappropriation doctrine

Misappropriation is the branch of unfair competition law concerned with the difficulties facing entrepreneurs who invest time, money, and

^{130.} See, e.g., 3 S. Ladas, Industrial Property, supra note 68, at 1705 (identifying two broad categories of acts of unfair competition). The distinction between passing off and misappropriation is central to an understanding of unfair competition law in the common-law countries, and it increasingly provides a key to analyzing the more ambiguous situation in the civil-law countries as well. See, e.g., P.J. Kaufmann, supra note 86, at 3-6; R. Brown & R. Denicola, Cases in Copyright, Unfair Competition, and Other Topics Bearing on the Protection of Literary, Musical, and Artistic Works 513-33, 533-47 (5th ed. 1989) (distinguishing the business tort of passing off from that of misappropriation). "The passing off doctrine has its primary function in the interests of the buying public," that is, it protects consumers against deception and confusion regarding the source of the offered product. P.J. Kaufmann, supra note 86, at 3-4. For the origins of the misappropriation doctrine, see infra text and authorities accompanying notes 134-52.

^{131. 2} S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 264; Paris Convention, supra note 21, art. 1.

^{132. 3} S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1675. Although Ladas omitted "artistic property" in the lines quoted, he did not mean to suggest that principles of unfair competition did not likewise underlie artistic property law. The opposite is true. See, e.g., Note, Developments in the Law: Competitive Torts, 77 HARV. L. REV. 888, 932-33 (1964) [hereinafter Competitive Torts] (casting misappropriation as a residual doctrine of unfair competition law devised to protect intangibles, including artistic property, in the absence of statutory relief).

^{133.} See Paris Convention, supra note 21, arts. 10bis, 10ter(1); supra note 91 and accompanying text; infra notes 153-57 and accompanying text.

effort in the production of intangible goods having great potential value, such as "ideas, information, formulas, designs and artistic creations, fame, goodwill, and performances of talent." Because intangible goods are inexhaustible and capable of simultaneous exploitation by any number of persons, their market value will be lost or diminished unless originators exercise some form of legal control over the fruits of their labors. Absent such control, the public benefits initially from free access and lower prices, but it may suffer long term harm if the lack of sufficient rewards or incentives unduly discourages the creation of socially useful intangible goods. As discussed below, intellectual property laws deal with this "public good" problem by artificially restricting the use of certain intangible goods so as artificially to maintain their market value. The misappropriation doctrine comes into play when no comparable statutory regime exists to address the same problem.

While the function of the misappropriation doctrine thus seems clear, its theoretical underpinnings and practical application remain controversial in view of the policies favoring one competitor's right to imitate the goods of another in a free market economy. Implicit in the case law of all developed legal systems that recognize the tort of misappropriation are notions of property or "quasi-property" rooted in natural-law thinking; elements of social cost or economic incentive theory; and ethical and moral judgments cast in terms of "unjust enrichment" or of conduct that distorts the proper workings of the market place. Rather different

^{134.} Competitive Torts, supra note 132, at 932.

^{135.} See, e.g., id. at 932-33.

^{136.} See, e.g., id. at 936-37.

^{137.} See infra notes 232-63 and accompanying text; Competitive Torts, supra note 132 at 932; see also R. Benko, supra note 7, at 15-21.

^{138.} See, e.g., 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1675; Competitive Torts, supra note 132, at 932-42; see also Baird, Common Law Intellectual Property and the Legacy of International News Service v. Associated Press, 50 U. CHI. L. REV. 411 (1983).

^{139.} Compare, e.g., P.J. Kaufmann, supra note 86, at 15 (criticizing ethical theory of unfair competition underlying misappropriation doctrine as espoused by Professors Callmann and Derenberg) and Meyer, Misapplication of the Misappropriation Doctrine to Merchandising: A Reply to Professor Bauer, 35 ASCAP: Copyright Law Symposium 69, 78, 88-91 (1988) with Terry, Unfair Competition and the Misappropriation of a Competitor's Trade Values, 51 Mod. L. Rev. 296 (1988) (endorsing broad misappropriation doctrine).

^{140.} See, e.g., International News Service v. Associated Press, 248 U.S. 215 (1918); Baird, supra note 138, at 428; Competitive Torts, supra note 132, at 935.

^{141.} See, e.g., Baird, supra note 138, at 428-29; Competitive Torts, supra note 132, at 936-37.

^{142.} See, e.g., 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1676 citing 1

legal results flow from each of these conceptual justifications or from any given combination of them.

Cases invoking improper or dishonest conduct are the least controversial insofar as they rely on acts that are universally condemned. Such cases usually emphasize the importance of goodwill to an entrepreneur's long term success and address the risk that a competitor's improper conduct may disrupt advantageous business relations built on this goodwill without direct harm to the consuming public. Examples of unethical conduct that unfair competition laws of this type commonly forbid include disparagement, commercial bribery, betrayal of trade secrets, interference with contractual relations, and false comparative advertising. As

More controversial theories come into play the moment one asks whether the tort of misappropriation also prohibits close or "slavish" imitation of intangible goods as such. Those who answer in the affirmative¹⁴⁷ must rely on the various justifications mentioned above because duplication of another's product is normally a competitor's right and no other improper conduct is at issue.¹⁴⁸ Whether by viewing the entrepreneur's goodwill as founded upon a quasi-property interest¹⁴⁹ or by invoking an economic incentive theory,¹⁸⁰ courts and commentators favor-

R. CALLMANN, THE LAW OF UNFAIR COMPETITION, TRADEMARKS, AND MONOPOLIES (3rd ed. 1969); Competitive Torts, supra note 132, at 936 (stressing unjust enrichment theory); But see P.J. KAUFMANN, supra note 86, at 8-10, 14-30 (criticizing this view).

^{143.} Even so, the modern tendency is to see such acts as sources of economic inefficiency and to condemn only those acts that can be justified in these terms. See generally P.J. KAUFMANN, supra note 86 at 7-30.

^{144.} See, e.g., 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1677-78.

^{145.} See, e.g., id. at 1705-06.

^{146.} See, e.g., id. at 1677, 1692 (reviewing civil law provisions); Competitive Torts, supra note 132, at 939.

^{147.} See infra notes 149, 151.

^{148.} See, e.g., Baird, supra note 138, at 428-29.

^{149.} In the sense that natural law philosophy views all property as founded on the rights of creators to enjoy the fruits of their own productive efforts. See supra notes 105-08; 3 S. Ladas, Industrial Property, supra note 68, at 1701 (viewing the decision in International News Service v. Associated Press, 248 U.S. 215 (1918), as "a great step... in finding unfair competition in the absence of passing-off"). See also id. at 1678 (goodwill as a property interest). The recognition of a quasi-property interest serves to preclude a competitor from diverting the fruits of a growing enterprise to the competitor's own account by measures that duplicate the original product or process without seeking to improve upon it or to vary it through independent effort and additional investment. See, e.g., P.J. Kaufmann, supra note 86, at 4-5 (criticizing "a quasi-patent analysis" that allows the goodwill in an imitated product to be protected as such).

^{150.} See supra notes 140-42; Baird, supra note 138, at 428-29 (noting that the two

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ing this doctrine may treat a competitor who exactly imitates or slavishly copies another's products, designs, or processes without any corresponding investment of his own as a commercial parasite who "reaps where he has not sown." That the tortfeasor neither confused nor deceived the public becomes irrelevant under this approach because his encroachment on the originator's goodwill by such means is deemed unjust enrichment in itself. 152

If one could demonstrate that States Members of the Paris Convention recognized this broad misappropriation doctrine in their domestic laws of unfair competition, exporters entitled to national treatment could logically expect to invoke the doctrine in international trade. The copying of unpatented intellectual products and processes might then constitute an "act of competition contrary to honest practices in industrial or commercial matters" as set out in paragraph 2 of article 10bis. Arguably, paragraph 1 of article 10bis would then bind "countries of the Union... to assure to nationals of such countries effective protection" against slavish imitation, even though paragraph 3 of this same article does not mention slavish imitation in the particularized list of dishonest practices that "shall be prohibited." Widespread acceptance of the broad misappropriation doctrine could thus entitle it to considerable weight even

justifications are often combined).

^{151.} See, e.g., International News Service v. Associated Press, 248 U.S. 215, 239 (1918); R. CALLMANN, THE LAW OF UNFAIR COMPETITION 33 (L. Altman 4th ed. 1981) ("If the copyist rival is permitted to ride 'piggy-back' into the market, on the shoulders of one who has legitimately sown, the classical injunction against the reaping of another's harvest is violated."); P.J. KAUFMANN, supra note 86, at 79 (discussing views of Verkade and Limpberg, who see imitation as the practice of "marginal producers" who rob bona fide producers of their investment and market share; reduce the level of quality production; and spoil the market for true innovators). See also 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1689 ("The dictum 'no one should reap where he has not sown' requires delicate application.").

^{152.} See supra notes 149, 151; see also 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1714-15 (traces of this doctrine in German law); id. at 1716-17 (influence of this doctrine on Italian law).

^{153.} See Paris Convention, supra note 21, art. 2(1) (national treatment).

^{154.} Paris Convention, supra note 21, art. 10bis(2); see supra note 91 and accompanying text; 3 S. Ladas, Industrial Property, supra note 68, at 1686 (Article 10bis is predicated on the assumption that "good morals and honest practices are notions which have a theoretical universality"). If enough states recognized this doctrine in this way, it could be evidence of "honest practices established in international trade," to which appeal might be made even in countries where the doctrine was not available in domestic law. See, e.g., G. Bodenhausen, supra note 89, at 144.

^{155.} See, e.g., 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1706 (dishonest acts outside purview of article 10bis(3)) are prohibited under general rule of 10bis(2)).

under existing international legislation¹⁵⁶ and would, at the very least, constitute a predisposing consensus from which a more refined international minimum standard could emerge.¹⁵⁷

b. Negative mandate of the patent system

Empirical evidence concerning actual state practice excludes this hypothesis, however, at least for the short and medium terms. The United States Supreme Court, for example, after flirting briefly with the broad doctrine of misappropriation in the famous *International News Service* decision of 1918, ¹⁵⁸ rejected that same doctrine twenty years later in *Kellogg Co. v. National Biscuit Co.* ¹⁵⁹ In the latter decision, which supports the thesis that "imitation is the lifeblood of commerce," the Court stressed that sharing in the goodwill of an article created by the skill and judgment of another was not unfair. ¹⁶⁰ On the contrary, "sharing in the goodwill of an article unprotected by patent or trade-mark is the exercise

^{156.} Assuming it could be shown that misappropriation was a practice generally considered dishonest in international trade, which is a big if, then the Paris Convention might be directly invoked against it in countries where the treaty was self-executing. See, e.g., G. Bodenhausen, supra note 89, at 143-44. The sanctions and remedies would depend on national law. Id. at 144. See also Paris Convention, supra note 21, art. 10ter(1) (obliging Union countries to ensure appropriate legal remedies for acts in violation of article 10bis, among others).

^{157.} See supra note 68-72 and accompanying text. In reality, the legal status of slavish immitation is highly controversial and one of the areas of unfair competition law on which there is little consensus. See, e.g., 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1685, 1689, 1710 (apparently favoring the view that slavish imitation is lawful unless the means employed are themselves unfair or unlawful). See infra text accompanying notes 158-206.

^{158.} See International News Service v. Associated Press, 248 U.S. 215, 239-40 (1918) (expressly recognizing the natural rights doctrine that an entrepreneur was entitled to reap where he had sown). International News affirmed the "sweat of the brow" rationale in nonstatutory federal unfair competition law, spoke approvingly of a quasi-property interest in the product of creative efforts, and condemned the exploitation of work done by others.

^{159. 305} U.S. 111 (1938) (Brandeis, J.).

^{160.} Kellogg, 305 U.S. at 122 (Brandeis, J.). Justice Brandeis had earlier declared that the uncompensated "taking and gainful use of a product of another which, for reasons of public policy, the law has refused to endow with the attributes of property, does not become unlawful because the product happens to have been taken from a rival and is used in competition with him." International News 248 U.S. at 258 (Brandeis, J., dissenting). This thesis was popularized in the axiom "imitation is the lifeblood of commerce." See American Safety Table Co., Inc. v. Schreiber, 269 F.2d 255, 272 (2d Cir. 1959) (Medina, J.). For its latest reincarnation in a Supreme Court opinion, see infra text accompaning notes 182-84.

of a right possessed by all—and in the free exercise of which the consuming public is deeply interested."¹⁶¹

Although the Kellogg decision became technically obsolete after 1938 due to constitutional limits imposed on the common-law jurisdiction of federal courts, ¹⁶² the United States Supreme Court reiterated the same principles in Sears-Roebuck & Co. v. Stiffel Co. ¹⁶³ and Compco Corp. v. Day-Brite Lighting, Inc. ¹⁶⁴ The Sears-Compco opinions, handed down in 1964, unequivocally rejected the broad misappropriation doctrine as inconsistent with the federal patent and copyright laws, which emanated from the enabling clause in the Constitution. ¹⁶⁵ These laws defined socially beneficial conditions that had to be met before innovators could insulate themselves from price competition at the public's expense. ¹⁶⁶

^{161.} Kellogg, 305 U.S. at 122. That the product and its name had become a household word and that its unpatented shape identified the product with a typical form of manufacture were considered "facts without legal significance," given the competitor's efforts to avoid deception or confusion in marketing its own product. Id. at 119. See, e.g., P.J. KAUFMANN, supra note 86, at 73. See also Crescent Tool Co. v. Kilborn & Bishop Co., 247 F. 299 (2nd Cir. 1917) (L. Hand, J.); Cheney Bros. v. Doris Silk Corp., 35 F.2d 279 (2nd Cir. 1929) cert. denied 281 U.S. 728 (1930).

^{162.} See Erie R.R. Co. v. Tompkins, 304 U.S. 64 (1938). The Erie doctrine required federal courts to apply state laws to comparable situations in the future. See, e.g., 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1701-02 (The vast body of federal case law "representing an effective set of rules against unfair business practices" was cut off by the Erie doctrine.). The ability of the United States to meet its international obligations under article 10bis of the Paris Convention was consequently open to doubt, and efforts were made to conform section 44, and then section 43(a), of the Lanham Act 15 U.S.C. §§ 1126, 1125(a) (1988) to its provisions. See, e.g., id. at 1702-03. Meanwhile, state unfair competition laws became increasingly receptive to the broad misappropriation doctrine, especially with regard to unpatented, noncopyrightable industrial designs. See, e.g., Reichman, Design Protection in Domestic and Foreign Copyright Law: From the Berne Revision of 1948 to the Copyright Act of 1976, 1983 DUKE L.J. 1143, 1224-25 [hereinafter Reichman, Designs Before 1976]; Ringer, The Case for Design Protection and the O'Mahoney Bill, 7 Bull. Copyright Soc'y 25, 29-30 (1959).

^{163. 376} U.S. 225 (1964).

^{164. 376} U.S. 234 (1964).

^{165.} See, e.g., Compco, 376 U.S. at 238 ("[R]egardless of the copier's motives, neither these facts, nor any others, can furnish a basis for imposing liability for or prohibiting the actual acts of copying and selling."); Meyer, supra note 139, at 92.

^{166.} See Compco, 376 U.S. at 237 ("[T]o allow state law to forbid copying an article unprotected by patent or copyright laws would interfere with the federal policy . . . of allowing free access to copy whatever [these laws] leave in the public domain."). See also 3 S. Ladas, Industrial Property, supra note 68, at 1711 (United States Constitution empowers Congress to promote invention while preserving free competition); P.J. Kaufmann, supra note 86, at 77 (patent monopoly protects inventor from price competition and constitutes private reward for public benefit).

Implicit in the positive grants of exclusive intellectual property rights, in other words, was a negative mandate favoring competition whenever the federal intellectual property system afforded no protection. Product simulation, rooted in the principle that "imitation is the lifeblood of commerce," thus became a right, not a wrong, provided that the imitator did not at the same time commit tortious acts of confusion or deception and that he sufficiently distinguished his packaging or trade dress from that of the originator. 168

The Sears-Compco opinions prevented state misappropriation laws from protecting industrial designs ineligible for design patent protection. The United States Copyright Act of 1976 confirmed these limitations on state-law doctrines of misappropriation and applied them to literary and artistic works in general. In the 1970s, however, the Supreme Court appeared to retreat from its position in a number of decisions that left the states considerable leeway in which to limit unauthorized duplication of unpatented articles. Courts and commentators hostile to Sears-Compco then began to assert that these precedents did

^{167.} See Goldstein, The Competitive Mandate: From Sears to Lear, 59 Calif. L. Rev. 873 (1971); see also Goldstein, Pre-empted State Doctrines, Involuntary Transfers and Compulsory Licenses: Testing the Limits of Copyright, 24 UCLA L. Rev. 1107, 1112-18 (1979); Meyer, supra note 139, at 88-91, 92-97. Meyer states: "[m]isappropriation . . . swallows all other intellectual property doctrines and creates property rights where none would otherwise exist. The . . . doctrine . . . conflict[s] with the federal statutory schemes of copyright, patent, and trademark protection." Id. at 88-89.

^{168.} See, e.g., Brown, Design Protection: An Overview, 34 UCLA L. Rev. 1341, 1357-58 (1987). Professor Brown stresses that, under Sears-Compco, "to imitate and copy another's goods is not a legal wrong unless the victim of copying has a legal right that has been invaded." Id. See also B. Kaplan, An Unhurried View of Copyright 2 (1967). "[I]f man has any 'natural' rights, not the least must be a right to imitate his fellows, and thus to reap where he has not sown." Id. But see Derenberg, The Influence of the French Code Civil on the Modern Law of Unfair Competition, 4 Am. J. Comp. Law 1, 6-8 (1955); Note, He Who Reaps Where He Has Not Sown: Unjust Enrichment in the Law of Unfair Competition, 55 Harv. L. Rev. 595, 597, 612-14 (1942). See generally Product Simulation: A Right or a Wrong?, 64 Colum. L. Rev. 1178 (1964) (Symposium).

^{169.} See, e.g., Reichman, Designs Before 1976, supra note 162, at 1224-27.

^{170. 17} U.S.C. § 301 (1988); see, e.g., Meyer, supra note 139, at 91-97.

^{171.} See Aronson v. Quick Point Pencil Co., 440 U.S. 257 (1979) (contract to pay royalties enforceable despite invalidation of corresponding patent); Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470 (1974) (state trade secret laws not preempted); Goldstein v. California, 412 U.S. 546 (1973) (state law giving copyright protection to sound recordings unprotected by federal copyright law was not preempted). Section 301 of the 1976 Copyright Act was, in part, a response to the Goldstein decision. See supra note 170 and accompanying text.

not restrict the scope of federal unfair competition law developing around Section 43(a) of the United States trademark law, known as the Lanham Act.¹⁷² They reasoned that statutory regulation of both registered and unregistered trademarks served valid federal purposes that were neither preempted by, nor inferior in status to, the goals that federal patent and copyright laws were enacted to promote.¹⁷³

Under cover of this immunizing thesis, the federal appellate courts began, in the mid-1970s, to broaden the accepted notion of "trade dress" in order to repress acts of product simulation not necessarily reached by unfair competition doctrines sounding in either the confusion or deception rationales.¹⁷⁴ By the late 1980s, and despite a Congressional decision in 1976 not to enact a sui generis design protection law,¹⁷⁵ these same courts had so extended the protection of unpatented, noncopyright-

^{172.} Lanham Act, ch. 540, § 43(a), 60 Stat. 427, 441 (1946) (prohibiting "a false designation of origin, or any false description or representation, including words or other symbols"), amended by Trademark Law Revision Act of 1988, § 103, Pub. L. No. 100-667, 102 Stat. 3935 (1988) (codified at 15 U.S.C. § 1051 (1988)) (prohibiting use of words, symbols and the like in connection with goods, services, or containers that cause consumer confusion, or that use commercial advertising to misrepresent goods, services or commercial activities). The official purpose of the amended text is "to codify the interpretation it has been given by the courts." See Report of the Comm. on the Judiciary, U.S. Senate, S. Rep. No. 515, 100th Cong., 2d Sess. 40-41, reprinted in 1988 U.S. Code Cong. & Admin. News 5603.

^{173.} See, e.g., 17 U.S.C. § 301(d) (1988) (other federal statutes not preempted); Warner Bros., Inc. v. Gay Toys, Inc., 658 F.2d 76 (2d Cir. 1981), on remand 553 F. Supp. 1018 (S.D.N.Y. 1983), affd, 724 F.2d 327 (2d. Cir. 1984); In re Morton-Norwich Prods., 671 F.2d 1332, 1339 (C.C.P.A. 1982); Truck Equip. Serv. Co. v. Fruehauf Corp., 536 F.2d 1210 (8th Cir. 1976), cert. denied, 429 U.S. 861 (1976); Bauer, A Federal Law of Unfair Competition: What Should Be the Reach of Section 43(a) of the Lanham Act, 31 UCLA L. Rev. 671, 724-28, 725 n.219 (1984). But see, e.g., Brown, supra note 168, at 1359-62, 1383-86 and Meyer, supra note 139, 97-109. Both Brown and Meyer argue that the Sears-Compco decisions also apply to federal unfair competition law in the sense that they prevent courts from using section 43(a) to prohibit the copying of unpatented, noncopyrightable articles under a de facto theory of misappropriation.

^{174.} See supra note 173; Meyer, supra note 139, at 104 ("The rationale in both Boston Hockey and Gay Toys is virtually indistinguishable from the majority's analysis in I.N.S."). See also Note, The Problem of Functional Features: Trade Dress Infringement Under Section 43(a) of the Lanham Act, 82 COLUM. L. REV. 77 (1982); Brown, supra note 168, 1380-81.

^{175.} See Reichman, Designs Before 1976, supra note 162, at 1260-64; see also Reichman, Design Protection After the Copyright Act of 1976: A Comparative View of the Emerging Interim Models, 31 J. COPYRIGHT SOC'Y 267 (1984) [hereinafter Reichman, Designs After 1976] (discussing early consequences of the congressional decision not to enact a design law and predicting the trend described in the text).

able industrial designs against slavish imitation under Section 43(a) as to cast serious doubt upon the continued inapplicability of the broad misappropriation doctrine in federal unfair competition law.¹⁷⁶ The proliferation of cases sounding these themes and the extent to which they have relied on overt or covert principles of misappropriation suggest, indeed, a growing judicial disenchantment with the raw competitive ethos as traditionally conceived in Anglo-American law.¹⁷⁷

In 1989, however, the United States Supreme Court—in a rare display of unanimity—reaffirmed the continued vitality of the Sears-Compco decisions and of the anti-misappropriation thesis they embodied. In Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 179 the Court invalidated state statutes forbidding competitors to duplicate the shapes of certain articles by processes that used the originators' finished products as "plugs" for molding the competing products. These statutes unconstitutionally interfered with the federal intellectual property system because they limited a competitor's right to copy an article that had not otherwise met the statutory prerequisites for protection under federal patent, copyright, or trademark laws. The Supreme Court thus recon-

^{176.} See, e.g., Clamp Mfg. v. Enco Mfg., 870 F.2d 512 (9th Cir. 1989); Brunswick Corp. v. Spinit Reel Co., 832 F.2d 513 (10th Cir. 1987); Vaughan Mfg. v. Brikam Int'l, 814 F.2d 346 (7th Cir. 1987); Le Sportsac, Inc. v. K-Mart Corp., 754 F.2d 71 (2d Cir. 1985). See generally Reichman, Design Protection and the New Technologies: The United States Experience in an International Perspective, _____ U. Baltimore L. Rev. _____ (symposium issue on industrial designs, forthcoming, Winter, 1990) [hereinafter Reichman, Designs and New Technologies]. The erosion of the functionality doctrine is accompanied by the dilution of the secondary meaning requirement in these trendsetting "appearance trade dress" cases. The decisions turn on copying and not trademark law or related principles of unfair competition law. Hence, the doctrine of misappropriation actually controls the end results.

^{177.} Compare, e.g., Reichman, Designs and New Technologies, supra note 176 (showing vigorous support for misappropriation doctrine in federal appellate courts) with Derenberg, supra note 168, at 1-8 (criticizing the conservative Anglo-American approach to unfair competition).

^{178.} Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 109 S. Ct. 971 (1989) (invalidating state "plug mold" statutes, which forbid competitors to duplicate unpatented products by using the originator's product configurations as molds for the competitors' products in a "direct molding process").

^{179. 109} S. Ct. 971 (1989).

^{180.} See, e.g., Fla. Stat. § 559.94 (1987) (forbidding use of direct molding process to duplicate hull or component part of a sailing vessel without permission); see also Interpart Corp. v. Italia, 777 F.2d 678, 685 (Fed. Cir. 1985) (upholding validity of a similar California statute).

^{181.} Bonito Boats, 109 S. Ct. at 980-81, 984-86.

firmed the negative mandate implicit in the patent system, ¹⁸² which "embodied a careful balance between the need to promote innovation and the recognition that *imitation and refinement through imitation are the very lifeblood of a competitive economy.*" ¹⁸³ The Court further reiterated that the legitimate concern of unfair competition law lay in "protecting *consumers* from confusion as to source . . . not [in] the protection of producers as an incentive to product innovation." ¹⁸⁴

The precise effect that *Bonito Boats* will have on the continued use of Section 43(a) of the Lanham Act to forbid imitation of unpatented, noncopyrightable product configurations remains to be seen. When a nonfunctional configuration has acquired a high degree of secondary meaning and a real likelihood of confusion arises from the competitor's unnecessary use of a similar configuration, ¹⁸⁵ its protection as "appearance trade dress" will not inherently conflict with *Bonito Boats*. ¹⁸⁶ But the broad extension of Section 43(a) to prevent servile imitation of product designs otherwise differentiated as to source of origin is inconsistent with the plain meaning of the Supreme Court's latest opinion in this field. ¹⁸⁷ It thus seems fair to conclude that the broad misappropriation doctrine retains no solid foothold in United States unfair competition law as of 1989, even if that doctrine possesses the capacity to reflower any time changed economic conditions liberate protectionist tendencies that remain very much alive beneath the surface.

^{182.} See, e.g., Bonito Boats, 109 S. Ct. at 980 (stating that the novelty and nonobviousness requirements of federal patent law "provide the baseline of free competition upon which the patent system's incentive to creative effort depends"); id. at 984 ("Sears and Compco protect more than the right of the public to contemplate the abstract beauty of an otherwise unprotected intellectual creation—they assure its efficient reduction to practice and sale in the marketplace.").

^{183.} Id. at 975 (emphasis supplied); see also Kellogg Co. v. Nat'l Biscuit Co., 305 U.S. 111 (1938), cited with approval in Bonito Boats, 109 S. Ct. at 978.

^{184.} Bonito Boats, 109 S. Ct. at 981 (emphasis in original).

^{185.} For the importance of high standards to avoid deforming the trademark law into a judge-made design law that inherently overprotects industrial designs, see Reichman, *Designs and New Technologies*, supra note 176 (forthcoming).

^{186.} See Bonito Boats, 109 U.S. at 979 (State regulation of confusing trade dress remains permissible; a fortiori, similar regulation under Lanham Act § 43(a) must be allowed, even though "[t]rade dress is . . . potentially the subject matter of design patents."). Cf. 17 U.S.C. § 301(d) (1988).

^{187.} See supra notes 182-84 and accompanying text.

c. Limits of the competitive ethos

The experience in other industrialized countries appears equally ambivalent. With the exception of the Netherlands, where courts and commentators overtly favor the broad misappropriation doctrine, the dominant view in most of these countries appears to reject it. The Court of Justice of the European Community, moreover, whose jurisprudence affects the Common Market as a whole, reportedly believes that "the law of unfair competition primarily serves to prevent consumer confusion." But ethical and moral evaluations of unfair business practices that portray imitation as unjust enrichment are still deeply rooted in all industrialized countries, and the use of economic analysis to clarify the foundations of unfair competition law has only recently gained ground. Foreign courts, like their United States counterparts, accordingly tend to resist slavish imitation in their decisions and to rationalize the end results in terms of strained applications of the confusion rationale.

^{188.} See, e.g., 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1712 (finding misappropriation a "controversial subject" that requires a difficult balancing of interests, because the aim is "to curb improper business conduct but not to risk subversion of the competitive process itself.").

^{189.} See, e.g., P.J. KAUFMANN, supra note 86, at 83 (Dominant Netherlands doctrine forbids imitation at the expense of those who invest much time and effort to develop new, unpatentable products; originator of "imitated product has a right to be protected against the piracy of the imitator.").

^{190.} For the United Kingdom, see W. CORNISH, PATENTS, COPYRIGHTS, TRADE-MARKS AND ALLIED RIGHTS 8-13 (1981) (finding it unlikely that a common-law doctrine of misappropriation could take root in the United Kingdom); see also 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1712-13. For the Federal Republic of Germany and France, see P.J. KAUFMAN, supra note 86, at 92-100; 3 S. LADAS, supra note 68, at 1714-15; for Japan, see id. at 1704. The tendency in all these countries is reportedly to emphasize the confusion rationale. An independent evaluation of the situation in these and other countries is beyond the scope of this Article.

^{191.} P.J. Kaufmann, supra note 86, at 112 (citing authorities). But see infra note 194.

^{192.} See, e.g., P.J. KAUFMANN, supra note 86, at 4, 12-13.

^{193.} See generally id. at 10-30.

^{194.} See, e.g., P.J. Kaufmann supra note 86, at 95-96, 98-100 (tendency to strain confusion test rather than to repress copying of skilled efforts generally in the Federal Republic of Germany; ghosts of pre-war misappropriation doctrine continue to haunt the courts despite formal allegiance to competitive principles). See also 3 S. Ladas, Industrial Property, supra note 68, at 1701, 1715-16. In the United Kingdom, the lack of a misappropriation doctrine spurred the courts to extend copyright protection to functional designs in the 1970s. See, e.g., W. Cornish, supra note 190, at 306-08, 411-22. This anti-competitive practice was ended by the United Kingdom's Copyright and De-

The whole topic is further complicated by the advent of new technologies, such as biogenetics and computer software, whose socially valuable innovations fit imperfectly under either the patent or the copyright paradigms. The resulting vulnerability of applied scientific know-how to rapid duplication, which is closely related to the older but still unsolved problem of industrial designs, has led to a growing reevaluation of the misappropriation doctrine that assumes different guises in different countries. This trend recently culminated in a new Swiss unfair competition law, enacted in 1986, which expressly aims to prevent slavish duplication of new technologies. 197 By requiring competitors to reverse

signs Act of 1988, but the unregistered design law introduced by this act gives both functional and aesthetic designs short term protection against misappropriation. See Copyright and Designs Act of 1988, Ch. 48, §§ 213-64; Fellner, The New U.K. Industrial Design Law, _____ U. Baltimore L. Rev. _____ (symposium issue on industrial designs forthcoming, Winter, 1990). Even the Beele decision of the European Court of Justice in 1982, although stressing the primacy of the confusion rationale, uses ambiguous language that can be read to permit domestic courts to repress slavish imitation as such. See B.V. Industrie Diensten Groep v. J.A. Beele Handelmaatschappij, 1982 ECR 707 (CJEC 1982), 1982 GRUR INT. 439; P.J. KAUFMANN, supra note 86, at 109-12. 195. See Reichman, Programs as Know-How, supra note 27, at 648-667, 690-98, 714-18 (1989):

Paradoxically, such products [embodying applied scientific know-how] obtain little or no protection under the dominant paradigms of classical intellectual property law despite their contribution to the public welfare. This . . . follows because the patent paradigm will exclude the bulk of the new technological innovations that appear to be slight or merely incremental advances over the prior art. At the same time, because of their functional character, the new technologies are alien to the spirit of the copyright paradigm, which historically rewards works of art and literature without encroaching upon the domain of industrial property law.

Id. at 660-661; see also Eisenberg, Proprietary Rights and the Norms of Science in Biotechnology Research, 97 YALE L.J. 177 (1987); Samuelson, CONTU Revisited: The Case Against Copyright Protection for Computer Programs, 1984 DUKE L.J. 663, 705-54, 762-69; infra text accompanying notes 196-201, 604-21.

196. The overall tendency has been to throw an array of old and new legal institutions at this moving target, with little success and with considerable strain to the world's intellectual property system. See generally Reichman, Programs as Know-How, supra note 27, at 662-67 (discussing biogenetic patents; copyright and sui generis protection of software; copyright and sui generis protection of data bases; sui generis protection of semiconductor chip designs; design patents; expanded protection of "appearance trade dress;" ornamental design laws; functional design laws; utility model laws; and the use of unfair competition laws to protect new technologies). See also Reichman, Designs and New Technologies, supra note 176 ("Why Know-How Attracts the Copyright Paradigm").

197. See Loi federale contre la concurrence deloyale du 19 Decembre 1986 [Federal Law on Unfair Competition of 19 December 1986], art. 5 (Switzerland) (effective March 1, 1988), reprinted in 27 INDUS. PROP. 1 (1988) (Laws & Treaties Supp.); see also

engineer these technologies, the Swiss law encourages incremental innovation while helping innovators to recoup their initial investment in research and development.¹⁹⁸

Although future trends are hard to predict, the crucial role of high technology in advanced development strategies pulls for greater, not lesser, reliance on the misappropriation rationale, at least in the short term. Until such time as a new intellectual property paradigm capable of dealing directly with the problem of applied scientific know-how has been worked out, 199 courts and legislators in many countries may well turn to the misappropriation branch of their respective unfair competition laws for temporary measures to safeguard the desired levels of domestic innovation. 200 Indeed, one can view the drive to bring intellectual property within the GATT as largely an attempt to install some emergency regime capable of protecting new technologies against misappropriation in a legal universe that lacks ready-made institutions to achieve this purpose at either the domestic or international levels. 201

Probst, Protection of Integrated Circuits in Switzerland, 4 E.I.P.R. 108, 109-10 (1988). According to Probst, products resulting from considerable research and development will be protected longer than common merchandise. *Id.* at 110.

^{198.} See generally Probst, supra note 197.

^{199.} See generally, J.H. Reichman, Legal Hybrids Between the Patent and Copyright Paradigms, (Nov. 30, 1989) (paper presented to the Forum on Intellectual Property Issues in Software, National Research Council, National Academy of Sciences, Computer Science and Technology Board, Washington, D.C.) [hereinafter Reichman, Legal Hybrids]. See also W. Kingston, The "Thesis" Chapters, in DIRECT PROTECTION OF KNOW-HOW (W. Kingston ed. 1985) [hereinafter DIRECT PROTECTION]; F. MAGNIN, KNOW-HOW ET PROPRIÉTÉ INDUSTRIELLE (1974); Kronz, Patent Protection for Innovations: A Model, 7 E.I.P.R. 178, 180 (1983).

^{200.} See supra notes 194, 197 and accompanying text. For example, the fact that courts and commentators in the Netherlands have clung to the misappropriation rationale notwithstanding criticism seems directly related to the problems of new technologies. See supra note 189. In this respect, commentators in the Netherlands favor the earlier thesis of Professor Hubmann, who argued that skilled efforts should be protected outside the existing patent and copyright systems. See, e.g., P.J. Kaufmann, supra note 86, at 83-85, 89 (showing connection between Verkade and Hubmann's Leistungsschutz, or theory of skilled efforts). See also Reichman, Designs After 1976, supra note 175, at 276-83 (explaining Hubmann's theory of skilled efforts). While courts in the Federal Republic of Germany appear to have rejected this thesis, see P.J. Kaufmann, supra note 86, at 92-96, article 5 of the new Swiss Unfair Competition Law may be viewed as the first legislative implementation of Hubmann's thesis. See supra note 197; P.J. Kaufman, supra note 86, at 92-93, 96.

^{201.} See, e.g., J. Gorlin, A Trade-Based Approach for the International Copyright Protection for Computer Software (Sept. 1, 1985) (unpublished paper); 1988 U.S. Proposal, supra note 5, at 361 (application to emerging technologies); Note, supra note 32, at 368 n.1 (stressing losses to high technology and citing 1 PRESIDENT'S COMM'N ON

If the empirical evidence thus confirms that a broad misappropriation doctrine is not so universally recognized that article 10bis of the Paris Convention could oblige Member States to include it in their domestic laws of unfair competition, 202 the evidence also reveals the extent to which state practice in the OECD countries remains of two minds as regards the slogan "imitation is the lifeblood of commerce." Fundamental doubts concerning the nature of piracy have attacked core premises of the free-market system in the very industrialized countries that are traditionally its most ardent defenders. These doubts infuse the dominant laissez-faire ethos with a tinge of hypocrisy and breed tensions that prevent the different branches of intellectual property law from pulling together in any coherent fashion. They also render the free-market economies as a whole increasingly vulnerable to special interests that exploit latent sympathies for the proposition that "no one should reap where he has not sown" in order to engraft new monoplistic concessions

INDUS. COMPETITIVENESS, GLOBAL COMPETITION: THE NEW REALITY 21 (1985)). See also Dreyfuss, Information Products: A Challenge to Intellectual Property Theory, 20 N.Y.U. J. INT'L L. & POL. 897 (1989). For the view that applied scientific know-how requires special treatment in the Uruguay Round negotiations, see infra text accompanying notes 604-21.

202. See, supra notes 91, 152-57 and accompanying text; 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1686 (stressing that practices covered by paragraph 2 of article 10bis pertain to "acts which, by general consensus, should always and everywhere be deemed . . . unfair competition and should be suppressed as such"). For the difficulties of reaching universal consensus regarding specific acts of unfair competition, see id. 1685-86.

203. Compare Lehmann, The Theory of Property Rights and the Protection of Intellectual and Industrial Property, 16 I.I.C. 525 (1985) [hereinafter Lehmann (1985)] and Lunn, The Roles of Property Rights and Market Power in Appropriating Innovative Output, 14 J. Legal Stud. 423 (1985) and Landes & Posner, Trademark Law: An Economic Perspective, 30 J.L. & Econ. 265 (1987) with Breyer, The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs, 84 Harv. L. Rev. 281 (1970) and Mandeville & MacDonald, Innovation Protection Viewed from an Information Perspective, in Direct Protection, supra note 199, at 157 (stating that "the patent system works only because it does not work: . . . its very weakness is its real strength") and R. Benko, supra note 7, at 27-30 (noting the views of those hostile to intellectual property protection).

204. See, e.g. Pendleton, Intellectual Property, Information-based Society and a New International Economic Order—The Policy Options, 7 E.I.P.R. 31 (1988); Oddi, supra note 34, at 832-36.

205. Compare, e.g., Mandeville & MacDonald, supra note 203, at 159 (providing strong protection for innovation by the grant of strictly enforceable property rights in technological information could stifle overall innovative process) with W. Kingston, supra note 199, at 287-88 (arguing that the principle of patenting is highly conducive to innovation in a dynamic information economy).

onto existing intellectual property systems.206

These ambiguities in the domestic laws of unfair competition reveal a curious paradox at the heart of the controversy surrounding a trade-based approach to the international "piracy" of intellectual goods. On the one hand, the developed countries that nominally subscribe to a regime of free competition²⁰⁷ want the rest of the world to strengthen their domestic intellectual property laws and to accept international minimum standards that could significantly restrict opportunities to copy cultural and technological products originating in the industrialized countries.²⁰⁸ These countries thus envision a protected and highly regulated international market for intellectual goods in which authors and inventors securely reap the fruits of their creative endeavors. The industrialized countries also seem eager to project the doctrine of misappropriation they are reluctant to adopt at home into the trade laws that govern the international arena.

On the other hand, Second and Third World countries, whose domestic economic policies restrict free-market principles, appear to support free competition for products of human ingenuity in the international marketplace. The developing countries in particular retain a penchant for weak intellectual property laws at home, especially as regards foreign proprietary rights; and they oppose any trade-based initiative that would limit their ability to exploit foreign intellectual property in domestic development strategies.²⁰⁹ In effect, these countries envision an unregulated

^{206.} See infra text accompanying notes 671-77; Brown, supra note 168, at 1399-1400 (criticizing proposed United States design law as "a bald piece of protectionism, aimed . . . at the Japanese and other competitors in the replacement parts market"). See also Kastenmeier & Remington, The Semiconductor Chip Protection Act of 1984: A Swamp or Firm Ground, 70 MINN. L. REV. 417 (1985).

^{207.} Commitment to free-market principles in the OECD was historically less wholehearted than in the United States, and government intervention via a dirigiste economy is still taken for granted in most of these countries. See, e.g., Hay & Sulzenko, supra note 32, at 472. For the tendency of industrialized countries, including the United States, to cushion themselves against legitimate imports from developing countries that are too competitive for comfort, see, e.g., R. HUDEC, DEVELOPING COUNTRIES, supra note 9, at 76-77.

^{208.} See supra notes 31-37 and accompanying text.

^{209.} See supra text accompanying notes 38-62.

international marketplace in which few if any legal obstacles stand in the way of making "imitation the lifeblood of commerce."²¹⁰

B. Obsolete Distinction Between Tangible and Intangible Alien Property

The developing countries' quest for cheap foreign technology necessarily stops short of invading the territories of richer states in order to physically appropriate machinery, laboratory equipment, and other material embodiments of high technology needed to advance their development goals.²¹¹ To do so would invite armed resistance consistent with the law of self-defense;²¹² economic retaliation consistent with the rule of proportionality and with other constraints on self-help remedies under present-day international law;²¹³ and an international claim for reparations.²¹⁴ Nor can needy states take the much easier path of confiscating material technological assets they covet from aliens enticed within their own territorial boundaries. To do so would subject the host states to international claims for violating the public international law of takings, in which case these states would probably have to pay compensatory reparations in the end.²¹⁵

^{210.} See supra note 183 and accompanying text (United States Supreme Court's recent reaffirmation of this principle).

^{211.} Absent a license to enter, the agents of one state may not enter the territory of another and there act in their official capacity, lest this activity disrupt the exclusive power of the territorial sovereign to regulate the territory, its population, and the property within it. See, e.g., I. Brownle, supra note 118, at 321; Restatement (Third) of Foreign Relations Law § 206 (1989) (principle of territorial sovereignty). See also I. Brownle, supra note 118, at 287 (deriving exclusive territorial jurisdiction, duty of nonintervention, and the necessity of state consent to legal obligations from the "sovereignty and equality of states, [which] represent[s] the basic constitutional doctrine of the law of nations").

^{212.} See, e.g., U.N. CHARTER, art. 51; M. AKEHURST, A MODERN INTRODUCTION TO INTERNATIONAL LAW 261-66 (6th ed. 1987).

^{213.} See, e.g., P. REUTER, DROIT INTERNATIONAL PUBLIQUE 398-400 (1976) (discussing role of retorsion and retaliation, including limits on trade and eventual rupture of economic relations).

^{214.} See, e.g., Chorzow Factory Decision (Indemnity), 1928 P.C.I.J. (ser. A) No. 17, at 29 (principle of reparation for any breach of international law); P. REUTER, supra note 213, at 213, 227.

^{215.} See generally I. Brownlie, supra note 118, 518-551; I. Brownlie, System of the Law of Nations: State Responsibility (Part I) 1-52, 132-58 (1983) [hereinafter Brownlie, State Responsibility]; Restatement (Third) Foreign Relations Law §§ 712, 713 (1987); infra notes 216-222 and accompanying text. The alien's state can no longer use force in defense of its national's loss of property. See U.N. Charter, arts. 2(3), 2(4) (binding as rules of customary international law on nonmember

The general rules concerning state responsibility for injury to the persons and property of aliens, although controversial in their application, are well known. A state has no obligations to admit aliens to its territory, and its economic policies may restrict the commercial activities of those it does allow to enter. Once admitted, however, customary international law allows the alien's national state to insist that the host state observe international minimum standards of due process if the latter decides to expropriate any property the alien acquires or brings with him. These standards require that the alien's property be taken for a public purpose by nondiscriminatory laws property protected under international law. A failure to observe the minimum standard applica-

states); M. AKEHURST, supra note 212, at 241-43.

^{216.} See supra note 215; see also M. AKEHURST, supra note 212, at 88-103.

^{217.} See, e.g., I. BROWNLIE, supra note 118, at 519.

^{218.} See, e.g., RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW § 712, comment a (1989); Permanent Sovereignty Over Natural Resources, G.A. Res. 1803 (XVII), 17 U.N. GAOR Supp. (No. 17) at 15 (1962) [hereinafter U.N. Resources Resolution] reprinted in 2 I.L.M. 223 (1963); see also I. Brownlie, supra note 118, at 524-25. However, representatives of many developing countries contend that only national treatment is required. Id. 525-28. See also Schwebel, The Story of the UN's Declaration on Permanent Sovereignty Over Natural Resources, 49 A.B.A. J. 463 (1963).

^{219.} See RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW § 712(1)(a) (1989); R. RIBERIO, NATIONALIZATION OF FOREIGN PROPERTY IN INTERNATIONAL LAW 17-27 (1980) (discussing an expanded notion of "public utility" that encompasses the nationalization of property); B.A. WORTLEY, EXPROPRIATION IN PUBLIC INTERNATIONAL LAW 22-29 (1977) (discussing English and French restrictions of justifiable expropriation to only those expropriations for "public interest").

^{220.} See, e.g., RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW § 712(1)(b) (1989); Banco Nacional v. Farr, 243 F. Supp. 957 (S.D.N.Y. 1965), affirmed 383 F.2d 166 (2d Cir. 1967), cert. denied 390 U.S. 956 (1968) (finding Cuba in violation of international law because of discriminatory retaliation against United States nationals). The principle of nondiscrimination, based on national treatment, is defended most vigorously by those representing the views of developing countries who would deny the principle of compensation. This view, sometimes known as the Calvo Doctrine, has played only a subsidiary role in the positive law of expropriation as currently applied. See, e.g., I. Brownlie, supra note 118, at 536-37, 541-43, 546-47.

^{221.} See, e.g., RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW § 712(1)(c) (1989) (providing for "just compensation"); I. BROWNLIE, supra note 118, at 543-45 (stating that "the right to compensation, on whatever basis, is recognized in principle"). Id. at 544. See further U.N. Resources Resolution, supra note 218. But see Declaration on the Establishment of a New International Economic Order, May 1, 1974 G.A. Res. 3201(XXIX) (Special) U.N. GAOR Supp. (No. 1), U.N. Doc. A/9559 (1974), reprinted in 13 I.L.M. 715 (1974) [hereinafter U.N. NIEO Declaration] and Charter of Economic Rights and Duties of States, G.A. Res. 3281 (XXIX), 29 U.N. GAOR Supp. (No. 31), U.N. Doc. A.9631 (1974) [hereinafter U.N. Economic Rights Resolution],

ble in such cases will engage the offending state's international responsibility.²²²

Analogous norms protect the tangible property of nationals that accidentally crosses international boundaries for any of a variety of causes, ranging from the instincts of stray cattle to the disintegration of a space exploration vehicle.²²³ In such cases, private and public international law normally require the receiving state to look to the law of the originating state for purposes of determining title to the property in question.²²⁴ If agents of the receiving state fail to give effect to the foreign legal title, that state may become liable for an international claim of compensation lodged by the aggrieved party's own state.²²⁵ In other words, these laws combine to defend the rights of the original owner whose tangible property accidentally entered the foreign domain without the consent of the

reprinted in 14 I.L.M. 251 (1975). The precise standard of compensation remains controversial. According to Akehurst, "when disputes arise between states [with conflicting views on the matter] they are usually settled by a compromise—the expropriating state pays part of the value of the expropriated property," usually in the form of a global settlement that covers all the claims pressed by the foreign state. M. AKEHURST, supra note 212, at 95. For an analysis of the standard of compensation as formulated by international tribunals, see Restatement (Third) of Foreign Relations Law of the United States § 712, note 2, at 206-07 (1989). See also Claggett, Protection of Foreign Investment Under the Revised Restatement, 25 Va. J. Int'l L. 73, 76 (1984) (arguing that the Restatement (Third) of Foreign Relations Law §§ 712-13 lowers the traditional United States standard of "prompt, adequate and effective" compensation); S. FRIEDMAN, Expropriation in International Law 204-19 (1953).

222. See supra note 215.

223. See, e.g., I. BROWNLIE, supra note 118, at 428-29; G. CHESHIRE & P.M. NORTH, PRIVATE INTERNATIONAL LAW 116-28 (8th ed. 1987); Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, Jan. 27, 1967, art. VIII, 18 U.S.T. 2410, 2416, T.I.A.S. No. 6347, 610 U.N.T.S. 205, 209, reprinted in 6 I.L.M. 386, 388 (1967). For the concept of excusable acts that may require compensation and a discussion of the objective boundaries of state responsibility, see I. BROWNLIE, supra note 118, at 431-41; I. BROWNLIE, STATE RESPONSIBILITY, supra note 215, at 37-47.

224. See G. CHESHIRE & P.M. NORTH, supra note 223, at 125.

225. See id. at 126, n.15; see also Restatement (Third) of Foreign Relations Law, § 713(2)(a), comment f (1989) (exhaustion of remedies). Tension arises from the powers and limits of territorial sovereignty in public international law, which may conflict with general principles of private international law that apply the doctrine of lex situs to movables. See, e.g., Luther v. Sagor, [1921] 3 K.B. 532, 548; Anglo-Iranian Oil Co. v. Jaffrate, [1953] 1 W.L.R. 246; G. Cheshire & P.M. North, supra note 223, at 125. The examples given in the text presuppose accidental entry of the movables and no intent to confiscate by the neighboring sovereign; hence, title under private international law is not acquired by the individuals who find the movables, despite the principle of possession. Id.

local sovereign,²²⁶ even though the owner's own state may have to pay reparations for its national's unauthorized violation of another state's territorial frontier.²²⁷

In contrast, when intangible property in the form of artistic works or patented inventions strays across an international frontier, neither private nor public international law will defend the original owner's title absent specific treaty obligations binding on both the states in question. The aggrieved creator must normally look either to the domestic intellectual property law of the receiving state or to any relevant international conventions that state may have signed. But his own state could not assert any claim under the traditional public international law of takings. 229

^{226.} See supra notes 223, 224.

^{227.} See supra notes 214, 223; I. BROWNLIE, supra note 118, at 428. ("Ownership in international law is normally seen either in terms of private rights under national law, which may become the subject of diplomatic protection and state responsibility, or in terms of territorial sovereignty."). Whether a confiscatory decree by the receiving state suffices to transfer title without compensation poses a different and more controversial question. See, e.g., Anglo-Iranian Oil Co. v. Jaffrate, [1953] 1 W.L.R. 246, in which Justice Campbell found that Luther v. Sagor, [1921] 3 K.B. 532, did not condone the confiscation of movables belonging to an owner who was not a national of the confiscating state, unless adequate compensation were paid. See, e.g., O'Connell, [1955] 4 I.C.L.Q. 27. But see Re Hubert Wagg & Co., [1956] 1 ALL E.R. 129. For the view that private international law and public international law converge in the doctrine of comity to protect the property of individuals against confiscatory legislation passed by a foreign state, see Maier, Extraterritorial Jurisdiction at a Crossroads: An Intersection Between Public and Private International Law, 76 A. J.I.L. 280, 282 (1982) [hereinafter Maier (1982)] (citing Huber's well-known axiom: "[t]hose who exercise sovereign authority so act from comity, that the laws of every nation having been applied within its own boundaries should retain their effect everywhere so far as they do not prejudice the powers or rights of another state, or its subjects"); see also G. CHESHIRE & P.M. NORTH, supra note 223, at 116-28.

^{228.} See supra notes 106-31 and accompanying text; Foyer, supra note 38, at 354. For a traditional statement of the tension between the principles traditionally applied to determine rights in real property and the conflicts principles developed for artistic property under the Berne Convention, see 3 J.P. NIBOYET, TRAITÉ DE DROIT INTERNATIONAL PRIVÉ FRANÇAIS 309-10 (1944).

^{229.} See, e.g., Geller, International Copyright, supra note 35, § 1[1], at 7, 13 n.31 (stressing that "principles such as national treatment tie the choice of copyright law to the lex causae of infringement," but noting that internationally applicable minimum standards under the Copyright Conventions facilitate a comparative overview that also renders other laws, including that of a national's home state, relevant); id. § 3[1][a], at 42 ("It is thus a settled principle that the law of the protecting country, inclusive of its treaty obligations, is dispositive of claims sounding in copyright or neighboring rights."); see also Foyer, supra note 38, at 354 (industrial property). But see Geller, International Copyright, supra note 35, at 42 n.208 (citing different views of Koumantos, Boytha, and

The inferior status of intellectual goods in private and public international law, as compared with that of movables generally, stems in part from the incorporeal nature of such property, which removed it from the traditional legal classifications of antiquity.²³⁰ It also stems from the propensity to treat artistic and inventive monopolies as privileges whose existence depend on the will or whim of particular sovereigns.²³¹ Neither of these historical justifications remains persuasive under modern economic conditions.

Portable Fences for an Ubiquitous Estate

Intellectual creations, which are intangible, ubiquitous, and inexhaustible by nature, defy the traditional notions of property handed down from Roman law.²³² They cannot be subdivided into discrete parcels by the metes and bounds of a surveyor and fenced off in order to secure exclusive enjoyment.²³³ Intellectual creations are everywhere and nowhere at once. The only barrier they cannot surmount is that of secrecy or nondisclosure. Once divulged, they spread from mind to mind, making nominal trespassers of all who concern themselves with the products of human ingenuity.²³⁴

the older approach, which determined rights in artistic works on the basis of "the law of the national jurisdiction in which they arose, 'the so-called country of origin,'" on analogy to the principles applied to real property). The principles discussed above normally apply to industrial property as well as to artistic property, because of the national treatment principle embodied in the Paris Convention. See, e.g., R.H. GRAVESON, CONFLICT OF LAWS: PRIVATE INTERNATIONAL LAW 114-117 (7th ed. 1974); 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 265. The low minimum standards of the Paris Convention, however, and the high threshold of eligibility in domestic patent laws generally, means that—absent treaties to the contrary—the patent is governed entirely by the law of the state granting the rights, which will also be the state where infringement occurs. See, e.g., Foyer, supra note 38, at 354-55. National treatment and convention rights, such as the right of priority, must nonetheless be respected. Id. at 355-62.

- 230. See, e.g., G. CHESHIRE & P.M. NORTH, supra note 223, ch. 30; R.H. GRAVESON, supra note 229, at 484; Foyer, supra note 38, at 353.
- 231. See, e.g., 1 S. LADAS, ARTISTIC PROPERTY, supra note 105, at 15-17, 22; Foyer, supra note 38, at 352-56.
- 232. See, e.g., Lehmann (1985), supra note 203 at 530-31, 538; Foyer, supra note 38, at 353-55 n.3 (stressing lack of perpetual ownership as well as incorporeal nature); see also 1 S. LADAS, ARTISTIC PROPERTY, supra note 105, at 7.
- 233. See, e.g., Foyer, supra note 38, at 353 (intellectual property laws confer on a proprietor no direct or immediate power over any material thing); Lehmann (1985), supra note 203, at 538. It is this parceling and fencing, backed by public force, that ordinarily neutralizes the rule of the strong and permits efficient use of limited resources by private means. Id.
 - 234. See, e.g., id. at 534; Beier, The Significance of the Patent System for Technical,

Intellectual creations also differ from the mass-produced goods that remain a primary source of wealth in modern industrial economies. For example, excess demand need not appreciably increase the price of unregulated intellectual goods, since these are neither scarce nor exhaustible once created and disclosed.²³⁵ Moreover, intellectual creations acquire value by deviating from standard solutions to known human needs in ways that yield more efficient results or that capture the public's fancy. They do not so much satisfy a demand for products that fill present needs as stimulate demand for products that did not previously exist.²³⁶ To the extent that intellectual goods are sold on market segments defined in terms of the novelty they purvey,²³⁷ their creators invent their own markets; hence, as Roubier observed, "industrial competition ends—despite everything—in a process of constant renewal."²³⁸

The weak point in this process of renewal is the inability of most creators to profit from new intellectual products so long as competitors can legally duplicate their proven successes.²³⁹ To the extent that neither originators nor the entrepreneurs who exploit their output²⁴⁰ can erect

Economic and Social Progress, 11 I.I.C. 563, 582 (1980) [hereinafter Beier (1980)].

^{235.} See R. Benko, supra note 7, at 17 (knowledge goods have "awkward properties that differentiate them from standard goods"). On the relations between the technology of reproduction in series, unknown in earlier times, and intellectual property rights, see generally Roubier, Unité et synthèse des droit de propriété industrielle, in Études Sur La Propriete Industrielle Littéraire Artistique: Melange Marcel Plaisant 161, 162-66 (1960) [hereinafter Roubier, Unité et synthèse]. Chattels reproduced in series do confer on manufacturers a certain power of diffusion that resembles the attribute of ubiquity characteristic of intellectual property. But ordinary chattels remain scarce and exhaustible, hence excess demand will increase their price unless further supplies become available.

^{236.} In contrast, mass-produced goods normally acquire value insofar as they satisfy known human needs in standardized ways at affordable prices. Their sameness is the source of their economic value, although saturation of demand for products of comparable technical yields leads to marginal differentiation on crowded market segments at later stages of industrial development. See, e.g., J. HESKETT, INDUSTRIAL DESIGN 68-85, 127-45 (1980); Reichman, Designs and New Technologies, supra note 176.

^{237.} See, e.g., R. Benko, supra note 7, at 22-23 (Literary, artistic, and scientific works largely "define a society" and create new products and new markets.); Lehmann (1985), supra note 203, at 537-40 (discussing restrictions on competition in order to promote competition).

^{238.} Roubier, Unité et synthèse, supra note 235, at 163 (trans.).

^{239.} See, e.g., R. BENKO, supra note 7, at 22; Lehmann (1985), supra note 203, at 534-35.

^{240.} See, e.g., Beier (1980), supra note 234, at 581 (stressing predominant role of the enterprise, rather than the individual inventor, in technological progress and the role of exclusive rights in fostering investment in new technology); Roubier, Unité et synthèse, supra note 235, at 162 (stressing the inability of artists or inventors to obtain any pecu-

fences around intangible intellectual creations once divulgation has occurred,²⁴¹ second comers able to obtain material embodiments of these creations will attempt to appropriate the profits without having shared in the costs and risks of the creative endeavor.²⁴² Refinements in the technology of copying then enable these second comers to shorten or avoid the process of reverse engineering that theoretically endows all originators of utilitarian goods with natural lead time in which to recoup their capital investments.²⁴³

Under these conditions, risk aversion will deter entrepreneurs from investing in the development and commercial exploitation of intellectual creations because free riders threaten to deprive investors of the marginal revenues they need to cover their marginal costs. The end result is an underutilized and inefficient market for intellectual goods, exactly as occurs when rights in material property do not receive adequate legal protection.²⁴⁴

Intellectual property law addresses these concerns²⁴⁵ by endowing creators with exclusive rights, limited in time, to reproduce their creations even after publication or disclosure in the normal course of doing busi-

niary return from their work without entrepreneurs who mediate between creators and the public, who render the creation operational, and who assume the risk of the undertaking).

- 241. One defensive tactic is not to disclose, i.e., to take refuge in trade secret law or nonpublication. For this reason, the intellectual property system is thought to encourage disclosure and the diffusion of both knowledge and technology, besides providing a profit incentive for creators. See, e.g., R. Benko, supra note 7, at 16, 21, 22.
- 242. See, e.g., Lehmann (1985), supra note 203, at 534 (stressing vulnerability of technical knowledge and information); Ullrich, The Importance of Industrial Property and Other Legal Measures in the Promotion of Technological Innovation, 28 INDUS. PROP. 102, 103-04 (1989) [hereinafter Ullrich, Innovation] (economic rationale of the patent system). See also R. Benko, supra note 7, at 17. "Inventions are public goods, characterized by difficulty of exclusion or the so-called free-rider problem—it is difficult to prevent people from consuming the goods without paying for them." Id. at 17. The same problem of market failure afflicts artistic works protected by copyright law. See, e.g., id. at 21.
- 243. See, e.g., Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 109 S. Ct. 971, 982-85 (1989) (crucial role of reverse engineering in free-market economy); see generally Reichman, Programs as Know-How, supra note 27, 652-67.
- 244. See especially Lehmann, Property and Intellectual Property: Property Rights as Restrictions on Competition in Furtherance of Competition, 20 I.I.C. 1, 10-11 (1989) [hereinafter Lehmann (1989)].
- 245. Unfair competition law cannot adequately deal with this problem except on a case-by-case basis, which is clumsy and inadequate for purposes of business planning. See, e.g., Roubier Unité et synthèse, supra note 235, at 165.

ness.²⁴⁶ In effect, this body of law establishes a surrogate form of ownership by instituting a fictitious system of portable fences, backed by the power of the state, that accompany the creation on its journey from mind to mind.²⁴⁷ Even though third parties legitimately obtain dominion over artifacts that embody new intellectual creations without trespassing on the creators' physical domains, the portable legal fences surrounding the creators' intangible contributions follow the artifacts inside the third parties' own domains. There these fences neutralize essential attributes of property that possession would ordinarily confer and restrict the possessors' rights to use the achievements embodied in the artifacts even within the confines of their private estates.²⁴⁸

The exclusive right to reproduce thus substitutes a statutory period of artificial lead time for the brief or negligible period of natural lead time that competition in intellectual achievements otherwise tends to produce.²⁴⁹ It mandates a contractual relation between creator and exploiter that prevents competitors from using the creator's contribution in specified ways without paying for the privilege.²⁵⁰ And it allows the market for intellectual creations to develop and organize itself efficiently, in keeping with the efficiencies generally thought to derive from the recognition of property rights in material objects.²⁵¹ The exclusive right to

^{246.} See, e.g., id.; Lehmann (1989), supra note 244, at 11-15.

^{247.} See, e.g., Foyer, supra note 38, at 353-54. The exclusive right to prevent third parties from accomplishing certain acts for a limited period of time gives intellectual property law the power that is characteristic of real property rights. It also permits the establishment of estates for use, and it permits transferability. "Contracts granting a license to exploit are like a kind of lease of a chattel." Id. at 354 (trans.).

^{248. &}quot;If it were not for the recognition and maintenance of property rights [either] in material objects or in the form of intangible property rights, the theft of property or of intellectual goods would remain unpunished; the right of the stronger in the battle of all against all would then be the sole regulating mechanism for the division and distribution of goods." Lehmann (1985), supra note 203, at 538.

^{249.} For the crucial importance of artificial lead time under present-day conditions of innovation, see Reichman, *Programs as Know-How*, *supra* note 27, at 662. *But see* R. Benko, *supra* note 7, at 19 (Critics of intellectual property system believe innovators gain sufficient natural lead time over competitors because the latter must master technological know-how.).

^{250.} See, e.g., R. Benko, at 17-18; Roubier, Unité et synthèse, supra note 235, at 163-65; see also Cabanellas, The Consequences of Stricter Working Requirements for Patentees Under the Paris Convention, 19 I.I.C. 158, 161-62 (1988).

^{251.} See, e.g., Ullrich, Innovation, supra note 242, at 103, 105 (function of stimulating and selecting commercially successful inventions); Lehmann (1989), supra note 244, at 11-15. Professor Lehmann states:

The granting of property rights in the same tangible object to several persons can—due to the economic nature of tangible property—only hamper the maximum

reproduce thus constitutes the essential element of intellectual property as such,²⁵² and it gives intellectual creations the quality of "goods" in both the legal and economic sense of the word.²⁵³

Economists are increasingly convinced that the exceptions to the rules of competition that intellectual property law carves out for authors and inventors at any given level of innovation actually stimulate competition in the long run by eliciting the production of scarce intangible goods that elevate the market—and competition—to ever higher levels.²⁵⁴ Consumers and users of new technologies and of cultural products benefit from these exceptions, despite the lack of price competition, by gaining the opportunity to choose new products or processes over previously available products and processes that are perceived as inferior.²⁵⁵ Although the social costs of restricting competition for these purposes are high, defenders of the system believe that overall gains in innovation more than offset these costs.²⁵⁶ The temporary nature of the exclusive rights granted and

economic use of the protected object Without the legal protection of tangible property, no modern planned production of material goods could develop, and without protection for intellectual and industrial property, no production of intangible property would arise.

Id. at 13-14. Professor Ullrich cautions, however, against assuming that inventions will not be made or exploited in the absence of patent protection. Nevertheless, he agrees with the principle that a more efficient market for intellectual property emerges under a system of proprietary rights. Ullrich, Innovation, supra note 242, at 103, 105-08. See also, Kitch, The Nature and Function of the Patent System, 20 J. LAW & ECON. 265 (1977).

252. Roubier, Unité et synthèse, supra note 235, at 164.

253. See, e.g., id. at 164-65; Lehmann (1985), supra note 203, at 540; Beier (1980) supra note 234, at 582 (The inventor's exclusive right of use converts the "intangible technical idea, which after disclosure is accessible to everyone" into "a merchantable good, an object of legal and business transactions.").

254. See, e.g., Lehmann (1989), supra note 244 at 11-15; Ullrich, Innovation, supra note 242, at 105; see also Kitch, supra note 251, at 266-67 (prospecting function of the patent system). Accord R. Benko, supra note 7, at 19 ("Patents explicitly prevent the diffusion of new technology to guarantee the existence of technology to diffuse in the future."). Intellectual goods in general are "scarce" before the acts of creation and divulgation, when risk-aversion is high and the success of the innovative enterprise uncertain, although the scarcity of any particular intellectual good vanishes with creation and disclosure.

255. See, e.g., Cabanellas, supra note 250, at 162. "If the new patented product or process is not purchased or used, the potential consumers or users are left in the same welfare situation they enjoyed before the patented invention entered the market." Id.

256. Compare, e.g., R. Benko, supra note 7, at 18-21 (Besides static inefficiencies of monopoly, notably higher prices, restricted supplies, and inefficient allocation of resources, critics fear long-term concentration and inefficiency from market power generated by patents. Other concerns are the costs of inventing around patents and administrative costs.) with id. at 22-23 (benefits of intellectual property system). See also Beier

the public's retention of a remainderman's estate in all intellectual achievements, which vests at the termination of the limited monopoly, further mitigate the social costs of a mature intellectual property system.²⁵⁷

Whether, and under what conditions, such a system adequately fulfills these expectations remains controversial, ²⁵⁸ despite a growing body of empirical evidence indicative of a positive correlation between intellectual property protection and innovation at different historical periods. ²⁵⁹ The fact remains that modern industrial economies are organized around the interplay between competition and monopoly that intellectual property systems mediate, ²⁶⁰ and the continued growth of these economies appears tied to the technical and cultural development such systems seek to foster. ²⁶¹ This, in turn, renders each national system increasingly vulnerable to the countervailing policies of other national systems and to the regulatory dispositions affecting intellectual property on the world market as a whole. ²⁶² The ability to project legal protection of new intellectual creations beyond home markets has consequently become of primary importance to policymakers responsible for domestic economic renewal and for the maintenance of a competitive position in world trade. ²⁶³

^{(1980),} supra note 234, at 564-70 (Reviews criticism by developing countries, socialist countries, and by free-enterprise economists.). For similar criticism of the copyright system, see generally Breyer, supra note 203. Both lines of criticism owe a debt to the Manchester School and the Great Patents Controversy it provoked in the 19th century. See, e.g., E. Penrose, supra note 56, at 1-18.

^{257.} See, e.g., Lehmann (1989), supra note 244, at 14-15. For the importance of the public domain, see Lange, Recognizing the Public Domain, 44 LAW & CONTEMP. PROBS. 147 (1981).

^{258.} See supra notes 203, 256.

^{259.} See, e.g., PLASSERAUD & SAVIGNON (1986), supra note 3; PLASSERAUD & SAVIGNON, PARIS 1883, supra note 54; Beier (1980), supra note 234, at 571 (striking correlation between industrialization and patent protection); see more recently Lunn, supra note 203, at 432-33 ("[T]he crucial determinant of innovative effort is the extent of property rights an inventor has to his innovation.").

^{260.} See, e.g., Cabanellas, supra note 250, at 163-65.

^{261.} See, e.g., Foyer, supra note 38, at 351; Gadbaw & Richards, supra note 8, at 1 ("Human creativity, the development and use of new ideas and new technologies, is now recognized as a primary element in the growth of modern economies.").

^{262.} See, e.g., Cabanellas, supra note 250, at 163-64 (role of international patent system in preventing single countries from free-riding on the incentives supplied by other countries to inventive activities). "Today a country's competitive standing in the world economy rests increasingly on its innovative capacity and performance." R. Benko, supra note 7, at 22.

^{263.} See, e.g., Gadbaw & Richards, supra note 8, at 5; Dam, supra note 78, at 627 (increasing proportion of international trade involves intellectual property).

2. Legal Recognition of Portable Fences in a Global Market

To this day, the notion that intellectual property depends entirely on the place where protection is sought²⁶⁴ continues to preclude the formation of private international legal remedies for entrepreneurs who invest in intellectual goods that are reproduced and commercially exploited on foreign soil.265 At the same time, gaps in the public international law of state responsibility that protects alien property in general permit states to seize the one form of alien property that has become the key to economic growth through technological innovation.²⁶⁶ The existing legal arrangement consequently allows free riders operating from sanctuary countries to destabilize national intellectual property systems by disrupting the balance between competition and monopoly these systems are supposed to regulate.267 But this result conflicts with the logic of an integrated world market in which all countries depend on the exchange of products and services that are the fruits of natural or comparative advantages.²⁶⁸ Changing economic conditions thus cast doubt on the continued validity of underlying private-law doctrines that tolerate confiscation without compensation.²⁶⁹ They also mandate a reconsideration of the public-law doctrines that traditionally prevent portable legal fences erected in countries that protect intellectual goods from following these goods into the international marketplace.270

The historical distinction between intellectual property and other forms of property becomes increasingly anachronistic the more that economies everywhere are driven by the need to innovate. This follows not from an appeal to natural justice, which laid the foundations of tangible property, but from refined economic analysis, which has begun to identify the common functions that property rights perform in both legal subcultures.²⁷¹ Nor can one say that intellectual property remains an

^{264.} See supra notes 106-13 and accompanying text.

^{265.} See supra text and authorities accompanying notes 228-31.

^{266.} See supra text and authorities accompanying notes 216-31.

^{267.} See supra text accompanying notes 78-80 (describing three modes of disruption).

^{268.} See, e.g., R. HUDEC, DEVELOPING COUNTRIES, supra note 9, at 142 (stressing decline of mercantilist doctrine and preeminence of "the theory of comparative advantage, which postulates that trade distortions of any kind cause economic loss to all countries affected by them, because resources are directed into less efficient uses").

^{269.} See supra note 227 (view of Professor Maier).

^{270.} See supra text and authorities accompanying notes 216-22, 228-31.

^{271.} See supra text and authorities accompanying notes 245-47. From today's standpoint, the need to recognize intellectual property as "property" in the current economic sense of that term remains compelling even if concerns about the sharing of information

intruder within the realm of established legal institutions. Despite residual difficulties of classification, these rights are now largely structured by the world's intellectual property system itself, which creates universal expectations whose implementation varies with domestic considerations.²⁷² All countries know what these rights are and why foreign intellectual goods retain their economic value once admitted into the national territory,²⁷³ even when those who govern the territory choose not to protect equivalent national creations.²⁷⁴

From the public-law perspective, an integrated world economy allows no room for domestic policies that enable states systematically to capture the productions of aliens in any form. Laws that defend the protection of

and ideas in the public interest were to dominate a future legal and economic order, as Professor Jackson fears. See, e.g., Remarks of Jackson, supra note 5, at 344.

272. See, e.g., S. RICKETSON, supra note 34, at 41 (stating that "the universalists have been responsible for the steady increase in measures on which general agreement has been reached, so much so that the Berne Convention can now be regarded as a limited kind of international copyright code"); 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 264-78. Ladas states:

The "Unionist" treatment of the [Paris] Convention is essentially a basic harmonization of the law of the member countries, rather than uniformity of such law

Divergence is then inevitable and even desirable to a certain extent. Each country may and should be free to deal with the ferment of legislative reform in its own territory and [to] resolve the necessary reconciliation and satisfaction of all interests pressing for recognition.

The fact, however, that these provisions [establishing industrial property rights that transcend national territories] are part of the Convention leads necessarily to a certain amount of uniformity of law.

All this has led through the years to the creation of national law which[,] if not uniform[,] is at least harmonious.

Id. at 276-77. See further infra notes 492-93, text accompanying notes 527-34. Nevertheless, the actual treatment of intellectual property in domestic laws reflects social, cultural, and economic concerns that differentiate it from the legal regimes governing both tangible property and the protection of privacy and the human personality as such.

273. See, e.g., Foyer, supra note 38, at 355 (observing that the denial of foreign patent rights on domestic territory historically offered sovereigns negotiating gambits that could be traded with governments practicing nationalist mercantile policies).

274. The establishment of a World Intellectual Property Organization (WIPO) within the family of United Nations Specialized Agencies further attests to the potential importance of intangible intellectual creations for all countries. See Convention Establishing the World Intellectual Property Organization, signed at Stockholm on 14 July 1967, 21 U.S.T. 1749, T.I.A.S. No. 6932, 828 U.N.T.S. 3, reprinted in 1967 INDUS. PROP. 135; 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 145-52; R. BENKO, supra note 7, at 4.

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an alien's physical property rest on a profound concept of comity in a system that "assumes mutual restraint by both sovereign states and private parties in exercising power." The fact that an alien's property was brought into a foreign realm against its owner's will because of its intangible and potentially ubiquitous nature does not lessen the harm to comity arising from confiscatory practices. When the alien property systematically sequestered in this fashion turns out to be the most valuable component in the home state's gross national product, the notion of comity is strained to the breaking point. 276

That the protection of intellectual creations happens to serve the home state's interests does not, of course, endow its laws and policies with extraterritorial validity. It does suggest that host states cannot blithely continue to maintain that intellectual goods are not alien property for purposes of international law simply because their status as property was once open to doubt.²⁷⁷ In reality, intellectual property does not meander across state lines like a herd of stray cows, nor does it accidentally disintegrate in the skies over a particular territory with a display of creative fireworks that happens to benefit the national economy.²⁷⁸ Alien intellec-

^{275.} See, e.g., Maier (1982), supra note 227, at 283; see also id. at 281-85. As a legal principle comity "suggests the need for just choices of law to encourage transnational commercial and social intercourse in a system that assumes mutual restraint by both sovereign states and private parties in exercising power, and it emphasizes principles of justice and practicality as policies for determining applicable law." Id. at 283-84. Insistence that "the forum . . . give effect to any right that had 'vested' within the territory of a foreign sovereign" degrades the proper function of comity. Id. at 284-85.

^{276.} See, e.g., Cabanellas, supra note 250, at 164 (The international patent system prevents erosion of incentives that, on a world-wide basis, make investment in research and development possible in patent-sensitive areas.); MacLaughlin, Richards & Kenny, supra note 49, at 100-02 (contending that adequate protection in markets of receiving states is a critical factor for development of export-based industries). Cabanellas believes that the international patent system should reflect the benefits that the world economy as a whole derives from research and development stimulated by the patent incentive. See Cabanellas, supra note 250, at 164, 179-80. But see Oddi, supra note 34, at 859 (Innovators obtain only "after-the-fact incentive[s]" to file in developing countries and rewards earned from distant markets are windfalls.). Query whether the windfall analysis, if valid, would remain valid in an integrated economy in which newly industrialized enterprises could squeeze firms from established rich countries out of markets for traditional products that are less dependent on innovation. See infra text accompanying notes 303-07.

^{277.} See, e.g., Foyer, supra note 38, at 352, 354-56. Professor Foyer observed that territorial and national limits on patents engendered difficulties that became intolerable as international trade increased. This closed system was what the founders of the Paris Convention set out to correct. Id.

^{278.} See supra text and authorities accompanying notes 223-27.

tual property crosses state lines because local citizens covet it for their own cultural and economic advancement and because state authorities deem it beneficial to condone systematic usage of such property.²⁷⁹ If this were not the case, host states would experience little difficulty in keeping the alien property out, notwithstanding its intangible and ubiquitous character, as routinely occurs with books and periodicals that offend national canons of decency or the tenets of political or religious orthodoxies.

That foreign intellectual goods, elsewhere protected as property, are routinely admitted into a state that does not protect them allows the receiving state to exercise dominion—on its own territory—over alien property that it could not control on the territories of other states.²⁸⁰ Yet, the intangible nature of the good, which makes this practice possible, in no way diminishes the fact that it is the product of aliens whose proprietary rights are widely recognized, who have not consented to this taking, and who have not waived their rights as aliens generally protected by public international law.²⁸¹ If, in short, a state or its putative agents²⁸² systematically detain foreign intellectual property merely by virtue of its intangible and ubiquitous nature, it is myopic for the international community to pretend that such property has become any the less alien property merely because it has crossed one or more national frontiers.

Respect for foreign intellectual property rights has accompanied the progressive integration of regional and subregional markets ever since the Paris Convention of 1883, with its rights of priority, 283 began to rec-

^{279.} For the problems of attributing private acts to the state for purposes of engaging the state's international responsibility, and the softening of this doctrine in recent years, see I. Brownlie, State Responsibility, supra note 215, at 36-37.

^{280.} See supra notes 211-15, 246-48 and accompanying text.

^{281.} See supra notes 216-27 and accompanying text.

^{282.} See supra note 279.

^{283.} See Paris Convention, supra note 21, art. 4 (rights of priority established for specified periods after filing applications for patents, utility models, industrial designs, and trademarks in a country of the Union). Other benefits of the Convention included the independence of patents, id. art. 4(b); and of trademarks, id. art. 6(3); the disallowance of local restrictions as a bar to the granting of patents, id. art. 4quater; the abolition of forfeiture for the importation of patented articles, id. art. 5(A)(1); restrictions on the obligation to work the patent locally, id. art. 5(A)(2), (3), (4); the grace period for the payment of fees, id. art. 5bis; protection of process patents, id. art. 5quater; elimination of the need for home registration of trademarks and the general validation of such marks, id. arts. 6, 6bis, 6quinquies, 7; restrictions on the obligation to use a trademark, id. art. 5(c); protection of service marks, trade names, and indications of origin, id. arts. 6sexies, 8, 10, and protection against unfair competition, id. art. 10bis. See generally 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 272-75 (unionist treatment).

tify the economic disincentives inherent in closed national systems.²⁸⁴ This principle applies with particular force to a rapidly integrating world market whose operations depend on the reciprocal willingness of states to recognize comparative advantages under neutral and efficient rules of international trade.²⁸⁵ In such a market, technology exporting countries cannot legitimately bar cheap, nontraditional imports from less industrialized countries merely because domestic industries suffer from the competition.²⁸⁶ By the same token, developing countries cannot expect to free ride indefinitely on those products that represent the primary comparative advantages of technology exporting countries²⁸⁷ merely because the international law of takings has yet to adapt to the realities of a global market.²⁸⁸

To pretend that aliens have no legal claims arising from wholesale, unauthorized uses of their most valuable property while respecting laws that protect less valuable alien property only because it is tangible rather

^{284.} See, e.g., 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, 26-28 (describing the disincentives under closed patent systems); supra notes 277, 283. See also 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 562-702 (discussing Patent Cooperation Treaty, European Patent Convention, and the Common Market Patent Convention). Developing countries argue that they are merely retracing the steps that leading industrialized countries took at a time when mercantilist philosophy abetted the legal rules limiting the recognition of foreign patents generally. See supra notes 52-54, 273 and accompanying text; infra text accompanying notes 542-46, 598-99.

^{285.} See, e.g., Hartridge & Subramanian, supra note 92, at 895-96 (modern theory of trade based on comparative advantages). See also R. Hudec, Developing Countries, supra note 9, at 40-42 (importance of exports to economic growth of developing countries); Cabanellas, supra note 250, at 177 (comparing developing countries that emphasize exports with those stressing import substitution; finding the latter likely to forfeit the opportunities to exploit comparative advantages in world economic competition).

^{286.} See, e.g., R. Hudec, Developing Countries, supra note 9, at 43-44, 46-52 (stressing extent to which these rules are not fully honored by the industrialized countries); O. Long, supra note 61, at 31-36 (tensions and practices concerning textiles), 68-69 (tensions and practices concerning agriculture), 83-84 (trade measures in the "gray area" of practices inconsistent with GATT principles).

^{287.} See, e.g., Gadbaw & Richards, supra note 8, at 1-4 (stressing increased role of technology exports in global marketplace). For the advantages that the industrialized countries enjoy in this sector, see Barton, Technology Trade, 1985 Am. Soc'y Int'l L. Proc. 130, 132 (1983) (proceedings of 77th annual meeting) summarized in Oddi, supra note 34, at 838. Exports of high technology goods from industrialized countries are reportedly favored because of initial economies of scale and continuing cost advantages inherent in the know-how acquired. Id.

^{288.} According to Gadbaw & Gwynn, supra note 52, at 41, "[w]hat brings these worlds [WIPO and GATT] together is the growing appreciation that the patterns of international trade are increasingly determined by the standards of intellectual property protection provided throughout the world."

than intangible is to exalt form over substance. Sooner or later, both private and public international law must assimilate intellectual property rights to the general international minimum standards that preserve comity by dissuading states from authorizing uncompensated uses of alien property on their national territories. Meanwhile, the TRIPs negotiators should construe the industrialized countries' demand for improved international protection of intellectual goods as a collective declaration that existing rules of international law must change in order to keep pace with changed economic conditions. 280

Acquiescence in the principle that alien intellectual property had become a fit object of the international law concerning state responsibility would only signify a point of departure for the future, not a point of arrival susceptible of broad, practical application.²⁹¹ Nevertheless, the importance of pursuing this goal cannot be overemphasized, given that unilateral acts in defense of alien intellectual property may violate existing rules of international law, including rules of international trade enshrined in the GATT.²⁹² Properly qualified, even formally impermissible acts may acquire a patina of legality as proposals to amend customary international law in a decentralized system that lacks a constitutional framework for more orderly means of pursuing the same objective.²⁹³

^{289.} See supra notes 216-27 and accompanying text.

^{290.} On the difficulties of changing customary international law in response to changed conditions, see generally Maier, The Authoritative Sources of Customary International Law in the United States, 10 Mich. J. Int'l Law 30, 470-71 (1989); Charney, The Power of the Executive Branch of the United States Government to Violate Customary International Law, 80 A.J.I.L. 913, 914-15 (1986); Cf. I. Brownlie, supra note 118, at 616-18 (discussing the impact of a fundamental change of circumstances on treaty obligations).

^{291.} For the dangers of exaggerating the level of international minimum standards in the law of state responsibility, see I. Brownle, supra note 118, at 526 ("A source of difficulty has been the tendency of writers and tribunals to give the international standard a too ambitious content The basic point would seem to be that there is no single standard."). For example, it does not follow that any international minimum standards eventually carried into the unwritten law of takings should correspond to the intellectual property norms of a particular group of countries. The opposite is true. Apart from a basic requirement of nondiscrimination, which seems axiomatic in the current law of state responsibility, see supra note 220 and accompanying text, the nature and level of the applicable standards and the degree of compensation they afford, if any, would remain subject to all the uncertainties that currently pervade the relevant body of international law. See supra notes 220-21, 227 and accompanying text. These uncertainties would be magnified by the introduction of a new subject matter category of protection.

^{292.} See infra text and authorities accompanying notes 413-27, 565-67, 631-47.

^{293.} See supra note 290; infra text accompanying notes 646-47.

C. Accommodation of Intellectual Property to International Economic Law

1. Sovereign Right of States to Control Their Own Economic Destinies

The premise that developing countries cannot expect to free-ride on costly intellectual goods produced in the industrialized countries draws support from still other principles of public international law that guarantee each state the sovereign right to determine its own economic development without interference from other states.²⁹⁴ The extent to which the many candidate norms emerging in this area add up to an international law of development binding on all states remains controversial.²⁹⁵ Nevertheless, the very sources of law that purport to strengthen the economic independence of developing countries contain important provisions entitling the industrialized countries to respect for national development policies implemented within their own territorial boundaries.²⁹⁶ Systematic, uncompensated use of alien intellectual goods undermines these

^{294. &}quot;Every state has the sovereign and inalienable right to choose its economic system . . . in accordance with the will of its people, without outside interference, coercion or threat in any form whatsoever." U.N. Economic Rights Resolution, supra note 221, art. 1.

^{295.} See, e.g., Kwaka, Emerging International Development Law and Traditional International Law: Congruence or Cleavage?, 17 GA. J. INT'L & COMP. L. 431, 436 (1987) (summarizing basic principles of international development law as including "1) The duty of states to cooperate for global welfare; 2) The principle of preferential treatment for developing countries; 3) The principle of entitlement of developing countries to need based assistance"); Espiell, The Right of Development as a Human Right, 16 Tex. INT'L L.J. 189 (1981). But see, e.g., Fikentscher & Lamb, supra note 42, at 83 (stating that the pertinent resolutions of the United Nations General Assembly are recommendations to the member states under article 13 of the Charter and without binding legal force unless adopted by the consent of states or accepted into customary international law). See generally M. Flory, Droit International Du Développement 20-67 (1977).

^{296.} See, e.g., U.N. Economic Rights Resolution, supra note 221, art. 1 (quoted supra note 294), art. 7 ("Every state has the primary responsibility to promote the economic, social and cultural development of its people. To this end, each state has the right ... to choose its means and goals of development, fully to mobilize and use its resources ... All states have the duty ... to co-operate in order to eliminate obstacles that hinder such mobilization and use"); Declaration on Principles of International Law Concerning Friendly Relations and Co-operation Among States in Accordance with the Charter of the United Nations, G.A. Res. 2625 (XXXV), 25 U.N. GAOR Supp. (No. 28), U.N. Doc. A/8028 (1970), reprinted in 9 I.L.M. 1292 (1970) [hereinafter U.N. Declaration on Friendly Relations] ("The principle of sovereign equality of States" includes "the duty to respect the personality of other states," inviolability of territorial integrity, and "the right freely to choose and develop ... political, social, economic and cultural systems.").

norms to the extent that it allows user states to project their development policies beyond territorial limits and to disrupt regulatory mechanisms on which the continued economic growth of the industrialized countries depends.²⁹⁷

By the same token, states having a major stake in the protection of intellectual property rights cannot project their domestic policies onto weaker foreign states in the name of uniformity and harmonization of laws without violating fundamental principles of economic sovereignty. Imposition of foreign legal standards on unwilling states in the name of "harmonization" remains today what Ladas deemed it in 1975, namely, a polite form of economic imperialism. That the proposals concerning intellectual property so far put forward by the leading industrialized countries in the course of the Uruguay Round suffer from this defect seems clear. Soo

297. See, e.g., U.N. Economic Rights Resolution, supra note 221, art. 13(2) ("All States should promote international scientific and technological co-operation and the transfer of technology, with proper regard for all legitimate interests including, inter alia, the rights and duties of holders, suppliers and recipients of technology.") (emphasis supplied); Id. art. 24 ("All States have the duty to conduct their mutual economic relations in a manner which takes into account the interests of other countries."); U.N. Declaration on Friendly Relations, supra note 296 ("States shall conduct their international relations in the economic, social, cultural, technical and trade fields in accordance with the principles of sovereign equality and non-intervention.").

298. See supra notes 294, 296, 297; U.N. Declaration on Friendly Relations, supra note 296, 9 I.L.M. at 1295 ("No State may use or encourage the use of economic, political or any other type of measures to coerce another State in order to obtain from it the subordination of the exercise of its sovereign rights and to secure from it advantages of any kind.").

299.

Generally, unification involves a forced imposition on a country of the law of another (for instance, in the case of a country importing its law into a colony), or a deliberate reception or copying of the law of one country by another Harmonization of law involves a search for uniform solutions . . . transcending national territories . . . where uniformity . . . is brought about through a slow and gradual process and in a spontaneous way on the basis of recommendations and directives internationally agreed upon Even harmonization has to be viewed realistically In certain areas it may be simply undesirable or impracticable from a country's national point of view, since the concessions . . . to achieve agreement may not be worth it.

1 S. Ladas, Industrial Property, supra note 68, at 14-15; see also supra note 272. 300. See, e.g., Ullrich, GATT, supra note 44, at 158-59. Professor Ullrich states: The balance of minimum rights and national treatment is entirely altered if national treatment is sought not for minimal, but for high level protection with a view to obtaining industrial property control over both the domestic market of exporting countries and the import market of third countries. Such a claim is no

Between these two extremes lies a gray area in which the legitimate economic policies pursued by different groups of states overlap and conflict. The resulting tensions can only be lessened through good faith negotiation and cooperation between states,³⁰¹ in a manner that "takes into account the interests of . . . [the developed] countries . . . [without] prejudicing the interests of developing countries."

2. Fair Use Versus Free Riding

Increased access to intellectual property as a driving force in present-day economic development could enable the developing states to accelerate their domestic growth.³⁰³ At the same time, these countries need to capture a larger slice of the international market for more traditional industrial products if they are to earn the foreign exchange needed to pay for up-to-date technological innovation.³⁰⁴ The willingness of indus-

longer a claim for equal protection under different national laws, but for the international extension of national industrial property. It is extra-territoriality in disguise.

Id.

301. See, e.g., U.N. Declaration on Friendly Relations, supra note 296. States have the duty to co-operate with one another, irrespective of the differences in their political, economic and social systems . . . in order to . . . promote international economic stability and progress

To this end:

. . . .

(C) States shall conduct their international relations in the economic, social, cultural, technical and trade fields in accordance with the principles of sovereign equality and non-intervention.

Id., 9 I.L.M. at 1295.

302. See U.N. Economic Rights Resolution, supra note 221, art. 24. But see also id. art. 13.

In particular, all States should facilitate the access of developing countries to the achievements of modern science and technology, the transfer of technology and the creation of indigenous technology for the benefit of the developing countries in forms and in accordance with procedures which are suited to their economies and their needs.

Id.

303. See, e.g., Burstein, Diffusion of Knowledge-Based Products: Applications to Developing Economies, 22 Econ. Inquiry 612, 614 (1984) (contrasting the failings of traditional economic theories of development based on investment in physical property with the possibilities for a well-managed investment in intellectual property); Dorsey, Preferential Treatment: A New Standard for International Economic Relations, 18 HARV. INT'L L.J. 109, 124 (1977). See generally M. FLORY, supra note 295, at 233-44. 304. See, e.g., R. HUDEC, DEVELOPING COUNTRIES, supra note 9, at 40; cf. Cabanellas, supra note 250, at 158 (stressing opportunities in this regard stemming from developing countries' greater involvement in old-fashioned industrial production; noting

trialized countries to expand imports from developing countries, however, cannot be severed from the continued ability of these same industrialized countries to maintain and augment their own levels of economic development through exports of intellectual goods to markets in which the developing countries will not be competitive for years to come. The logic of a changing international division of labor thus suggests that developing countries cannot expect to make wholesale use of foreign cultural and technological products without affording some reasonable rate of return to those who have defrayed the costs of research, development and dissemination incident to these products.

One cannot deny, however, that the domestic laws of all countries recognize derogations from and limitations on the exclusive rights to exploit intellectual property in order to promote the public interest generally and to ensure adequate levels of competition and continued innovation in particular. The international public interest, no less than the respective national public interests, requires a balancing between incentives to create and access to the fruits of creation. So long as the principle becomes established that all countries must sooner or later pay for the use of foreign intellectual goods, multilateral negotiations should focus on defining the areas of fair use to which developing countries must be entitled if they are ever to narrow the gap between haves and have nots.

that the share of industrial production in total GNP of these states often exceeds that of states with developed economies).

^{305.} See, e.g., Gadbaw & Gwynn, supra note 52, at 41; Hartridge & Subramanian, supra note 92, at 895, 897-98.

^{306.} A pragmatic concept endorsed by UNCTAD since 1964. See, e.g., M. FLORY, supra note 295, at 296-304.

^{307.} See, e.g., Primo Braga, supra note 7, at 264 (predicting increase of trade distortions owing to different levels of protection over time and judging "GATT disciplines for TRIPs... a worthwhile goal... in the long run" as a result); Cabanellas, supra note 250, at 163-65, 183 (evaluating effect of free-rider trend in the international context); Burstein, supra note 303, at 613. Even partisan observers recognize, however, that for the developing countries, "[a]t the extreme, the ability to obtain technology without contributing to the costs of its development is seen as an economic imperative." Gadbaw & Gwynn, supra note 52, at 41.

^{308.} See, e.g., S. RICKETSON, supra note 34, 477-548 (limitations on artistic property rights under Berne Convention); Ullrich, GATT, supra note 44, at 136-37 (discussing patent misuse, exhaustion, antitrust rules and the general balancing of free trade and free competition interests with intellectual property protection in all industralized countries); Foyer, supra note 38, at 384, 390-94 (public interest recognized under the patent systems of all countries).

^{309.} See, e.g., Remarks of Goldstein, supra note 69; Hartridge & Subramanian, supra note 92, at 905-06; Ullrich, GATT, supra note 44, at 137.

^{310.} See supra note 52; infra text accompanying notes 547-68.

3. Dualist Realities of International Economic Life

If, in principle, international law thus permits both the developing and the developed countries to adapt intellectual property rights to their respective economic strategies, the problem becomes how to achieve satisfactory relations between the two groups of states without sacrificing the rights of intellectual property owners and without derogating from basic principles of economic sovereignty discussed above.³¹¹ It was the difficulty of reconciling these interests that led to the collapse of the Conference to Revise the Paris Convention notwithstanding arduous negotiating sessions held between 1979 and 1985.³¹²

At that Conference, some industrialized countries had hoped to strengthen existing international minimum standards applicable to patents and trademarks and to halt what they perceived to be the erosion of acquired rights by deviant legislative or regulatory practices in developing countries that belonged to the Paris Union. The latter countries, instead, expected to legitimate certain restrictive practices that appeared inconsistent with the letter of the Convention or at least with certain

^{311.} See supra notes 294-98, 301-02 and accompanying text.

^{312.} See, e.g., Note, The United States Position on Revising the Paris Convention: Quid Pro Quo or Denunciation?, 5 FORDHAM INT'L L.J. 411, 424-32 (1988); McKee, You Can't Always Get What You Want: Lessons From the Paris Convention Revision Exercise, 8 Res. L. Econ. 265, 266, 269-71 (1986); Kunz-Hallstein, U.S. Proposal, supra note 97, at 265-66; see also supra note 34.

^{313.} During the preparatory stage, the International Chamber of Commerce led a campaign to halt what it termed the "erosion of industrial property rights" occurring within the existing framework of the Paris Convention. See generally ICC, Erosion, supra note 34. As regards patents, the difficulties stemmed generally from the "wide legislative freedom" the Convention left to Third World members of the Union. See Gansser, supra note 53, at 230. Specific problems included prohibitions or restrictions with respect to patentable subject matter, especially chemical and pharmaceutical patents, id. at 27-31; the reduction of patent terms for all or certain types of inventions, id. at 31-33; patent immunity with regard to imports of imitated products, id. at 33-35; extension of compulsory licenses and patent forfeiture, id. at 35-41. As regards trademarks, the following appeared to constitute the erosion complained of: compulsory licensing; arbitrary prohibition or cancellation of registrations, especially in certain product fields, such as pharmaceuticals; high taxes and/or reduction of the period of protection; the linking of foreign to national marks; preferential treatment of nationals from developing countries; cancellation of marks on grounds of "public interest"; nonpayment of royalties by licensees in developing countries; or requirements that licensees in such countries maintain a certain level of exports. See Peters, Restrictions in the Exploitation of Trade Marks, in ICC Erosion, supra note 34, at 43-44.

interpretations of it.³¹⁴ They also hoped to obtain a number of derogations from applicable legal standards and to establish a regime of preferential treatment in the interest of accelerating their own economic development.³¹⁵ It was partly an unwillingness to meet these demands that

314. See, e.g., Kish, supra note 34, at 62-63 ("Why... this keen interest in the Paris Convention on the part of countries which for the most part do not adhere to it?... They wish to obtain international approval and endorsement for measures... they have adopted or are in the process of adopting in their national laws, and which severely restrict the rights of patentees."); supra note 313, infra note 315.

315. See, e.g., Baeumer, Le contexte de la revision de la Convention de Paris, in L'Institute de Recherche en Propriete Intellectuelle Henri Desbois [I.R.P.I.], VERS UNE ÉROSION DU DROIT DES BREVETS D'INVENTION? NAIROBI 1981, at 7-20 (1982) [hereinafter Érosion Du Droit] (Symposium on the Revision of the Paris Convention). See generally Kish, supra note 34; Kunz-Hallstein, Revision of International System, supra note 34. Of particular interest to developing countries were proposed changes of article 5A that would permit governments to exploit patents for reasons of public interest, such as security, health, or vital economic needs, and that would also facilitate grants of "exclusive nonvoluntary compulsory licenses" on favorable terms in the event the patents were not worked locally. These provisions would enable third parties to work the patent locally if the patentee did not do so, without competition from the patentee for a fixed period of time. The developing countries would also be able to grant non-exclusive compulsory licenses, or to forfeit a patent for nonworking altogether, at a faster rate than is otherwise permitted. See, e.g., Baeumer, supra, at 12-13; Kish, supra note 34, at 63-68. Article 5A posed the thorniest issues and ultimately caused the failure of the Conference. Compare, e.g., id. (criticizing these proposals) with Françon, La decheance des brevets, in Erosion Du Droit, supra, at 21, 31-32 and Hiance, Les beneficiares des dispositions revisees de la Convention de Paris, in Ero-SION DU DROIT, supra, at 49, 51-55 (justifying the proposals). Efforts by Australia, Canada, Spain, New Zealand, Portugal, and Turkey to acquire the right to apply concessions in favor of developing countries under article 5A as thus amended brought the issues to the boiling point. See, e.g., id. at 50-51.

Apart from article 5A, other important proposals for concessions were advanced. For example, article 5quater would be suspended or changed to allow developing countries to import products covered by a process patent even when the product was manufactured locally in conformity with the patent. Arguably, this would free most developing countries to import chemical products in disregard of the relevant patents, since the issue is seldom one of local infringement of the process itself. See, e.g., Kish, supra note 34, at 68; Foyer, supra note 38, at 389-90 ("a very bad solution to a problem badly framed") (trans.). Some relaxation of article 6ter was also foreseen. See Baeumer, supra, at 12-13. In addition, it was proposed to add five new articles to the Paris Convention that would give preferential treatment to nationals of developing countries. These concerned taxes, fees, and priorities under existing articles; an Article 10quater concerning marks indicating geographic origins; an article 12bis concerning the exchange of patent information; and, an article 12ter concerning technical assistance to developing countries. See, e.g., Baeumer, supra, at 12-13. The proposal concerning a duty to furnish information about the state of patent applications in other countries, devised to facilitate adjudication by poorly equipped patent offices, was deemed vexatious by representatives for industrialspurred some industrialized countries to remove intellectual property from the exclusive jurisdiction of WIPO and to bring this subject matter before the GATT in the context of the Uruguay Round.³¹⁶

A change in venue has, in turn, intensified the demand for a universal set of intellectual property standards, chiefly in regard to industrial and quasi-industrial property, that would be codified and implemented within the framework of a GATT Code of Conduct. These standards reflect the maximum levels of protection that the industrialized countries as a group currently provide, with none of the concessions and compromises in favor of developing countries that had been tentatively worked out during the Conference to Revise the Paris Convention. The What has yet to be explained, however, is why this move to the GATT should either strengthen or legitimate the industrialized countries ability to impose a universal set of intellectual property norms on the rest of the world when the history of the GATT over the last thirty years portrays an unremitting and ultimately successful drive to institutionalize a dualist system of international trade within the very framework of the GATT itself.

ized countries. See, e.g., Kish, supra note 34, at 68-69.

Moreover, controversial proposals to shift from a rule of unanimity to a majoritarian or qualified majoritarian rule were nearly adopted, but were vetoed in the end by the United States. See, e.g., id. at 71-73; Kunz-Hallstein, U.S. Proposal, supra note 97, at 266-67. Also controversial for other reasons were proposals concerning the status of inventor's certificates, a legal institution relied upon in some socialist and some developing countries. See, e.g., Baeumer, supra, at 9-10; Kish, supra note 34, at 69-71. This topic lies outside the scope of the present Article.

316. See, e.g., Gadbaw & Gwynn, supra note 52, at 40; Ullrich, GATT, supra note 44, at 146-47 (Revising the Developing Countries' Attempt to Revise the Paris Convention). Professor Ullrich notes ironically that "by an astute shifting of the place of the negotiation the majority rule is now praised as a particular advantage of GATT" because the industrialized countries actually "set the tone [in GATT] and may expect to do so in future. The economic growth of developing countries simply depends on . . . access to the markets of industrialized countries." Id. at 147. For the status of intellectual property under the GATT prior to the Uruguay Round, see infra text accompanying notes 359-94.

317. See supra notes 32-35 and accompanying text. Such a Code of Conduct, once in place, would then be applied directly to signatories through beefed up enforcement measures under the GATT itself and indirectly to nonsignatories by various means still to be worked out. See supra text and authorities accompanying notes 36-37; infra text accompanying notes 524-69.

318. See, e.g., Ullrich, GATT, supra note 44, at 147-48; supra note 315. See generally Hiance, supra note 315 (characterizing the Paris Revision negotiations as a conflict between universalists and dualists).

319. Accord Ullrich, GATT, supra note 44, at 148-49. See generally D. Tussie,

a. Preferential treatment under the GATT

The developing countries' demand for preferential treatment, which haunted the very formation of the GATT, ³²⁰ gathered momentum throughout the 1960s and found particular expression in a Generalized System of Preferences favoring these countries. ³²¹ Although the single-tiered structure of the General Agreement was preserved by recourse to a series of waivers in this period, ³²² the practice of a de facto preferential

The Less Developed Countries and the World Trading System: A Challenge to the GATT (1987); R. Senti, GATT: System Der Welthandel Sordnung (1986); O. Long, supra note 61, at 89-97. According to Dorsey, supra note 303, at 122, the very idea of preferential treatment was introduced to international law via the GATT. By 1982, indeed, well before intellectual property officially became a trade issue, the dualist nature of the GATT appeared so paradigmatic that Madame Hiance invoked it as an example of the kind of accomodation needed to make the Paris Revision Conference succeed! See Hiance, supra note 315, at 53. But see R. Hudeg, Developing Countries, supra note 9, 39-50, 63-65 (stressing that the legal status of the GSP program was permissive, not mandatory, and that any agreement worked out between governments in UNCTAD was not made a contractual obligation of the GATT; hence, only the waivers of 1970 and 1971 allowing governments voluntarily to introduce preferences had binding legal force).

320. See, e.g., R. SENTI, supra note 319, at 312 (stating that article I of the Havana Charter concerning "Economic Development and Reconstruction" recognized Third World development as a prime objective of the abortive ITO, and that it expressly called for increased investment in, and preferential treatment for, the developing countries); see also K.W. DAM, supra note 25, at 225-27; Meier, The Tokyo Round of Multilateral Trade Negotiations and the Developing Countries, 13 Cornell Int'l L.J. 239, 243 (1980) (stating that "[a]s early as 1947, in the initial negotiations for the International Trade Organization (ITO), representatives of the less developed countries wanted 'to incorporate wide authority for all waivers of discriminatory practices, if these were intended to foster economic development." (quoting G. Patterson, Discrimination in INTERNATIONAL TRADE: THE POLICY ISSUES 1945-1965, at 323 (1966)). The ITO was never realized and gave way to the GATT, in which the industrialized countries predominated. See, e.g., Jackson, The Puzzle of GATT: Legal Aspects of a Surprising Institution, 1 J. WORLD TRADE L. 131, 134-40 (1967). Nevertheless, the rise of UNCTAD recreated de facto the bipolar structure thought to have been avoided with the demise of the ITO. See generally R. HUDEC, DEVELOPING COUNTRIES, supra note 9, 7-46 (By the early 1960s GATT negotiations between developed and developing countries had become almost totally centered on competition with UNCTAD.). UNCTAD remains the center of trade policy for the enlarged Group of 77.

321. See, e.g., R. Senti, supra note 319, 266-70, 312-18; D. Tussie, supra note 319, 18-24; O. Long, supra note 61, 89-94. See also Behman, The Development and Structure of the Generalized System of Preferences, 9 J. World Trade L. 442 (1975).

322. See, e.g., O. Long, supra note 61, at 100-02; R. Senti, supra note 319, at 112-13; see also Yusuf, supra note 61, at 491; see supra note 319 (legal effect of waivers). The demand for preferences was apparently facilitated by the rise of customs unions and free trade areas, notably the European Communities (EC), and by the willingness of

regime without reciprocity clashed with the spirit, if not the letter, of the basic legal framework, which imposed the rule of Most-Favored-Nation (MFN) treatment in all cases. During the 1970s, the developing countries concentrated their efforts on converting these waivers into a permanent part of the GATT structure at the very period in which the industrialized countries were working to elevate the general standards of international trade law for all Contracting Parties in the context of what became the Tokyo Round. 324

The package deal put together during this Round introduced major innovations into the legal framework of the GATT. On the one hand, this deal allowed the industrialized countries to open specialized Codes of Conduct that imposed high regulatory standards on those Contracting Parties willing and able to sustain them.³²⁵ In theory, it also allowed

the industrialized countries to allow the developing countries to use article XXIV of the GATT to create new preferences between themselves. See, e.g., R. HUDEC, DEVELOPING COUNTRIES, supra note 9, at 50-51; see generally Dam, Regional Arrangements and the GATT: The Legacy of a Misconception, 30 U. CHI. L. REV. 615 (1963). "The crumbling legal discipline against preferences was merely the symptom of a deeper disagreement over the wisdom of the MFN obligation itself." R. HUDEC, DEVELOPING COUN-TRIES, supra note 9, at 51. These pressures led to the stipulation of part IV of the GATT concerning "Trade and Development." See GATT, supra note 2, arts. XXXVI-XXXVIII; Espiell, The Most-Favoured-Nation Clause: Its Present Significance in GATT, 5 J. WORLD TRADE L. 29, 30-31, 35-42 (1971). Although these provisions formulated the principle of special and preferential treatment in rather grandiose terms, one can argue that they "reached new heights in suggesting commitment where there was none." R. HUDEC, DEVELOPING COUNTRIES, subra note 9, at 56-57. On this view, the commitments set out in part IV were not legally binding. Id. at 57. Even on this restrictive interpretation, however, the "major significance of Part IV was its force as an agreed statement of principle." Id. at 58.

323. GATT, supra note 2, art. I. See, e.g., Takase, The Role of Concessions in the GATT Trading System and Their Implications for Developing Countries, 21 J. WORLD TRADE L. 67, 70 (1987). See generally D. CARREAU, P. JUILLARD & T. FLORY, DROIT INTERNATIONAL ECONOMIQUE 259-60, 341-67 (1980) [hereinafter D. CARREAU]. Although the immediate legal status of the waivers permitting the GSP program can be played down, see supra note 322 (view of Hudec), the overall implications cannot. At the very least, it meant that "[a]fter 23 years in the wilderness, Article 15 of the ITO Charter had finally been welcomed into the GATT. (Nine years later, in 1979, both waivers would be made permanent in the so-called enabling clause decision.)" R. HUDEC, DE-VELOPING COUNTRIES, supra note 9, at 64. See infra notes 328-33 and accompanying text.

324. See generally D. CARREAU, supra note 323, at 288-306 (nontarriff barriers); Rubin, Most-Favored-Nation Treatment and the Multilateral Trade Negotiations: A Quiet Revolution, 6 INT'L TRADE L.J. 221, 224-35 (1981).

325. See Legal Instruments, Multilateral Trade Negotiations, GATT, BISD: TWENTY-SIXTH SUPP. 8-188 (1980) [hereinafter Tokyo Round Codes] (including the

signatories to apply conditional MFN treatment to states that declined to accept the higher disciplines,³²⁶ although both the legality and practicality of this principle remain open to doubt.³²⁷

On the other hand, the concept of "Special and Differential Treatment" was written into virtually every side code,³²⁸ and it became a permanent fixture of the basic GATT instrument as well.³²⁹ At the same

Agreement on Government Procurement and the Agreement on Interpretation and Application of articles VI, XVI and XXIII (Subsidies Code)). See generally D. CARREAU, supra note 323, at 288-306; GATT: THE TOKYO ROUND OF MULTILATERAL TRADE NEGOTIATIONS (Pt. 1) at 49-88, GATT Sales No. GATT/1979-3 (1979) (Report by the Director General) [hereinafter GATT REPORT (I)].

326. See, e.g., Hufbauer, Erb, & Starr, The GATT Codes and the Unconditional Most-Favored-Nation Principle, 12 LAW & Pol'y. Int'l Bus. 59, 61-62 (1980) [hereinafter Hufbauer]. These authors state: "The . . . Tokyo Round . . . continued the trend away from unconditional MFN by enshrining the conditional MFN principle in the six Codes addressed to nontariff barriers . . . While every GATT member is eligible to sign each code, it is only upon signature that the member nation is assured of the full range of Code benefits." Id. at 61. As implemented in the U.S. Trade Agreements Act of 1979, Pub. L. No. 96-39, § 2, 93 Stat. 144 (codified at 19 U.S.C. § 2503 (1988)), this approach arguably conflicts with the unconditional MFN principle of the GATT, supra note 2, art. I. Hufbauer, supra, concludes that signatories to the Codes, especially the Subsidies/Countervailing Measures Agreement, known as the Subsidies Code, may legally restrict their benefits to other non-signatories, notwithstanding article I or bilateral agreements to the contrary. Id. at 62, 77-85, 91-93. See also Rubin, supra note 324, at 238-39. But see Enabling Clause, supra note 61, at 201, para. 3 ("The CONTRACTING PARTIES also note that existing rights and benefits under the GATT of contracting parties not being parties to these Agreements, including those derived from Article I [MFN], are not affected by these Agreements"); R. HUDEC, DEVELOPING COUNTRIES, supra note 9, at 88-89 (contrasting official policy of industrialized countries with this GATT Decision and with tendency of the United States to back down in the face of actual litigation); Hartridge & Subramanian, supra note 92, at 899 (recognizing no exceptions to the MFN principle of article I as applied to government actions, rules, and formalities "affecting the import and export of goods").

327. See supra note 326; infra notes 399, 413-33 and accompanying text.

328. See especially R. Hudec, Developing Countries, supra note 9, at 86-87. "The only code to emerge with no S and D provision [Special and Differential Treatment] at all was the Aircraft Code . . . to remove all trade barriers to trade in civil aircraft." Id. at 87. While the contents of these special provisions varied with the codes, the concessions on substantive matters were reportedly significant, especially in regard to subsidies, from which discipline the developing countries were largely exempted. See id. at 87 (concluding that this "was clearly a defeat for the United States").

329. See Enabling Clause, supra note 61. According to Professor Hudec, The Framework texts included a decision of the GATT Contracting Parties, called the Enabling Clause, which was meant to be a de facto amendment of the MFN obligation in Article I. The Enabling Clause gave permanent legal authorization for: (a) GSP preferences, (b) preferences in trade between developing countries, (c) 'more favorable' treatment for developing countries in other GATT rules

time, countervailing stipulations provided for "graduation" of the more industrialized developing countries to a stricter discipline.³³⁰ It was thus implicitly recognized that a nonreciprocal, preferential regime should last only so long as necessary to help eliminate present inequities of the international trading system.³³¹ This agreement institutionalizing a two-tiered regime "as an integral part of the GATT system"³³² was perfected in 1979 with the adoption of an Enabling Clause and other relevant protocols that completed the work of the Tokyo Round.³³³

b. Preferential treatment under the Copyright Conventions

Meanwhile, echoes of North-South tensions that had influenced the evolution of the GATT since the 1960s³³⁴ reached the international organizations administering the Berne and Geneva (U.C.C.) Copyright Conventions.³³⁵ In these fora, the developing countries portray them-

dealing with non-tariff trade barriers and (d) specially favorable treatment for the least-developed developing countries.

R. HUDEC, DEVELOPING COUNTRIES, supra note 9, at 85. Paragraph 5 of the Enabling Clause, declared that the "developed countries do not expect reciprocity for commitments made by them in trade negotiations to reduce or remove tariffs and other barriers to the trade of developing countries" supra note 61, at 204, para. 5. This moved closer to the position of total nonreciprocity. See R. HUDEC, DEVELOPING COUNTRIES, supra note 9, at 85.

The Framework Agreements, supra note 61, also relaxed the discipline applied to developing countries in regard to balance-of-payments issues. See Declaration on Trade Measures Taken for Balance-of-Payments Purposes, GATT Decision, 28 Nov. 1979, GATT, BISD: Twenty-Sixth Supp. 205-09 (1980). Still another Framework Agreement broadened the ability of developing countries to protect infant industries beyond the exceptions already set out in article XVIII. See Safeguard Action for Development Purposes, GATT Decision, 28 Nov. 1979, GATT. BISD: Twenty-Sixth Supp. 209-10 (1980). See generally R. Hudec, Developing Countries, supra note 9, at 82-88; GATT, The Tokyo Round of Multilateral Trade Negotiations, Supplementary Report (Pt. 2) 14-26 (1980) (Report by the Director-General of GATT) [hereinafter GATT Report (II)].

- 330. See Enabling Clause, supra note 61, at 205, para. 7; R. HUDEC, DEVELOPING COUNTRIES, supra note 9, at 85-86 (reporting successful state action under this graduation principle).
- 331. See, e.g., Takase, supra note 323, at 76-77; see also Yusuf, supra note 61, at 491-93.
 - 332. GATT REPORT (II), supra note 329, at 19.
 - 333. See supra note 329.
 - 334. See supra notes 321-24 and accompanying text.
- 335. See, e.g., S. RICKETSON, supra note 34, at 595-608. The administering organizations were UNESCO and the International Office of the Berne Union, which had been combined with the International Office of the Paris Union in BIRPI. BIRPI gave way to WIPO in 1967, but UNESCO continues to administer the U.C.C. See id. at 123.

selves as dependent importers of foreign cultural products that are sold at monopoly prices, when available, and that are frequently unavailable in their markets even at inflated prices.³³⁶ Because these states lack the financial resources and foreign exchange to pay for imported educational works they deem essential for national development,³³⁷ they see the international copyright system as an instrument for limiting access to the world's common cultural heritage. This point of view pulls against copyright protection for foreign works and serves to justify tolerance of unauthorized uses, especially educational uses, on local markets.³³⁸

After the Stockholm Diplomatic Conference in 1967 failed to produce a set of concessions to developing countries that the industrialized countries would ratify, 339 the principle of "differential and more favorable treatment" was formally accepted at the Diplomatic Conference of Paris in 1971. 340 As a result, provisions appended to the Berne Convention and incorporated into the U.C.C. in 1971 sanctioned derogations from the general standards of international copyright protection that were otherwise elevated for Member States of the U.C.C. 342 These texts estab-

^{336.} See, e.g., S. RICKETSON, supra note 34, at 596-97 (early concerns of India and of certain African countries); Tocups, supra note 58, at 408.

^{337.} The tendency of publishers in the developing countries to gear their pricing and distribution policies to affluent markets aggravates this disability. In other words, publishers prefer exports to the publication of cheap, local editions in the developing countries. See, e.g., S. RICKETSON, supra note 34, 590-91; Tocups, supra note 58, at 408, 410-11. Strict enforcement of both educational and noneducational copyrights then adds to national development costs and may be used to inhibit the growth of local publishers, whose activities could foster more cultural independence. See, e.g., S. RICKETSON, supra note 34, at 649. See also Tocups, supra note 58, at 410-11 (citing Boguslavsky). To the extent that the developing countries' own cultural products, including folklore, remain unprotectable or unmarketable abroad, these countries become participants in a one-way exchange that aggravates the basic imbalance. See, e.g., id. at 408, 410-11.

^{338.} See, e.g., R. Benko, supra note 7, at 28; S. RICKETSON, supra note 34, at 596; Tocups, supra note 58, at 410-11, 420-21.

^{339.} See, e.g., S. RICKETSON, supra note 34, at 598-624.

^{340.} See, e.g., id. 624-64.

^{341.} See Berne Convention, supra note 22, art. 21, App. arts. I-VI; U.C.C., supra note 23, arts. Vbis-Vquater. The relevant U.C.C. provisions are incorporated into the text, while those of the Berne Convention are added as an appendix and incorporated by reference in article 21; the substance of both sets of provisions is essentially the same. See generally S. RICKETSON, supra note 34, 632-64; S.M. STEWART, INTERNATIONAL COPYRIGHT AND NEIGHBORING RIGHTS 150-54, 160-72 (1983).

^{342.} Because the two Conventions were to apply parallel provisions to developing countries, it was also agreed in a preliminary package deal that the latter countries would not be prevented from leaving Berne for the U.C.C. if they chose to do so. As a disincentive, however, the negotiators also agreed to raise the level of protection afforded by the U.C.C. by the addition of minimum standards, including express recognition of

lished a set of preferential measures³⁴³ that enable nationals of developing countries³⁴⁴ to secure nonexclusive compulsory licenses on favorable terms that grant the rights to translate or otherwise reproduce literary, scientific, and artistic works³⁴⁵ needed for teaching, scholarship, or re-

the author's general reproduction right, of a public performance right, and of a right to broadcast works in their original or derivative forms. See, e.g., U.C.C., supra note 23, art. IVbis; S. RICKETSON, supra note 34, at 629, 631-32, 662; S.M. STEWART, supra note 341, at 148-50. The lower tier of protection afforded by the codified international copyright system as a whole was thus significantly elevated before providing the developing countries with a differential and more favorable regime under either Convention. There was, accordingly, less reason to move from one to the other. S. RICKETSON, supra note 34, at 662.

343. Both the U.C.C. and the Berne Convention allow all Member States certain derogations from authors' exclusive rights in order to promote the public interest in access to cultural products at the international level. See, e.g., Berne Convention, supra note 22, art. 2bis (exceptions for political speeches, lectures, addresses and the like), art. 10(2) (exceptions for teaching), art. 10bis (exceptions for articles in newspapers or broadcasts, news reports); see also id. art. 9(2) (general "fair use" exceptions to the reproduction right), art. 11bis (compulsory licenses for broadcasting rights), art. 13(1) (compulsory license for recorded musical works).

The Berne Convention as revised over the years contains no compulsory license for translations in derogation from the exclusive rights of article 8. See, e.g., WIPO GUIDE, supra note 125, at 53. Article 5 of the 1896 text, however, provided that if, within ten years of first publication, no authorized translation of a work into a language of general use in the country concerned had occurred, the exclusive right of translation ceased to exist in that country and no further permissions to translate were required. See id. at 130. This "ten-year regime" for translations remains available, on pain of reciprocity, under article 30 for those countries that have made the appropriate reservation in their acts of accession. Id. In contrast, U.C.C., supra note 23, art. 5, provides a general, nonexclusive, compulsory license for the translation of writings if no translation has otherwise occurred within seven years of first publication or if a translation published within the period goes out of print. See generally S.M. STEWART, supra note 341, at 152-54; A. BOGSCH, THE LAW OF COPYRIGHT UNDER THE UNIVERSAL CONVENTION 57-58 (3rd ed. 1968). The special provisions for developing countries were largely modeled on the U.C.C.'s own article V, and they are included within the U.C.C. as articles Vbis to Vquater. Essentially the same provisions are set out in the Berne Convention, supra note 22, App. art II. See, e.g., S.M. STEWART, supra note 341, at 152, 154; see further infra notes 345-48.

344. See Berne Convention, supra note 22, App. art. I; U.C.C., supra note 23, art. Vbis. Developing country status depends essentially on United Nations practice and self-selection; a formal declaration of intent is required. Not every qualified developing country intends to exercise these rights. See, e.g., S.M. STEWART, supra note 341, at 160-61.

345. See Berne Convention, supra note 22, App. arts. II, III; U.C.C., supra note 23, art. Vter. Under either Convention as amended in 1971, "a developing country which wishes to do so, may provide for a regime of non-exclusive, nonassignable compulsory licenses carrying an obligation to make fair payment to the copyright owner, to translate and/or reproduce works protected by the Convention[s], exclusively for systematic in-

search purposes.346 At the same time, both Copyright Conventions forbid

structional activities (or in some cases for teaching, scholarship or research)." WIPO GUIDE, supra note 125, at 147. See also S.M. STEWART, supra note 341, at 154, 160-72; see generally S. RICKETSON, supra note 34, 632-64. These compulsory licenses can be granted as early as three years after first publication if the translation is made into "a language in general use" within the country concerned, or even after one year in the case of translations "into a language . . . not in general use in one or more developed countries which are members of the Union." See, e.g., Berne Convention, supra note 22, App. art. II(2), (3); WIPO GUIDE, supra note 125, 154-56. Hence, translations from English, French, and Spanish are excluded from the one-year period. S. RICKETSON, supra note 34, at 639-40.

Compulsory licenses for the reproduction of protected works may be issued between three and seven years from first publication, depending on the nature of the work, when the copyright owner has not otherwise distributed copies of the work in the country concerned "at a price reasonably related to that normally charged in the country for comparable works. . . ." Berne Convention, supra note 22, App. art. III(2)(a); accord U.C.C., supra note 23, art. Vter. See, e.g., S.M. Stewart, supra note 341, at 169. The waiting period is normally five years, but only three years for works concerning mathematics, science, or technology, seven years for literature, music, and art books. Subject matter, not language, is thus the operative criterion for reproductions, and use of the work under the license must be "in connection with systematic instructional activities." Id. at 169-70. The "normal price" criterion is said to be satisfied by imported copies, not just locally made copies. But if only imports are available, and if they are uniformly high priced, the external price may actually control the compulsory licenses. See S. RICKETSON, supra note 34, at 648-49.

Until the compulsory license provisions kick in, the copyright owner retains exclusive rights. See, e.g., WIPO GUIDE, supra note 125, at 155. With regard to translations, as distinct from reproductions, moreover, developing countries that belong to the Berne Union may elect to invoke the old ten-year regime of the 1896 text, see supra note 343, rather than the provisions of the Appendix as such. Developing countries that elect the ten-year regime rather than article II of the Appendix cannot later revoke this choice and revert to the system of compulsory licenses; nor can a developing country that selects the latter regime convert to the simpler ten-year regime later on. See, e.g., S.M. Stewart, supra note 342, at 168-69.

346. Berne Convention, supra note 22, App. arts. II(5), III(2) ("systematic instructional activities"). These are the same for the U.C.C. See, e.g., S. RICKETSON, supra note 22, at 642-43, 651-52. The purpose of the compulsory licenses is clearly to facilitate translations or local editions of school books, textbooks of all kinds, encyclopedias, technical and scientific manuals, and the like, not entertainment as such. See, e.g., S.M. STEWART, supra note 341, at 161-62, 164. The compulsory licenses are, accordingly, not subject to claims of reciprocity. See Berne Convention, supra note 34, App. art. I(6); S. RICKETSON, supra note 34, at 637. The same principle applies to the U.C.C. via legislative history. S. M. STEWART, supra note 341, at 163-64. These licenses, however, cannot issue until effort has been made to negotiate a proper license with the holders of the proprietary rights. See Berne Convention, supra note 22, App. art. IV(1), (2), (3), as amplified by id. art. II(4); U.C.C., supra note 23, art. Vter(1)(c); S.M. STEWART, supra note 341, at 161-62. Reasonable compensation must be paid in any case. Berne Convention, supra note 22, App. art. IV(6); U.C.C., supra note 25, art. Vter. Absence of a

exports of works published under these regimes,³⁴⁷ and both recognize a "graduation" principle for states that attain higher levels of development.³⁴⁸

History teaches, in short, that in the GATT as under the Copyright Conventions, accommodation became feasible because improvements in the international minimum standards applicable to all states over time were accompanied by temporary derogations and preferences in favor of the developing countries.³⁴⁹ These concessions recognize present disparities

similar clause in the Stockholm Protocol of 1967, supra note 339, was strongly criticized. See S. RICKETSON, supra note 34, at 658.

347. Berne Convention, supra note 22, App. art. IV(4), (5); U.C.C., supra note 23, Vter (4)(a). "The provisions of the Appendix were inserted into the [Berne] Convention to meet the educational needs of the developing countries . . . not . . . to permit publishers in developing countries to compete with the copyright owner in supplying foreign markets. Hence, it is a fundamental principle that translation and reproduction licenses only permit publication within the country granting the license." WIPO Guide, supra note 125, at 168. The absence of such a provision in the Stockholm Protocol of 1967 was bitterly criticized. S. Ricketson, supra note 34, at 655. Moreover, the compulsory licenses for both translations and reproductions may lapse if the copyright owner later meets the needs of the local market at reasonable prices. See, e.g., Berne Convention, supra note 22, App. arts. II(6), III(7).

348. See, e.g., Berne Convention, supra note 22, App. art. I(1), (3) ("Any country of the Union which has ceased to be regarded as a developing country as referred to in paragraph (1) shall no longer be permitted to renew its declaration . . . and . . . such country shall be precluded from availing itself of the faculties referred to in paragraph (1) . . ."); U.C.C., supra note 23, art. Vbis(3). The graduation principle implicitly acknowledges that the international minimum standards of protection should apply uniformly to all signatories of these Conventions once present conditions of inequality are ameliorated. See, e.g., Berne Convention, supra note 22, App., art. I(1), (3). Article I(1) of the Appendix applies both an objective criterion (status of developing country according to United Nations practice) and a subjective criterion ("having regard to its economic situation and its social or cultural needs, [a country] does not consider itself immediately in a position to make provision for the protection of all the rights as provided for in this Act" (emphasis supplied)). Article I(3) of the Appendix then applies the same criteria to determine if "any country of the Union . . . has ceased to be regarded as a developing country," in which case it cannot renew its declaration of intent to use the compulsory licenses. In short, this provision "assumes progress" and indirectly reinforces the basic framework. See, e.g., WIPO GUIDE, supra note 125, at 150-51; S.M. STEWART, supra note 341, at 163. How to proceed if a developing country disputes its putative status remains uncertain.

349. See supra text and authorities accompanying notes 320-33, 334-48. The temporary system of compulsory licenses under the Copyright Conventions has been called "a remarkable piece of international cooperation and compromise" that avoided "the breakdown of the structure of international copyright." S.M. Stewart, supra note 341, at 162. While the practical significance of these concessions has not been great, they served to defuse the crisis and to convince the developing countries that their "economic assis-

in levels of economic development between groups of states, and they are intended to help the developing countries acquire the capacity to compete on more equal terms. Whether such concessions actually deliver the impetus to development for which they are claimed is a separate and debatable question.³⁵⁰ The fact remains that, given this historical perspective, no group of states opposed to differential and more favorable treatment for developing countries within the context of the Paris Convention could reasonably hope to escape the logic of that solution by transferring the subject of industrial property to the GATT. On the contrary, the structural changes institutionalizing a preferential regime within the basic GATT framework, as perfected in 1979,³⁵¹ arguably make the very demand for a GATT-endorsed, universal set of industrial property norms inconsistent with the spirit if not the letter of both the GATT itself and of an emerging international law of development.³⁵²

III. ANALYTICAL PROPOSITIONS FOR A TRADE-BASED APPROACH TO INTELLECTUAL PROPERTY

The industrialized countries' proposals concerning intellectual property in the Uruguay Round can be broken down into two basic goals. One is to establish an internationally regulated market for intellectual goods that could be made impervious to unauthorized imports from states tolerating the conversion of foreign intellectual property on their territories.³⁵³ A second goal is to develop a set of international minimum stan-

tance should not be at the expense of the . . . persons who create and provide literary and artistic works." S. RICKETSON, *supra* note 34, at 663. An unexpected result was that the developing countries are reportedly "more fully integrated into the Berne Union system than ever before, and . . . it seems true to say that the Berne Convention has scored a significant victory." *Id.* at 664. See also Ndiaye, The Berne Convention and Developing Countries, 11 COLUM. J.L. & ARTS 47, 54, 56 (1986).

- 350. See supra note 349 (view of Ricketson); R. HUDEC, DEVELOPING COUNTRIES, supra note 9, 208-35 (view that preferential regimes are economically harmful and that strict MFN regime benefits all sides); infra text and authorities accompanying notes 551-65.
 - 351. See supra notes 325-33 and accompanying text..
- 352. See, e.g., O. Long, supra note 61, at 22 (contending that the GATT and a two-tiered balancing process are virtually synonymous under a pragmatic approach); see also Yusuf, supra note 61, at 488. But see R. Hudec, Developing Countries, supra note 9, at 103-08 (questioning the legal validity of broader claims, but noting the likelihood that developing countries will take them seriously). In general, the pragmatic approach favored by Long (former Director-General of GATT) is viewed as an anti-legal perspective by Hudec. Compare, e.g., Hudec, GATT Disputes, supra note 36, at 151 n.9 with O. Long, supra note 61, at 64; see also K.W. Dam, supra note 25, at 3-9.
 - 353. See, e.g., 1988 U.S. Proposal, supra note 5, which states: "Parties would agree

dards for the protection of intellectual property that all Contracting Parties of the GATT would sooner or later have to respect even in the course of national development strategies that did not rely on the exportation of intellectual goods to major industrialized markets.³⁵⁴ Because these two goals raise rather different legal and policy issues, it is well to keep them distinct for purposes of further analysis.

A. A Transnational Market for Qualified Intellectual Goods

1. Pooling the GATT's Reserved Domains

Nothing in the principle of economic sovereignty³⁵⁵ impedes the industrialized countries from voluntarily harmonizing their own intellectual property laws with a view to heightening the level of protection in their collective territories or from instituting internal enforcement procedures and border control measures aimed at excluding imports of goods and services that violate these laws.³⁵⁶ Successful completion of such a project

to provide in their national laws for the protection of intellectual property" and for border and internal enforcement measures consistent with the terms of the agreement. Id. at 360. Thus, parties would agree to: 1) "Create an effective economic deterrent to international trade in goods and services which infringe intellectual property rights through implementation of border measures." Id. at 358. 2) "Recognize and implement standards and norms that provide adequate [protection] and provide a basis for the effective enforcement of such rights." Id. See also 1987 EC Guidelines, supra note 31, at 208-09 (stressing border measures, internal procedures, and remedies designed to ensure respect for intellectual property rights).

354. See, e.g., 1988 U.S. Proposal, supra note 5, which states that the parties would agree to: "[e]xtend the international notification, consultation, surveillance and dispute settlement procedures to protection of intellectual property and enforcement of intellectual property rights; [and] [e]ncourage non-signatory governments to achieve, adopt and enforce the recognized standards for protection of intellectual property and join the agreement." Id. at 358. See also 1988 EC Proposal, supra note 32, at 324 (stressing the need for "a basic degree of convergence" as regards the "principles and the basic features of protection" and stating that "the negotiations should result in the insertion into the GATT legal system of widely recognized principles of intellectual property rights which affect trade"). While the European Communities' 1987 Guidelines had emphasized border measures, see supra note 353, its 1988 Proposal accented the importance of agreed international standards.

355. See supra notes 211, 294, 296-98 and accompanying text.

356. Border measures to repress commercial counterfeiting of trademarked goods were discussed during the Tokyo Round. See, e.g., Agreement on Measures to Discourage the Importation of Counterfeit Goods, GATT Doc. L/5382 (Oct. 18, 1982) [hereinafter Counterfeiting Code]; Hartridge & Subramanian, supra note 92, at 900-01, 906-907. The proposed Counterfeiting Code expressly invoked the authority of article XX(d) of the GATT, as follows: "Noting that the Contracting Parties are exercising their rights under Article XX... to adopt or enforce laws and regulations relating to the protection

would, of course, restrict market access for nonparticipating states, some of whose previously permissible exports might now become forbidden infringing goods. But these states should find little basis for complaint under the GATT, which has heretofore played a limited role in the regulation of intellectual goods as such.

a. Ambiguities of article XX(d)

The legal posture of a defensive intellectual property alliance along these lines depends in the first instance on the relation between the traditional disciplines of the world's intellectual property system and the basic disciplines of the GATT.³⁵⁷ Article XX(d) of the General Agreement configures this relation in the following language:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditons prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any Contracting Party of measures:

(d) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to . . . the protection of patents, trade marks and copyrights, and the prevention of deceptive practices 358

Unfortunately, the ambiguities of article XX(d) make it susceptible of several interpretations. 359

In attempting to decipher the precise nature of the exceptions to the GATT that article XX as a whole was intended to establish, trade experts customarily approach intellectual property from the direction of international trade law.³⁶⁰ On this approach, it can be argued that the

of trademarks" See GATT, supra note 2, art. XX(d), quoted in text accompanying note 358. This invocation, however, did little to clarify the ambiguous nature of the authority inherent in article XX(d). See infra notes 360-88 and accompanying text.

^{357.} See, e.g., J.H. JACKSON, supra note 19, at 743-44.

^{358.} GATT, supra note 2, art. XX(d).

^{359.} See, e.g., J.H. Jackson, supra note 19, at 743-44; Rubin, supra note 324, at 238-39; Hufbauer, supra note 326, at 75-76. For recent emphasis on the ambiguous nature of this provision, see Remarks of Jackson, supra note 5, at 351.

^{360.} See, e.g., J.H. JACKSON, supra note 19, at 743-44; Hartridge & Subramanian, supra note 92, at 900 ("Article XX(d) does not oblige Contracting Parties to adopt any enforcement measures; it ensures that GATT obligations do not stand in the way of effective enforcement of intellectual property legislation."). But see Hufbauer, supra note 326, at 89-91.

"laws or regulations which are not [to be] inconsistent with the provisions of this [General] Agreement, includ[e]... the protection of patents, trade marks and copyrights, and ... deceptive practices." Hence, these laws would remain subject to the basic GATT disciplines, especially those of article I, which requires MFN treatment, and article III, which requires national treatment, except when objective conditions of necessity justify derogations from these principles. 362

This extreme view, however, downplays the fact that article XX as a whole deals with "General Exceptions to the GATT," and it strains the phrase "necessary to secure compliance with" to the point where it becomes virtually redundant. A less extreme view, on which there is considerable agreement, therefore concedes that the traditional intellectual property disciplines—"patents, trademarks and copyrights, and the prevention of deceptive practices"—are exempt from the MFN discipline of article I by dint of article XX(d). But those who hold this view contend that the relevant intellectual property disciplines nonetheless remain subject to the constraints of national treatment under article III. This follows from language in the introductory text of article XX(d) itself, which evokes the principle of nondiscrimination as "between countries where the same conditions prevail" and prohibits "a disguised restriction on international trade." and prohibits "a disguised restriction on international trade."

Reliance on this language seems misplaced, however, because it can just as plausibly be used to support the opposite conclusion. The general rules pertaining to national treatment are set out in article III of the

^{361.} GATT, supra note 2, art. XX(d), quoted in text accompanying note 358. See, e.g., J.H. JACKSON, supra note 19, at 743 (registering but not fully endorsing this thesis); see also Hartridge & Subramanian, supra note 92, at (5) (can be read this way).

^{362.} See supra note 360. Articles II (tariffs) and XI (quantitative restrictions) also become applicable. See J.H. JACKSON, supra note 19, at 743.

^{363. &}quot;In the first place, it might be asked why, if it is seriously meant that provisions falling under one or another of the general exceptions cannot be used for purposes of protecting domestic producers, the general exceptions would be necessary at all." J.H. JACKSON, *supra* note 19, at 743.

^{364.} GATT, supra note 2, art. XX(d), quoted in text accompanying note 358. See, e.g., J.H. Jackson, supra note 19, at 743-44; Meesen, supra note 4, at 71; Hart, supra note 32, at 61. But see Husbauer, supra note 326, at 75-76; Rubin, supra note 324, at 238 (emphasizing the "arbitrary and unjustifiable discrimination" clause of article XX; stating that, so long as article XX is used to offset unfair trade practices in the broadest sense, then neither MFN nor national treatment apply). Those who endorse the proposition set out in the text believe that the language in article XX(d) concerning "a disguised restriction on international trade" triggers national treatment under article III, and not the language concerning nondiscrimination as such. See J.H. Jackson, supra note 19, at 743 n.2.

GATT.³⁶⁵ If the drafters had intended article III to apply to the intellectual property laws mentioned in article XX(d), they had only to say so either in article III itself, which contains many nuances,³⁶⁶ or unambiguously in article XX(d). In either case, there would be no need for the peculiar and restrictive language actually used in the introductory paragraph of article XX, which talks opaquely of parties "similarly situated" and does not mirror the language used in article III. Nor would it be necessary to drop a cryptic reference to "a disguised restriction on international trade" if the drafters unabashedly intended to impose the rule of national treatment across the board.³⁶⁷ The plausible inference is not that article III applies to article XX(d) generally, which is nowhere clearly stated, but rather that the principle of nondiscrimination remains relevant to aspects of article XX(d) that have yet to be clarified.³⁶⁸

One can then reinforce this inference if one approaches article XX(d) from the direction of world intellectual property law as it stood in the late 1940s, with a view to assessing the relation between this body of law and the revised rules of international trade that were emerging from the GATT negotiations. At that time, the industrialized countries responsible for erecting the GATT on the ruins of a projected International Trade Organization³⁶⁹ were all signatories to the Paris Convention, which dealt with "patents, trade marks . . . and the prevention of deceptive practices." Except for the United States, they were also signatories to the Berne Convention, which dealt with "copyrights." The

^{365.} GATT, *supra* note 2, art. III, which state practice applies to border measures implementing internal policies in place of article XI.

^{366.} See, e.g., GATT, supra note 2, art. III(8)(a), (b); see generally infra text accompanying notes 419-27.

^{367.} See GATT, supra note 2, art. XX, quoted in text accompanying note 358, art. III. National treatment as such is nowhere mentioned either in the introductory paragraph of article XX or in the exception for intellectual property in clause (d). While it is customary to infer a reference to national treatment from the language concerning "a disguised restriction on international trades" see supra note 364, this begs the question as to what exactly this clause actually covers, see infra text accompanying notes 383-84, and it further begs the question as to why the drafters were so coquettish.

^{368.} See infra text and authorities accompanying notes 381-88.

^{369.} See, e.g., R. SENTI, supra note 319, at 312; G. PATTERSON, supra note 320, at 323; supra note 320.

^{370.} See Paris Convention, supra note 21, art. 1(1), (2); infra notes 456-66 and accompanying text. For the lists of countries that had acceded to the Act of London (1934) and the Act of Lisbon (1958), together with the dates of accession, see 1 WIPO & BIRPI, MANUAL OF INDUSTRIAL PROPERTY CONVENTIONS E-3 & F-3 (1967).

^{371.} See Berne Convention, supra note 22, arts. 1, 2; WIPO GUIDE, supra note 125, at 10-11 (relation of "copyrights" to the protection of authors and of literary and artistic works); infra text accompanying notes 449-51. For a list of countries that had acceded to

United States, meanwhile, was in the process of establishing the U.C.C. as a bridge between the Berne Union countries and the non-Berne countries, in order to strengthen and solidify the international regulation of "copyrights."³⁷² All three treaties uniformly make national treatment the cornerstone of the regulatory frameworks they install.³⁷³

Had the drafters of the GATT meant to apply the basic GATT discipline to intellectual property rights in the late 1940s, therefore, they must necessarily have intended to reinforce an international legal discipline that had already existed for some sixty years. This, in turn, might well have influenced States Members of the International Unions to implement their obligations under the Great Conventions more perfectly before incurring new liabilities of unknown scope in regard to the basic intellectual property rights. In that case, however, one must further suppose that the drafters of the GATT would have informed authors, inventors, and trademark proprietors, not to mention their lawyers, of this intent. Rights holders privy to this intent would then have pressed their governments to use the GATT to compel stricter compliance with the Great Conventions over the past fifty years, 374 and most of the difficulties that led to the inclusion of intellectual property in the Uruguay Round would never have arisen in the first instance. 375

Merely to state this preposterous theory is to cast doubt on any interpretation implying that the drafters of the GATT intended to include substantive intellectual property laws as such within the basic GATT disciplines or that they sought to accomplish this chimerical goal in the roundabout language of article XX(d). A more plausible theory is that the drafters of the GATT, having trimmed their sails after the failure of

the Brussels Act of 1948, and the dates of accession, see 3 CLTW, *supra* note 22, Item F-1.

^{372.} See, e.g., Ringer, The Role of the United States in International Copyright Law: Past, Present, and Future, 56 Geo. L.J. 1050, 1060-61 (1968).

^{373.} See infra note 441 and accompanying text. However, national treatment under these treaties applies to nationals as such, whereas national treatment under GATT applies to goods. See infra note 434 and accompanying text.

^{374.} This would be especially true under the Paris Convention, where nationals of member countries realize important rights only through the national treatment clause, which gives them access to domestic legislation that implements obligations under the Convention. See supra notes 90-91; infra notes 443-52, 456-74 and accompanying text.

^{375.} Many problems of lax protection arising under the Paris Convention stem from tepid implementation of the Convention itself in domestic law, and not from a lack of international standards, although this also poses a problem. See, e.g., supra notes 100-03, 312-13 and accompanying text; infra notes 467-84 and accompanying text. Nearly 100 states belong to the Paris Convention, and more than 70 states belong to the Berne Convention.

the ITO, ³⁷⁶ decided to place the traditional institutions of the world's intellectual property system beyond the GATT altogether in order to avoid potential conflicts or overlap between the GATT and the International Unions already regulating intellectual property.

Approached from this angle, article XX(d) lends itself to an interpretation consistent with the empirical relations between the GATT and the Great Conventions existing at the present time and with the structure of the article as a whole. In fact, article XX, entitled "General Exceptions," sets out ten subject matter areas, including intellectual property rights, as to which "Nothing in this Agreement shall be construed to prevent" the Contracting Parties from adopting certain "measures."377 As to these ten exceptions, however, there are two packages of limitations that must be respected. The first consists of the general limitations in the introductory text of article XX, which apply to all ten of the subject matter areas listed thereafter, but only insofar as they constrain measures "necessary to" or "relating to" or "imposed for" or "essential to" the implementation of substantive laws concerning the expressly exempted subject matter areas.378 The second package consists of any limitations specifically devised for the ten subject-matter areas taken one by one, which are imposed within the different clauses applicable to each of the subject matters appearing in the list of "General Exceptions." In a word, each of the clauses setting out the subject matters of article XX(a) through (j) also contains exceptions to the "General Exceptions" that it is the task of article XX as a whole to establish.³⁸⁰

^{376.} See supra notes 320, 369 and accompanying text. The opening to intellectual property is another step toward the expanded agenda originally set for the ITO. See supra note 19.

^{377.} GATT, supra note 2, art. XX, quoted in text accompanying note 358; see J.H. Jackson, supra note 19, at 743-44. "Thus, all GATT obligations are rendered subject to the exception," whatever that may entail. Id. at 744. These subject matters include public morals, GATT, supra note 2, art. XX(a); the protection of human, animal or plant life, or health, id. art. XX(b); imports or exports of gold or silver, id. art. XX(c); intellectual property rights, id. art. XX(d); products of prison labor, id. art. XX(e); the protection of archeological or historical artifacts and artistic treasures, id. art. XX(f); measures to conserve exhaustible natural resources, id. art. XX(g); measures in conjunction with certain commodity agreements, id. art. XX(h); measures in conjunction with certain domestic price stabilization plans, id. art. XX(i); measures essential to the acquisition or distribution of scarce products, id. art. XX(j).

^{378.} See GATT, supra note 2, art. XX(a)-(j).

^{379.} See supra note 377.

^{380.} Neither this nor any other interpretation can be verified by appealing to legislative history. See J.H. JACKSON, supra note 19, at 744 (stating that the language of the introductory text "is so nebulous as to make exact definition impossible"; noting lack of

Accordingly, the most plausible interpretation of article XX(d) is that it places substantive laws dealing with "patents, trademarks and copyrights, and the prevention of deceptive practices" as such beyond the basic GATT regime in order not to trammel the regulation of these same subject matters by the Great Conventions and the International Unions to which they gave rise. Ancillary measures, however, such as border control measures, that are adopted to "secure compliance with laws or regulations" pertaining to these traditional intellectual property disciplines fall within the exceptions to the "General Exceptions" of article XX. Hence, they must pass the test of necessity expressly incorporated into paragraph (d) of this article. Such ancillary measures likewise

litigation to clarify the ambiguities of state practice under the exceptions, which have effectively resulted in discrimination against imported goods).

381. See supra text and authorities accompanying notes 369-73. This reading, however, can support the argument that WIPO has exclusive jurisdiction over intellectual property matters and that the GATT can only ensure that measures taken to protect intellectual property do not constitute barriers to legitimate trade. See, e.g., Hartridge & Subramanian, supra note 92, at 901-02; Joos & Moufang, Report on the Second Ringberg-Symposium, in GATT or WIPO, supra note 5, at 1, 30-34. The notion that WIPO or other Specialized Agencies acquire exclusive subject-matter jurisdiction within the United Nations family is supported by operational agreements stipulated under United Nations auspices that are widely disregarded in United Nations practice, as international civil servants well know. The binding status in international law of such interagency agreements remains uncertain. Besides, the GATT is not a Specialized Agency within the United Nations family and could not be bound by such agreements absent the consent of the Contracting Parties. At the same time, UNCTAD's own free-wheeling Board of Governors has exercised little restraint in determining what does or does not affect international trade, although the industrialized countries have argued against the ability of UNCTAD to encroach upon WIPO's territory in the past. This precedent arguably applies to current attempts to enlarge GATT's jurisdiction at WIPO's expense. See, e.g., Joos & Moufang, supra, at 30-31. But the industrialized countries have generally not succeeded in limiting the broad notion of trade-related matters that UNCTAD has consistently adopted in the past, regardless of interagency tensions, and this notion cuts against UNCTAD now.

Above all, as masters of a treaty about international trade, the ability of the GATT Contracting Parties to regulate new fields of concern to international trade would seem unchallengable so long as it is the fruit of procedurally valid decisions by these parties. See, e.g., Joos & Moufang, supra, at 30. The contrary view, however, holds that the GATT cannot undertake new disciplines in fields that were not within the original purview of the Agreement. See, e.g., Hartridge & Subramanian, supra note 92, at 901-02. This reading would tend to immunize GATT Contracting Parties from new GATT initiatives in any of the subject-matter areas excepted under article XX.

382. See GATT, supra note 2, art. XX(d), quoted in text accompanying note 358. See also Rubin, supra note 324, at 238 (concluding, by different reasoning, that measures under article XX are never arbitrary or unjustifiably discriminatory so long as they are necessary to offset prior "unfair trade practices"). Apparently, Rubin sees all viola-

remain subject to the general package of limitations set out in the first paragraph of article XX, which prohibits any "disguised restriction on international trade" and forbids "arbitrary or unjustifiable discrimination between countries where the same conditions prevail."³⁸³ But these general limitations apply only to ancillary measures taken, for reasons of necessity, to secure compliance with the intellectual property laws otherwise regulated by the Paris and Berne Conventions.³⁸⁴

On this interpretation, the traditional institutions of the world's intellectual property system remain exempt from the GATT's basic framework altogether, both as regards the MFN requirement of article I and the national treatment requirement of article III. Nothing in these articles or in article XX(d), therefore, impedes Contracting Parties from elevating and coordinating the legal standards that render their intellectual property laws operational, see even though Contracting Parties that also belong to the International Unions must scrupulously respect any limitations imposed by the Great Conventions. When, however, the signatories to a future GATT Code of Conduct take steps to secure compliance with these standards on their home territories by instituting and coordinating the border control measures needed to immunize a transnational market from imports of illicit intellectual goods, they must first satisfy the test of "necessity" in article XX(d), and, second, they must avoid applying these measures in a manner that arbitrarily discriminates

tions of basic intellectual property disciplines as unfair trade practices in a broad sense, which has some historical justification if one views intellectual property laws as a subset of unfair competition law. See supra text and authorities accompanying note 132, quoting 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1675.

^{383.} See GATT, supra note 2, art. XX(d), quoted in text accompanying note 358. On this view, Section 337 of the United States Tariff Act could be characterized as a "disguised restriction on international trade" to the extent that it discriminates in favor of nationals in a manner that is not "necessary" to secure compliance with "the domestic patent law." Cf. Remarks of Jackson, supra note 5, at 351; Meesen, supra note 4, at 71; see infra note 678. Query, in this regard, whether the language concerning "arbitrary or unjustifiable discrimination between countries where the same conditions prevail" does not invite tolerance for special and differential treatment "between countries where the same conditions [do not] prevail."

^{384.} See supra notes 369-80 and accompanying text.

^{385.} See supra text and authorities accompanying notes 376-77. Cf. Husbauer, supra note 326, at 75-76 (reaching the same conclusion by different reasoning).

^{386.} A claim of nonviolative nullification and impairment could still be lodged, though without much hope of success. *See infra* text and authorities accompanying notes 401-06.

^{387.} See infra text and authorities accompanying notes 435-42, 456-90 (concluding that national treatment under the Great Conventions must be respected in all cases).

against other states.388

These limitations, in turn, are serious, and they must be heeded. 889 Border control measures need not be arbitrary, however, if they are reasonable measures applicable to intellectual goods from all sources on the same basis, and they will not discriminate if they do not favor certain states over other states or nationals over foreigners. Assuming that participants in a GATT Code take pains to avoid these shoals or to eliminate shoals that already exist in their domestic systems, 300 the one remaining obstacle is the duty to ensure that such measures are really "necessary to secure compliance with" the relevant domestic intellectual property laws. 391 The collective declarations and practices of the industrialized countries to date, however, leave no doubt that improved intellectual property protection is of vital economic importance to them all. 892 If the pragmatic approach to the GATT means anything, 393 it would be difficult for a particular bloc of states to challenge the level of collective necessity claimed in this case, especially in view of the benign tolerance with which all sides have greeted derogations from the GATT's obligations on the grounds of one necessity or another in the past. 394

b. Facilitating analogies and the bugbear of nullification

If, on this interpretation, each Contracting Party retains a reserved domain in which its domestic laws pertaining to "patents, trade marks and copyrights, and . . . deceptive practices" are normally untramelled by the GATT, then nothing in the GATT as applied in practice would seem to prevent these same states from pooling their respective exemptions into a single domain subject to their collective and consensual regu-

^{388.} See supra text and authorities accompanying notes 378-80.

^{389.} See, e.g., Remarks of Jackson, supra note 5, at 351; supra note 383 and accompanying text.

^{390.} See infra note 678 and accompanying text.

^{391.} See supra note 382 and accompanying text.

^{392.} See supra notes 1-18, 26-37 and accompanying text.

^{393.} See supra note 352 (contrasting views of Long and Hudec). Long states: "Pragmatism and the legal approach should compliment each other. What is important is that the one should not prevail to any great extent over the other." O. Long, supra note 61, at 64.

^{394.} See, e.g., R. HUDEC, DEVELOPING COUNTRIES, supra note 9, at 59-60; see also id. at 65-67 (criticizing "theology of 'pragmatism'" as "a doctrine to justify a decline in the legal discipline of developed countries"). The ability to allege collective rather than individual necessity could be a reason for folding a defensive alliance into the GATT in the first place. See, e.g., Ullrich, GATT, supra note 44, at 149-50 (questioning the need for a GATT Code to impose internal border measures).

lation in order to perfect the regime of intellectual property rights as a whole. By elevating their domestic standards to a common level; by adopting common border control measures; and by eliminating multiple forms of interference that assume different legal guises on different national territories, the participating states could greatly strengthen the cumulative protectionist effect throughout the entire reserved domain. 396

If precedents were needed to justify a higher discipline of this kind, both the Subsidies Code and the Government Procurement Code³⁹⁷ demonstrate that a defensive arrangement along these lines can be reconciled with the general GATT framework. For example, the Subsidies Code indicates that Contracting Parties may organize a stricter than normal discipline³⁹⁸ even for subject matter that is not clearly exempt from the general obligations concerning nondiscrimination under articles I and III of the GATT.³⁹⁹ The Government Procurement Code presents an

^{395.} Assuming article XX(d) is otherwise respected. See supra text and authorities accompanying notes 381-88.

^{396.} See, e.g., Ullrich, GATT, supra note 44, at 149-50.

^{397.} Agreement on Government Procurement in Tokyo Round Codes, supra note 325, at 33; Agreement on Interpretation and Application of Articles VI, XVI, and XXIII, id. at 56.

^{398.} GATT, supra note 2, art. III(8)(b), did "not prevent the payment of subsidies exclusively to domestic producers." Hence, the Subsidies Code addresses "the most difficult issue in this area—how to achieve at least some international discipline over domestic subsidies. Governments would not accept legal obligations limiting the use of domestic subsidies, but they did agree to subject domestic subsidies to this lesser kind of regulatory discipline." Hudec, Regulation of Domestic Subsidies Under the MTN Subsidies Code, in Interface Three: Legal Treatment of Domestic Subsidies 1 (Wallace, Loftus, & Krikorian eds. 1984) [hereinafter Hudec, Subsidies Code].

^{399.} See GATT, supra note 2, art. I(1) (incorporating "all matters referred to in paragraphs 2 and 4 of Article III" into the general Most-Favored-Nation Treatment provision by reference); id. art. III(2) (forbidding discrimination against imported products by means of internal taxes or charges); id. art. III(4) (forbidding discrimination with respect to "all laws, regulations and requirements affecting . . . internal sale . . . distribution or use" of imported products); supra note 325 (Subsidies and Government Procurement Codes). The problems arise from the attempt to invoke the "conditional MFN" concept against nonsignatories of the Subsidies Code who have not accepted it and who, as Contracting Parties, fall back upon general rights afforded by articles I and III. The Subsidies Code arguably falls within the GATT's general MFN domain, however, since article I invokes matters referred to in article III(2) and III(4), while article III(8)(b) of the GATT, which permits subsidies to continue, says nothing of other derogations and fails to exclude subsidies from the provisions incorporated by reference into article I. See, e.g., R. HUDEC, DEVELOPING COUNTRIES, supra note 9, at 84, 97 n.26. Attempts to impose reciprocity on nonsignatories to the Subsidies Code have thus encountered resistance and a show of restraint by the United States. Id. 84-85; supra notes 326-27 and accompanying text.

even closer analogy. It illustrates the case of a higher discipline organized within the GATT framework to regulate a subject matter that was otherwise deliberately placed beyond the reach of the GATT's most fundamental obligations.⁴⁰⁰

That nonsignatories of an Intellectual Property Code could suffer sizeable losses if they previously exported significant quantities of intellectual goods to different parts of the reserved domain under loopholes about to be closed by collective regulation hardly constitutes a valid ground for challenging the legality of these harmonizing measures as such. Although the nullification and impairment provisions of article XXIII can, in principle, be invoked even for a loss of "benefits" ensuing from government measures that are not violations in themselves, of GATT practice has not challenged every "government measure that diminished commercial opportunity for the concession product. Although the notion of benefit has reportedly been confined to tariff concessions; the nonviolating measures must be wrongful or improper; the notion of benefit has reportedly been confined to tariff concessions; the nonviolating measures must be wrongful or improper; and where there are no concessions at stake, an impairment claim becomes almost too difficult to be worth pursuing. In the case of intellectual property rights, there are no relevant tariff concessions directly at

^{400.} See, e.g., R. Hudec, Developing Countries, supra note 9, at 84. Although article III(4) (which is incorporated by reference into article I) "would clearly cover a buy-national rule or regulation governing purchases by the government," article III(8)(a) expressly excludes noncommercial government procurement. Id. at 97 n.26. It follows that the language defining the scope of article I in terms of certain provisions of article III, see supra note 399, could not incorporate noncommercial government procurements by reference to article III. "Although it could be argued that the text of paragraph 8(a) does not literally excuse procurement from article I obligations but only from article III obligations, GATT practice has been to read the 8(a) exemptions as applicable to article I as well." Id. at 97 n. 26. See also J.H. Jackson, supra note 19, at 270 n.2; Hufbauer, supra note 326, at 89-90.

^{401.} See, e.g., Hudec, Subsidies Code, supra note 398, at 2-4; see generally R. Hudec, The GATT Legal System and World Trade Diplomacy 148-52 (1975) [hereinafter Hudec, Legal System].

^{402.} Hudec, Subsidies Code, supra note 398, at 4.

^{403.} Id. at 6-7.

^{404.} Id. at 6.

^{405.} Id. at 7. But some GATT rules, such as those pertaining to export subsidies under article XVI(4), do contemplate "benefits" distinct from those of a tariff concession. Id. at 7-8. "Without a concession binding the tariff, the other GATT rules . . . do not really promise any particular level of commercial opportunity; they merely promise the avoidance of the trade barrier forms specified in the rule, a kind of 'benefit' which is not any larger than the rule itself." Id. at 7. But see id. at 7 n.8 (citing Uruguayan Recourse to article XXXIII, GATT Doc. L./1923 (Nov. 16, 1962), GATT, BISD: ELEVENTH SUPP. 95 (1962)).

stake. Moreover, government actions alleged to cause an impairment of benefits would arguably be taken in regard to matter outside the GATT discipline⁴⁰⁶ for the purpose of repressing conduct that all the participating states deemed wrongful, or at least, improper.

Lacking any well-defined, GATT-rooted rights to trade in traditional intellectual goods with single states, 407 nonsignatories to an intellectual property agreement can hardly muster a persuasive GATT attack on the loss of a collective market that is composed of these unregulated individual segments. On the contrary, once signatory countries have created a transnational market for intellectual goods by pooling their respective reserved domains, external states should find themselves under a duty not to project their own economic policies into the collective territory, lest they disrupt the general level of economic activity that the new arrangement was expected to sustain. 408 The same general principles of economic sovereignty that restrain the industrialized countries from imposing their own intellectual property standards on the developing countries of distorting trade in intellectual goods within any collective reserved domain that the industrialized countries succeed in establishing. 410

2. Limits of a Defensive Alliance

To achieve maximum efficacy, a pooled reserve domain would not only exclude unauthorized intellectual goods along a common frontier, ⁴¹¹ but it would also prevent nationals of nonsignatory countries from gaining access to the harmonized intellectual property system that emerged from a GATT Code of Conduct unless these countries had accepted reciprocal obligations and responsibilities. ⁴¹² Otherwise, the more efficient the common system became, the greater the benefits it could bestow on qualifying authors, inventors and investors from nonsignatory countries whose own domestic laws continued to provide inadequate protection for intellectual goods originating from signatory countries. Any scheme that

^{406.} See supra text and authorities accompanying note 381.

^{407.} See supra text and authorities accompanying notes 377-88.

^{408.} See supra text and authorities accompanying notes 294, 296-97.

^{409.} See supra text and authorities accompanying notes 538-68. But see infra text accompanying notes 538-68 (discussing proposals to impose high intellectual property standards on nonsignatory states by means of trade leverage and retorsion).

^{410.} See supra text and authorities accompanying notes 294-97.

^{411.} See supra text accompanying notes 353, 355-56.

^{412.} See supra notes 32, 354; see also supra text and authorities accompanying notes 326-27.

tried to condition access to a pooled reserve domain on material reciprocity, however, would elicit legal challenges rooted in basic provisions of both the GATT and the existing intellectual property conventions.

a. Conditional MFN and national treatment under the GATT

Those interpretations of article XX(d) that tend to place substantive intellectual property laws under basic GATT disciplines⁴¹³ could cause serious complications in this regard if they prevailed. The arguments against those interpretations are set out above,⁴¹⁴ and there seems little likelihood that the more extreme view will prevail.⁴¹⁵ Hence, efforts by nonsignatory Contracting Parties to obtain the benefits of a prospective Intellectual Property Code by appealing to the MFN principle enshrined in article I of the GATT appear unlikely to succeed.⁴¹⁶ Whether the less extreme view predicated on national treatment⁴¹⁷ stands a better chance cannot be determined a priori, even though this thesis appears inconsistent with the historical and empirical interpretation suggested above.⁴¹⁸

Given this uncertainty, differences between an analogy to the Subsidies Code and an analogy to the Government Procurement Code could become of considerable interest. As noted above, a conditional MFN approach to the Subsidies Code appears to rest on a doubtful legal foundation, while a conditional MFN approach to the Government Procurement Code seems legally unexceptionable because the "subject of government procurement lay outside the GATT's MFN obligation." By the same token, one can argue that an Intellectual Property Code would not be subject to the MFN requirement without accepting the

^{413.} See supra text accompanying notes 360-62.

^{414.} See supra text accompanying notes 363-88.

^{415.} See supra text and authorities accompanying notes 361-64. But see Hartridge & Subramanian, supra note 92 at 901 (noting that the GATT leaves the level of intellectual property protection to the discretion of Contracting Parties under article XX(d); but stating that "the GATT requires that the substantive law and the related enforcement measures be non-discriminatory as between the products [not persons, see id. at 898-99] of different Contracting Parties and not operate so as to protect or favor domestic products, except where enforcement measures can be justified under article XX(d).")

^{416.} See supra text and authorities accompanying note 363.

^{417.} See supra text and authorities accompanying notes 363-64.

^{418.} See supra text accompanying notes 365-88.

^{419.} See supra text accompanying notes 397-400.

^{420.} See supra notes 326-27, 399 and accompanying text.

^{421.} R. HUDEC, DEVELOPING COUNTRIES, supra note 9, at 84; see supra note 400.

^{422.} See, e.g., Hufbauer, supra note 326, at 89-90.

overall interpretation of article XX(d) that was developed above. 423

As regards national treatment under article III, however, even the Government Procurement Code is conceivably subject to this discipline because the relation of national treatment to government procurement depends entirely on the interpretation of article III, and it can be argued—against the weight of authority—that this article still applies. ⁴²⁴ In contrast, if intellectual property remains outside the GATT under the interpretation of article XX(d) suggested above, ⁴²⁵ then national treatment under article III does not apply to this defensive alliance except insofar as ancillary measures—especially border control measures—may trigger it. ⁴²⁶ But if the historical and empirical interpretation set out above is rejected, then the predominant view of article XX(d) would almost certainly end by imposing a form of national treatment on an Intellectual Property Code under article III. ⁴²⁷

Even if the interpretation this Article recommends should prevail and article XX(d) were construed to exempt basic intellectual property laws from the GATT disciplines, it should not be thought that article XX(d) is a blank check that states can cash at will. Besides requiring that ancillary measures to secure compliance with substantive intellectual property laws must be "necessary," article XX(d) presupposes some general understanding about the nature of "patents, trade marks . . . copyrights and . . . deceptive practices." It further requires that such measures should not constitute "a disguised restriction on international trade" and that they should not be applied in a manner that would constitute a means of arbitrary or unjustifiable discrimination between countries where "the same conditions prevail." **100.

Given these prerequisites, there is every reason to suppose that a GATT panel would not look kindly on border measures that were un-

^{423.} See supra text and authorities accompanying notes 381-88.

^{424.} The weight of authority is to the contrary. See, e.g., J.H. JACKSON, supra note 19, at 270 n.2; Rubin, supra note 324, at 238-39; Hufbauer, supra note 326, at 89-90.

^{425.} See supra text accompanying notes 381-88.

^{426.} See supra text accompanying notes 385-94. In this case, however, work by Hufbauer, supra note 326, at 90, provides some basis for arguing, if only by analogy, that an Intellectual Property Code otherwise exempt from both unconditional MFN and national treatment under articles I and III might still remain subject to the discipline of "fair and equitable treatment," which derives from article VII(2).

^{427.} See supra text and authorities accompanying notes 363-64.

^{428.} See supra text and authorities accompanying notes 382-84.

^{429.} See GATT, supra note 2, art. XX(d), quoted in text accompanying note 358.

^{430.} Id.; supra note 383 and accompanying text.

necessarily discriminatory in fact.⁴⁸¹ Moreover, the legal institutions of "patents, trademarks, and copyrights" are not infinitely elastic, and states that unilaterally move domestic laws away from the historical understanding of these institutions assume the risk that other states may deem the result inconsistent with the broad exemption implicit in article XX(d). The growing tendency to create new forms of intellectual property protection for subject matter not covered by the traditional disciplines, such as occurred for semiconductor chip designs, or to protect functional designs under copyright laws or under sui generis laws that require zero creativity⁴³² arguably raises serious questions about "disguised restrictions on international trade" that could render such laws inconsistent within the original thrust of article XX(d).⁴³³

^{431.} See, e.g., Remarks of Jackson, supra note 5, at 351 (stating that section 337 of the United States Tariff Act failed to meet the necessity requirement); infra note 678. It goes without saying that the use of sanctions under article XX(d) would meet similar objections. See Remarks of Jackson, supra note 5, at 351. But this is not the kind of governmental action under consideration in the text. There the issue is denial of access under domestic intellectual property laws to nationals of nonsignatory states. The question of sanctions in regard to a nonsignatory state's refusal to meet minimum international standards of protection on its home territory poses a different issue, one that is analyzed infra, in the text accompanying notes 524-68.

^{432.} For example, during the period in which the United Kingdom protected noncreative functional designs in its copyright law, it seems that other states complained that this constituted "a disguised restriction on international trade," at least in the context of the European Communities law. See, e.g., Reichman, Designs and New Technologies, supra note 176, part III(C). Similarly, the new unregistered design law enacted in the United Kingdom in 1988 could end by protecting noncreative functional designs. See supra note 194 (noting that the level of "originality" remains to be determined by the courts); see generally R. MERKIN COPYRIGHT, DESIGNS AND PATENTS: THE NEW LAW 360-93 (1989) (stating that spare parts would not be protected). Proposals for comparable laws in the United States seek to restrain foreign competition on the domestic market for spare automobile parts. See e.g., Brown, supra note 168, at 1398-99 (criticizing comparable proposals in the United States as "a bald piece of protectionism"). Such laws could be inconsistent with article XX(d). As regards semiconductor chip designs, the issue actually raised is that of national treatment under the Paris Convention. See infra notes 475-84 and accompanying text. But there is a buried question as to how far states can subjectively determine what constitutes intellectual property for purposes of article XX(d). A related problem of excess protection also falls under this rubric, and it has recently surfaced in the European Communities. See, e.g., Ullrich, GATT, supra note 44, at 139-41.

^{433.} For example, such tendencies open the door to unilateral interpretations of article XX(d) as opposed to the principle of independent or autonomous interpretation of the treaty, which in turn opens the door to national manipulation. See, e.g., Katzenberger, National Treatment, Minimum Protection and Reciprocity in International Copyright Law, in GATT OR WIPO, supra note 5, at 43, 49. If states cannot arbitrarily expand the meaning of "patents" and "copyrights" within article XX(d), these and other actions

Whatever rights become available to nonsignatories for intellectual goods under the General Agreement, finally, the rights of nationals from nonsignatory states that are also members of the intellectual property Unions are much better founded. It is these claims, rather than claims spawned by the GATT's basic principles, that seem most likely to break through the defensive barrier erected by a Code of Conduct for intellectual property rights in the end. 135

b. National treatment under the Great Conventions

Signatories to the Great Conventions retain the right to enter into special agreements among themselves in order to provide their respective nationals with higher levels of intellectual property protection than these Conventions otherwise mandate. The exercise of these rights, which occurs frequently under the Paris Convention, is subject to the condition that special agreements should not contravene basic provisions of the underlying Conventions. As a practical matter, this ensures that any future GATT Code concerning intellectual property rights would have to respect minimum standards set down in both the Paris and Berne Conventions because most signatories to such a Code would belong to the International Unions created by those Conventions. Whether the

raise questions about the abuse of intellectual property law from a GATT perspective. 434. For the distinction between national treatment as to goods under the GATT and national treatment as to nationals under the Great Conventions, see Hartridge & Subramanian, supra note 92, at 898-99.

^{435.} See infra text accompanying notes 436-52, 456-74.

^{436.} See, e.g., Paris Convention, supra note 21, art. 19; Berne Convention, supra note 22, art. 20. Matters under the U.C.C. are more complicated, in part because of the need to stabilize relations between this Convention and the Berne Convention. See U.C.C. supra note 23, arts. XVII, XVIII, XIX; A. BOGSCH, supra note 343, at 110-39. These matters are beyond the scope of the present Article.

^{437.} See, e.g., G. BODENHAUSEN, supra note 89, at 170-72, 193; see also WIPO GUIDE, supra note 125, at 104 (noting that special agreements between Berne Union countries were rare compared to those between Paris Union countries).

^{438.} See supra note 436; Kunz-Hallstein, U.S. Proposal, supra note 97, at 270-71. See also Paris Convention, supra note 21, art. 18(1) (requiring revisions of the Convention "to improve the system of the Union").

^{439.} See, e.g., Kunz-Hallstein, U.S. Proposal, supra note 97, at 170-71. Whether article 18(1) of the Paris Convention would also prevent a GATT arrangement from lowering existing levels of protection in order to favor developing countries is a question that can be raised. See, e.g., id. at 266, 272. But this invests article 18(1) with an interpretation that remains untested. This interpretation also runs contrary to state practice under the Berne Convention, which did accommodate special and preferential treatment with a similar clause requiring special agreements to respect the Convention. See supra text and authorities accompanying notes 339-48.

Great Conventions, by virtue of their national treatment clauses,⁴⁴¹ would limit the ability of a GATT Code to impose a condition of reciprocity on *nonsignatories* that belonged to either or both of the Unions poses a controversial issue.⁴⁴²

(1) Functional implications of nonreciprocity

Historically, the resort to national treatment without reciprocity⁴⁴³ was the means by which those who founded the Unions finally overcame the divisive tendencies fostered by an earlier drive to impose universal norms on all participating states.⁴⁴⁴ Unable to agree on uniform standards of protection, the drafters adopted the principle of national treatment as the cornerstone of both the Paris and Berne Conventions, together with certain minimum standards that all members of the

^{440.} See, e.g., Paris Convention, supra note 21, art. 1(1) ("The countries to which this Convention applies constitute a Union for the protection of industrial property."); Berne Convention, supra note 22, art. 1 (constituting "a Union for the protection of the rights of authors in their literary and artistic works").

^{441.} See Paris Convention, supra note 21, art. 2(1); Berne Convention, supra note 22, art. 5(1); U.C.C., supra note 23, art. II. These clauses provide the nationals of any Member State with the same advantages that domestic laws grant to nationals of the states where protection is sought; reciprocity is denied. See supra notes 122-23 and accompanying text; infra note 443.

^{442.} Compare, e.g., Kunz-Hallstein, U.S. Proposal, supra note 97, 272-84 (holding that a GATT arrangement could override the rule of national treatment in the Great Conventions) with Meesen, supra note 4, at 70 (forseeing conflict with national treatment rules of the Great Conventions). See also Fikentscher, GATT Principles and Intellectual Property Protection, in GATT OR WIPO, supra note 5, at 99, 121-22 (recognizing the conflict but attempting to minimize its practical importance in view of differences between public and private international law).

^{443.} Because they forbid discrimination, the effective meaning of the national treatment clauses under the Great Conventions is "that no reciprocity of protection can be required by the States party to the Convention." G. Bodenhausen, supra note 89, at 29 (discussing Paris Convention); supra note 123; 1 S. Ladas, Artistic Property, supra note 105, at 266 ("The assimilation of unionist to national authors [in the Berne Convention] is . . . without condition of reciprocity."). See also WIPO Guide, supra note 125, at 32 (stressing that assimilation to nationals "does not in itself mean identity of treatment in all member countries since the scope of protection varies from one country to another"); infra note 448 (same approach under U.C.C.). While the difference between national treatment of goods under the GATT and of nationals under the Great Conventions is important, see supra note 434, this does nothing to weaken the authority of the Conventions when and if they apply.

^{444.} See, e.g., PLASSERAUD & SAVIGNON, PARIS 1883, supra note 54, at 113-15, 155-62 (stressing Lyon-Caen's famous admission concerning the utopian character of a uniform law, which led to the victory of those favoring the principle of assimilation or national treatment); 1 S. LADAS, ARTISTIC PROPERTY, supra note 105, at 77-80, 83-84.

International Unions had pledged to respect.⁴⁴⁸ In principle, any reciprocity built into the Conventions derived solely from these minimum standards⁴⁴⁶ or from certain reservations of reciprocity set out in the Conventions.⁴⁴⁷ Apart from these safeguards, the national treatment clauses functioned as clearing keys that eliminated the possibility of further appeals to material reciprocity, a doctrine that had proved injurious to international intellectual property relations at an earlier period.⁴⁴⁸

In addition to the comparison of terms clause, the Berne Convention provides for a limited degree of reciprocity in regard to certain borderline subject matters, notably applied art and industrial designs, concerning which Member States have been unable to reach a full consensus. See Berne Convention, supra note 22, art. 7(4); WIPO GUIDE, supra note 125, at 46-47, 49. For the situation in regard to designs, see generally Reichman, Designs Before 1976, supra note 162, at 1153-64. The Berne Convention also reserves reciprocity for the droit de suite, Berne Convention, supra note 22, art. 14(2); for reservations concerning translation rights, id. art. 30(2); and as a possible retaliatory measure against non-Union countries that refuse to protect works by nationals of Union countries, id. art. 6(1)). See, e.g., Katzenberger, supra note 433, at 46.

448. See, e.g., S. RICKETSON, supra note 34, at 205-06; 1 S. LADAS, ARTISTIC PROPERTY, supra note 105, at 23-29, 268; 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 26-28, 265-70. For the thesis that even the U.C.C. eliminated material reciprocity by adopting the same approach, see Ringer & Flacks, supra note 366, at 157, 161-66. Under material reciprocity:

Country A does not bind itself to give any more protection to the works of Country

^{445.} See supra notes 121-25, 272, 441, 443 and accompanying text; G. Bodenhausen, supra note 89, at 13-16, 29-31; 1 S. Ladas, Artistic Property, supra note 105, at 83-86, 262-63.

^{446.} See supra notes 443, 445.

^{447.} The Berne Convention preserved a degree of reciprocity in the duration of protection, to the extent that "the term of copyright protection in the country where protection is sought may not exceed the duration fixed in the country of origin of the work." 1 S. LADAS, ARTISTIC PROPERTY, supra note 105, at 263. This principle, known as the comparison of terms clause or the "rule of the shorter term," remains operative to the present day. See Berne Convention, supra note 22, art. 7(8); WIPO GUIDE, supra note 125, at 50-51. The U.C.C. contains the same principle. See U.C.C., supra note 23, art. IV(4); Ringer & Flacks, Applicability of the Universal Copyright Convention to Certain Works in the Public Domain in Their Country of Origin, 27 Bull. Copyright Soc'y 164-65 (1980). The U.C.C. goes one step further by applying the comparison of terms principle to classes of works. On this approach, if the country of origin affords no protection at all to the class of works at issue, the state where protection is sought could invoke a zero term of comparison and deny all protection under domestic law, despite the national treatment rule. See, e.g., id. at 182-86, 202-04. Under the Berne Convention, the "zero term" option, which rests on a theory of minimum recognition of protection in the country of origin, is believed to be incompatible with national treatment, and it is rejected by the weight of authority. See, e.g., S. RICKETSON, supra note 34, at 206-09; 1 S. LADAS, ARTISTIC PROPERTY, supra note 105, at 266-69; Katzenberger, supra note 433, at 47 (citing authorities). Nevertheless, the thesis crops up from time to time.

When international minimum standards keep evolving and become rather detailed over time, as occurred under the Berne Convention, the higher levels of consensual reciprocity that result from this process tend to diminish the everyday importance of the national treatment clause.⁴⁴⁹ Problems arise chiefly in regard to the recognition of new subject matters of protection⁴⁵⁰ or to new kinds of rights protected by states that deny the applicability of the principle of national treatment.⁴⁵¹ When, in con-

B than Country B gives to the works of Country A. Thus, . . . reciprocity means that there is no need to give more than that offered by the lower of the two. Implicit in the system are the need for comparisons and the prerogative of retaliating by discrimination—by offering less protection to foreign authors than to domestic authors.

Id. at 164. See also Katzenberger, supra note 433, at 45-46.

449. Berne Convention, supra note 22, art. 5(1), which establishes national treatment, also provides that authors shall enjoy "the rights specially granted by this Convention," i.e., the minimum standards, but only in "countries other than the country of origin." Hence, nationals in the country of origin, or those assimilated to them, are not entitled to the Convention minima. See, e.g., S. Ricketson, supra note 34, at 206; see also G. Bodenhausen, supra note 89, at 31 (Under the Paris Convention, the "protection of a national in his own country depends on the domestic legislation of that country" and no more.). In practice, states cannot long give their nationals less protection than foreigners, and they will usually enact the minimum standards into their domestic laws without distinguishing between nationals and eligible foreigners. As a result, the "'rights specially granted' by the [Berne] Convention will . . . not apply separately to Union authors, but will have the effect of defining the central content or core of the protection which the latter will receive under the principle of national treatment." S. Ricketson, supra note 34, at 206.

450. To the extent that a new subject matter is assimilated to existing subject matters for which the Berne Convention mandates protection, both national treatment and the minimum standards must be respected. Thus, a state that recognizes computer programs as "literary works" must satisfy all requirements of the Berne Convention. This follows in part because articles 2(1)-(5) specify what is meant by "literary and artistic works" and in part because article 2(b) requires that "[t]he works mentioned in this Article shall enjoy protection in all countries of the Union." See, e.g., WIPO GUIDE, supra note 125, at 12-21. But states still retain considerable discretion in determining what shall be considered literary and artistic works, and here national treatment can play a major role. See, e.g., S. RICKETSON, supra note 34, at 210, 306-18. In 1985, for example, France declined to protect computer programs as literary works and assimilated them instead to works of applied art, which provides a basis for material reciprocity even under the Berne Convention. See, e.g., Reichman, Programs as Know-How, supra note 27, at 663, 663 n.121; see generally Katzenberger, supra note 433, at 50-53; Dreier, National Treatment, Reciprocity and Retorsion: The Case of Computer Programs and Integrated Circuits, in GATT OR WIPO, supra note 5, at 63, 67-70.

451. This very old problem goes back to the nonrecognition of *droit de suite* under the national treatment rule of certain states at the turn of the century. See, e.g., 1 S. LADAS, ARTISTIC PROPERTY, supra note 105, at 268. On the one hand, Berne Conven-

trast, the minimum standards remain relatively low, as occurred under the Paris Convention, the role of national treatment in checking unilateral moves to restrict or expand the level of protection afforded by domestic law becomes of considerable importance.

No Member State of either International Union can reduce the requisite level of protection below that of the minimum standards on pain of violating its treaty obligations. Absent an applicable minimum standard, however, a state remains free to provide less protection than states with comparable economic conditions would ordinarily provide to comparable subject matters under their respective intellectual property statutes. In practice, a state contemplating the exercise of this option must evaluate possible disincentives to innovation on its home markets, and it must consider the ability of its nationals to compete on foreign markets where more generous levels of protection may favor a certain type of innovation. Only if the gains from less regulated competition at home outweigh potential losses from a lack of incentives or from more intense competition abroad will unduly restrictive protection yield sufficient rewards as between states with relatively homogeneous economies.

Conversely, because the Great Conventions do not, in principle, recognize any degree of reciprocity beyond that established by their own minimum standards, signatory states remain free to provide greater levels of protection under their domestic laws than the international minimum standards actually require. What tends to restrain them from so doing

tion, supra note 22, art. 5(1), states that "[a]uthors shall enjoy, in respect of works for which they are protected under this Convention, in countries of the Union other than the country of origin, the rights which their respective laws do now or may hereafter grant to their nationals, as well as the rights specifically granted by this Convention" (emphasis added). On the other hand, there is uncertainty whether this means "any law applying to literary or artistic works, or, more generally, any law applying to authors." S. RICKETSON, supra note 34, at 208. There are dangers in adopting either too restrictive or too expansive an interpretation. See id. at 208-10. Besides the droit de suite, which has now been brought under the Berne Convention, supra note 22, art. 14ter, tensions have arisen in regard to public lending rights and distribution rights, as well as special claims to remuneration derived from compulsory licenses on photocopying. The availability of national treatment is not certain in such cases. See, e.g., S. RICKETSON, supra note 34, at 209-10; Katzenberger, supra note 433, at 51-52; see also von Lewinski, National Treatment, Reciprocity and Retorsion—the Case of Public Lending Right in GATT or WIPO, supra note 5, at 53.

^{452.} See Berne Convention, supra note 22, art. 5(1); 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 271, 276 (Unionist treatment).

^{453.} See supra note 443 and accompanying text.

^{454.} This is made explicit in the Berne Convention, supra note 22, art. 7(b), but goes without saying in the context of minimum standards generally. See, e.g., WIPO GUIDE, supra note 125, at 49 ("[T]he terms in the Convention are minimal and any

is the fear that nationals of other Member States will claim the same benefits on the territory of the deviant state without conceding comparable benefits on their own territories to nationals from that state. A unilateral broadening of protection at home can thus weaken a Member State's overall competitive position. Unless the gains accruing to a deviant Member State from unilaterally expanding protection in its home market exceed the potential losses accruing to that same state from the diminished capacity of its nationals to compete with comparable, less protected intellectual goods on other relevant markets, the unilateral move may be counterproductive in the end.

(2) National treatment under the Paris Convention

The Paris Convention, 456 unlike the Berne Convention, 457 contains no mandatory list of subject matters that states must protect in their domestic patent laws and no minimum periods of protection that these laws must respect. 458 Instead, the Paris Convention identifies certain legal in-

country may go further."). See also G. Bodenhausen, supra note 89, at 15-16 (States may grant more extensive protection than is prescribed in the Paris Convention.).

^{455.} See, e.g., C. FELLNER, THE FUTURE OF LEGAL PROTECTION FOR INDUSTRIAL DESIGN 55, 62-63 (1985) (discussing problems caused by the protection of functional industrial designs under the United Kingdom's copyright law prior to 1988). See also Ladas, Belgian Courts Deny Industrial Design Protection Under International Convention for the Protection of Industrial Property, 45 TRADEMARK REP. 503, 505-06 (1955).

^{456.} See supra note 21.

^{457.} See supra note 22.

^{458.} Compare, e.g., Berne Convention, supra note 22, arts. 2 (protected works), 7 (term of protection), with Paris Convention, supra note 21, arts. 1(1) (objects of industrial property protection as specified legal institutions), 1(4) (types of patents). See supra note 450 (discussing obligation to protect works specified in Berne Convention). The Paris Convention does, however, mandate the protection of industrial designs, Paris Convention, supra note 21, art. 5quinquies; its signatories do undertake to protect service marks, id. art. 6sexies; collective marks, id. art. 7bis; trade names, id. arts. 8, 9, 10ter; and indications of source, id. arts. 10, 10ter; and Member States are "bound to assure . . . effective protection against unfair competition," id. art. 10bis. See generally, G. BODENHAUSEN, supra note 89, at 24. Although there appears to be no express requirement that Member States enact patent or trademark laws at all, it was implicit in the need to fulfill their specific obligations under the treaty, see supra note 283, and in the general obligation of article 25(1), under which a Member State "undertakes to adopt, in accordance with its constitution, the measures necessary to ensure the application of this Convention." Id. art. 25(1). Article 25(2) expressly requires a new adherent to "be in a position under its domestic laws to give effect to the provisions of this convention." Id. art. 25(2). See, e.g., G. Bodenhausen, supra note 89, at 21, 24, 208-09. It follows that there is a body of substantive rules pertaining to private rights in industrial property that are available only to the extent that domestic legislation implements them, and the prin-

stitutions that are the "object" of industrial property protection, 459 without necessarily requiring that Member States actually or fully recognize these institutions in their domestic laws. 460 The Paris Convention also sets out certain minimum standards applicable to these institutions that Member States must respect in regard to nationals of other Member States if and when they do recognize these legal institutions. 461 Finally, this Convention assimilates nationals of any given Member State to those of all the others as regards the "objects" of industrial property protection, in the sense that the former "shall . . . enjoy . . . the advantages" that the others' "respective laws now grant, or may hereafter grant, to nationals . . . without prejudice to the rights specially provided for by this Convention."

It follows that the true subject matter of protection under the Paris Convention is *industrial property* as such⁴⁶³ and not the legal institu-

462. Paris Convention, supra note 21, art. 2(1). The full text provides: Nationals of any country of the Union shall, as regards the protection of industrial property, enjoy in all the other countries of the Union the advantages that their respective laws now grant, or may hereafter grant, to nationals; all without prejudice to the rights specially provided for by this Convention. Consequently, they shall have the same protection as the latter, and the same legal remedy against any infringement of their rights, provided that the conditions and formalities imposed upon nationals are complied with.

Id. (emphasis supplied).

ciple of national treatment makes them available to nationals of other Member States. See G. Bodenhausen, supra note 89, at 12; infra note 462.

^{459.} Paris Convention, supra note 21, art. I(2). "The protection of industrial property has as its object patents, utility models, industrial designs, trademarks, service marks, trade names, indications of source or appellations of origin, and the repression of unfair competition." Id. (emphasis supplied).

^{460.} See, e.g., G. BODENHAUSEN, supra note 89, at 24; Kunz-Hallstein, U.S. Proposal, supra note 97, at 281. But see supra note 458.

^{461.} See, e.g., G. BODENHAUSEN, supra note 89, at 13-16. Bodenhausen states that the Convention also "contains rules of substantive law regarding rights and obligations of private parties, . . . which do not merely refer to the application of domestic laws, but the contents of which may directly govern the situation at issue." Id. at 13 (emphasis in original); 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 271, 276 ("unionist treatment" constitutes a common legislation for all members of the Union, and "is essentially a basic harmonization of the law of the member countries, rather than uniformity of such law."). See also id. at 272-74 (detailed contents of unionist treatment); supra notes 123-28, 283.

^{463.} See Paris Convention, supra note 21, arts. I(1) ("Union for the protection of industrial property"); 1(2) ("The protection of industrial property has as its object..."), 1(3) (definition of industrial property); 2(1) ("Nationals of any country of the Union shall, as regards the protection of industrial property...).

tions through which its protection may or may not be perfected.⁴⁶⁴ The definition of industrial property in article 1(3) then leaves nothing to the discretion of the Member States.⁴⁶⁵ It dictates that this term "shall be understood in the broadest sense and shall apply not only to industry and commerce proper, but likewise to agricultural and extractive industries and to all manufactured or natural products, for example, wines, grain, tobacco leaf, fruit, cattle, minerals, mineral waters, beer, flowers, and flour."⁴⁶⁶

The Paris Convention does not require its Member States to take any particular action with regard to any of the product categories listed in this comprehensive definition. All Rather, it subjects all "industrial property" as broadly defined to one right and one right only, to which nationals of all Member States are always entitled: namely, the right of national treatment on the territories of other Member States in respect of "advantages that their respective laws now grant, or may hereafter grant, . . . to nationals." To the extent that Member States elect to protect intangible industrial property rights in any of these products by means of the legal institutions set out in article 1(2),469 then they must also recognize the minimum international standards that apply to those legal institutions. If, however, States Members choose to protect "industrial property"—as objectively defined—outside the confines of these legal institutions or by means of new legal institutions not known to the founding fathers, then these minimum standards would not apply.

^{464.} See supra notes 459-60 and accompanying text.

^{465.} Paris Convention, supra note 21, art. 1(3) (definition of industrial property).

^{466.} Id.

^{467.} See, e.g., 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 265; G. BODENHAUSEN, supra note 89, at 25.

The purpose of the provision is merely to avoid excluding from the protection of industrial property activities or products which would otherwise run the risk of not being assimilated to those of industry proper. The various industrial property rights will, however, be applied to those activities and products only insofar as appropriate.

Id.

^{468.} Paris Convention, supra note 21, art. 2(1), quoted in full supra note 462; 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 266 ("The national treatment extends to the protection of industrial property, as this term is defined in Article 1 of the Convention.").

^{469.} See supra note 459.

^{470.} See, e.g., 2 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 263-65, 271-75; supra notes 459-61.

^{471.} See supra notes 456-61 and accompanying text.

^{472.} See supra notes 460-61 and accompanying text.

In no case could such states discriminate against the nationals of other Member States without violating the cardinal principle of the Convention as a whole, 473 a principle that is innately "opposed to the principle of reciprocity."474

Attempts to place new forms of industrial property protection beyond the Paris Convention merely because they fall outside the modalities listed in article 1(2) are therefore suspect on their face. From this perspective, the United States decision in 1984 to protect semiconductor chip designs on condition of reciprocity arguably violated article 2(1) of that Convention, as some authorities intimated privately at the time. Member States of the Paris Union cannot arbitrarily convert in-

473. See 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 265-66. Ladas states:

The provisions of paragraphs 2, 3, and 4 of article 1 purport to define the term "industrial property" in the first paragraph. The definition does not, in terms, purport to impose specific obligation on the contracting countries to enact legislation covering the entire defined field of industrial property. But it does mean that the country cannot exclude the application of the Convention to any matters as defined. Thus the National Treatment clause of article 2 extends to all subjects to which the concept of industrial property extends under article 1. Similarly, specific stipulations of the Convention relating to particular kinds of industrial property such as patents, trademarks and so on are understood to apply to what these terms are defined to encompass.

Id.

- 474. Id. at 269. Accord G. BODENHAUSEN, supra note 89, at 12 ("The idea of the Convention is that such reciprocity is sufficiently assured by the obligations involved in adherence to the Convention."). An attempt by the United States to substitute reciprocity for national treatment was unanimously rejected at the Conference of the Hague in 1925. 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 270.
- 475. See supra notes 466, 473 and accompanying text; Cornish, The Canker of Reciprocity, 10 E.I.P.R. 99 (1988). But see Kunz-Hallstein, U.S. Proposal, supra note 97, at 275 (arguing that the objects of industrial property protection as characterized by the legal institutions listed in article 1(2) itself define the scope of treaty obligations, and that this definition "should be understood as a closed one;" concluding that "the treaty obligation to grant national treatment does not extend to new objects of industrial property that are not specifically mentioned").
- 476. Semiconductor Chip Protection Act of 1984, Pub. L. No. 98-620, 98 Stat. 3347 (1984) (codified as amended at 17 U.S.C. §§ 901-914 (1988)).
- 477. 17 U.S.C. §§ 902(9)(1), 914 (1988); see generally R. STERN, SEMICONDUCTOR CHIP PROTECTION 377-444 (1980); McManis, International Protection for Semiconductor Chip Designs and the Standard of Judicial Review of Presidential Proclamations Issued Pursuant to the Semiconductor Chip Protection Act of 1984, 22 Geo. WASH. J. INT'L. L. 331 (1988).
- 478. See, e.g., Dreier, supra note 450, at 70, 73 (stating that "the case of integrated circuits has sometimes been regarded as the most blatant and severe stroke ever made against the principle of national treatment by a developed nation").

dustrial property as broadly defined in article 1(3)⁴⁷⁹ into quasi-artistic property by affixing labels of convenience, and they are not free to ignore that industrial designs are specifically covered by article 5quinquies of the Convention. Nor can Member States overlook the fact that the national treatment provision of article 2(1) covers advantages in respect of industrial property that "their respective laws now grant, or may hereafter grant, to nationals." To the extent that the OECD countries have acquiesced in the United States action concerning integrated circuit designs out of self-interest, it may constitute a waiver of their rights under the Convention. But this deviation from the strict rule of national treatment sets a dangerous precedent that invites other states to claim that vital economic interests likewise justify their discriminating against foreign intellectual property rights in derogation of treaty obligations.

Similarly, the notion that states belonging to the Paris Convention can impose reciprocity on other Member States by means of a collective agreement to elevate standards under article 19,485 even though these other states do not assent to that Agreement, will hardly withstand close analysis. The intermediation of the GATT makes little practical differ-

^{479.} See supra notes 463-66 and accompanying text.

^{480.} See, e.g., Dreier, supra note 450, at 70; supra text accompanying notes 471-74. The Semiconductor Chip Act, supra note 476, protects "mask works," elsewhere designated integrated circuit designs.

^{481.} See Paris Convention, supra note 21, art. 5quinquies. This provision was potentially violated by the United Kingdom's Copyright, Designs, and Patents Act, 1988, ch. 48, which established an "unregistered design right" on sui generis terms and a condition of reciprocity. See, e.g., Kunz-Hallstein, U.S. Proposal, supra note 97, at 274-75; Cornish, supra note 475 at 99. Although Kunz-Hallstein condemns the United Kingdom's decision but not that of the United States, see id. at 274-76, it is hard to see any difference between the two cases, which both provide sui generis protection, on a copyright-like model, to functional designs. See generally Reichman, Designs and New Technologies, supra note 176, part III.

^{482.} See supra note 462 (emphasis supplied).

^{483.} See, e.g., Dreier, supra note 450, at 71-72; Cornish, supra note 475, at 100.

^{484.} See, e.g., Dreier, supra note 450, at 73.

Whereas the USA, satisfied with the results caused by its SCPA [Semiconductor Chip Protection Act], is willing to return to the principle of national treatment, the latter is now . . . questioned by the developing nations. . . . Even if [a] . . . treaty may be achieved . . . , it is the character of the SCPA as a precedent which so much clouds the future prospects of survival of the traditional national treatment principle.

Id. at 73.

^{485.} See supra notes 436-42 and accompanying text.

ence in this connection⁴⁸⁶ because the GATT cannot authorize members of the Paris Convention to violate their obligations to *nationals* of other Member States under that Convention.⁴⁸⁷ As between themselves, of course, the signatories to such a Code can impose reciprocity and suspend the role of national treatment if they so desire.⁴⁸⁸ But they cannot remove *industrial property* as broadly defined in article 1(3) from the sweep of the Paris Convention; nor can they deny, "as regards the protection of *industrial property*," the advantages of their laws to nationals of other member states by dint of article 2(1).⁴⁸⁹ To hold otherwise is to allow any group of like-minded states to subvert the historical function of national treatment under the Paris Convention by undertaking collectively what they could not do individually in order to discriminate against foreign nationals in the name of supreme economic interests.⁴⁹⁰

c. Harmonizing force of national treatment

Even so, the result hardly appears disasterous and may harbor unexpected benefits. True, national treatment under either the Paris or the Berne Convention may sometimes enable inventors and authors from states that remain outside a GATT Code of Conduct to qualify for protection in the pooled reserve domain in situations that a requirement of material reciprocity could rule out. These beneficiaries of national treatment must still compete on fair terms with local producers inside the common domain, however, and local producers are free to profit from all

^{486.} The mediation of the GATT makes some difference in that it imposes public international law directly on Contracting Parties, whereas the Great Conventions create private law rights that are folded into public international law through domestic legislation. See, e.g., Fikentscher, supra note 442, at 119-22. While this distinction may affect the timing of serious conflicts, it seems unlikely to defuse those conflicts once states decide to question the interplay of rights under overlapping treaties.

^{487.} See supra notes 462, 473-74 and accompanying text.

^{488.} See supra notes 436-40, 483 and accompanying text.

^{489.} See supra notes 462-66, 471-74 and accompanying text. But see Kunz-Hallstein, U.S. Proposal, supra note 97, at 273-77 (reaching the opposite conclusion).

^{490.} See, e.g., 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 269-70, 276-78 (finding reciprocity inconsistent with the Convention under all circumstances); cf. Dreier, supra note 450, at 73-74; Cornish, supra note 479, at 100. In effect, the United States proposal to reintroduce reciprocity by the back door of a GATT side code is an attempt to reverse the virtually unanimous decision of the Hague Revision Conference in 1925 to reject a United States proposal to the same effect. See 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 269-70. Ladas warned that the introduction of reciprocity "would have brought back the situation existing before 1883" and would have ended "the work of progressive uniformity" that the Convention had fostered. Id. at 270; see also id. at 269.

legitimate means of competition that the intellectual property system itself affords. Meanwhile, the foreign inventors and authors in question will still have to compete with free riders at home and in other foreign markets where inadequate levels of protection exist. Firms operating from within the common domain are therefore free to reverse engineer or otherwise duplicate the foreign intellectual good outside the common domain, on any territory that fails adequately to protect the work or invention at issue. Once in possession of the work or the invention, firms domiciled in the common domain can directly compete with, and undersell, the foreign originator in his home market and in other foreign markets, to the extent that inadequate intellectual property laws continue to allow free-riding of this kind.⁴⁹¹

History teaches that sooner or later, creators faced with this dilemma exert pressure on their own governments to improve the level of protection at home so as to end a situation in which they are better protected abroad. In the long run, pressures of this kind can help persuade non-signatories to join the GATT Code itself in order to obtain its advantages for their own territories. That, indeed, is precisely the kind of harmonizing influence the Great Conventions have always exerted.

3. Advantages and Disadvantages of a Common Domain

a. Economies of scale under agreed standards

A transnational market for qualified intellectual goods defended against free-riding imports by border control measures and by interna-

^{491.} However, if the public international law of state responsibility eventually recognized intangible property as protectible alien proeprty, as this Article recommends, then signatories to a GATT Code could not free-ride on foreign creations originating from states that kept aloof from the Code. See supra text accompanying notes 264-93. In theory, nonsignatory states could then exploit their right to national treatment in signatory countries to greater advantage. In reality, nonsignatory states that attained the capacity to produce intellectual goods marketable in signatory countries, without free-riding, would find it logical to adhere to a GATT Intellectual Property Code. See infra text accompanying notes 600-01, 630-47.

^{492.} See, e.g., 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 269 (national treatment principle tends to harmonize and make uniform the various national laws), id. at 276-78; Dreier, supra note 450, at 74 (same tendency historically at work in copyright law).

^{493.} See supra note 491; cf. Dreier, supra note 450, at 74 (contrasting traditional idealistic approach founded on gradual harmonization through national treatment with more aggressive pragmatic approach reflected in recent bilateral actions and proposals for multilateral action).

tional machinery for the settlement of disputes⁴⁹⁴ could undoubtedly become a vehicle for implementing cultural and industrial policies on a grand scale. The larger rewards potentially accruing from successful innovation under these conditions could be factored into the aggregate investment calculus for research and development and for the dissemination of cultural products. To the extent that intellectual property laws overcome high risk-aversion by offering prospectors a kind of sweep-stakes reward if they succeed,⁴⁹⁵ the stimulus of legal protection in an enlarged and relatively undistorted market could greatly exceed that of similar laws operating in national markets that pursue different goals by different legal means. The ability of each subsystem to project more efficient uses of intellectual property throughout the entire pooled domain could thus magnify the capacity of the system as a whole to attain progressively higher levels of competition in the long run through appropriate short term restrictions on free competition.⁴⁹⁶

A well-regulated market for intellectual goods on this scale, however, requires interested GATT parties to agree on the minimum standards applicable within the common domain. This sounds easy so long as attention focuses on the interdiction of parasitical practices in developing and certain developed countries that are widely condemned. In reality, when it comes to harmonizing positive legal standards destined to govern relations between signatory states, the task could be far more daunting than trade experts unfamiliar with intellectual property law may suppose.

From a theoretical perspective, existing disparities between national intellectual property systems that otherwise share a common economic and cultural heritage reflect different views concerning the most efficient balance between monopoly and competition in the various legal disciplines. April National subsystems thus pursue different experimental paths

^{494.} See supra text accompanying notes 353, 355-56.

^{495.} See generally, Kitch, supra note 251; see also Reichman, Programs as Know-How, supra note 27, at 662 (stressing that world intellectual property law has come under intense pressure to alleviate risk aversion in regard to new technologies by providing modern innovators with artificial lead time through one legal device or another).

^{496.} See supra text and authorities accompanying notes 254-57.

^{497.} See, e.g., WIPO GUIDE, supra note 125, at 11 (The "very concept of copyright from a philosophical, theoretical and pragmatic point of view differs country by country, since each has its own legal framework influenced by social and economic factors. To define it in a manner binding on all member countries would be difficult if not impossible."). For similar tensions in industrial property law, see generally Foyer, supra note 38, at 360-401, 437 (stressing the expanding use of the public interest doctrine and corresponding limits on private rights); supra note 272 (quoting Ladas).

toward commonly desired goals without as yet having discovered one optimal solution that satisfies the social, economic, and philosophic goals of them all. Estimates of the relative success attained by these different national experiments are intuitive and often influenced by latent protectionist sentiments. Objective empirical verification of claims made for any given protective "mix" remain unavailable even at this late date and despite the keen interest of economists in these questions. 498

To some extent, therefore, erecting a defensive legal barrier against the rest of the world that overrides national differences risks impoverishing the supply of empirical data currently provided by a diversity of approaches. It could also trigger countervailing inefficiencies whenever the standards frozen into transnational law actually fostered conditions of under- or over-protection not foreseen at the time the relevant decisions were made. This could well be the case with computer programs if the GATT negotiators knuckle under to special interests seeking to perpetuate seventy-five to one hundred years of copyright protection for this particular form of applied scientific know-how.

Broad areas of agreement are nonetheless within reach if the negotiators avoid exaggeration. The Anti-Counterfeiting Code put forward towards the end of the Tokyo Round provides a workable framework for improving the transnational protection of trademarks. Border control measures initially developed in the context of this Code can be generalized and applied to imported products that violate any of the traditional intellectual property laws falling within a GATT agreement on this subject. Similarly, the Berne Convention provides a workable set of standards for copyright protection that now apply to the United States, and its operative preferential regime facilitates the identification of cultural products that developing countries could not export to the common do-

^{498.} See supra notes 256, 272 and accompanying text.

^{499.} See Reichman, Programs as Know-How, supra note 27, at 667, 683-98, 714-17; infra text accompanying notes 604-23. For evidence that cycles of under- and over-protection still haunt other segments of the world intellectual property system despite some two centuries of legal experimentation, see generally Reichman, Designs and New Technologies, supra note 176, part III. See also supra note 272.

^{500.} See Counterfeiting Code, supra note 356; Hartridge & Subramanian, supra note 92, at 907. However, this could require the United States to provide more protection for famous and geographical works than in the past. See, e.g., Kastenmeier & Beier, supra note 35, at 297.

^{501.} See, e.g., Hartridge & Subramanian, supra note 92, at 907; see also supra notes 85-88 and accompanying text (concerning the narrow definition of counterfeiting applied in the past).

main.⁵⁰² Finally, the harmonization of patent law underway in the industrialized countries constitutes a basis for agreement on tenets of primary interest for a defensive Code of Conduct governing a pooled reserve domain.⁵⁰⁸

Offsetting transaction costs

Experience shows, however, that where serious differences of opinion exist, the likelihood of achieving a consensus on any given set of intellectual property standards is not high even as between relatively homogeneous countries. 504 Efforts to accelerate this process often boomerang and may widen the initial differences. 505 The European Community countries, for example, generally agree on the need to provide sui generis protection for industrial designs, but they do not agree on the level of concurrent protection that copyright law should also make available. 506 The United States does not provide even sui generis protection for ornamental designs. 507 In contrast, some states protect nonpatentable functional designs on soft, copyright-like terms; other states confine such designs to the more rigorous discipline of utility models; and still others recognize no derogation from the patent law for all or most categories of functional designs. 508 Without a common standard for all signatories to a Code of Conduct, the exclusion of foreign designs could become haphazard, ineffective, and perhaps discriminatory. Yet, negotiators will find the problem of industrial design no less difficult to resolve within the GATT than it has been within the framework of the Great Conventions for the past one hundred years. 509

The uncertainties surrounding legal protection of applied scientific

^{502.} See supra notes 339-48 and accompanying text.

^{503.} See supra note 72.

^{504.} See, e.g., 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 13-16; Foyer, supra note 38, at 363-68, 378-84 (stressing the extent to which progressive reform of the Paris Convention was contingent on the common presuppositions of the industrialized countries; relating later tensions to growing heterogeneity of the membership); supra notes 70-72 and accompanying text. See also, Schricker, Harmonization of Copyright in the European Economic Community, 20 I.I.C. 466, 483-84 (1989); Dietz, The Harmonization of Copyright in the European Community, 16 I.I.C. 379 (1985).

^{505.} See, e.g., S. RICKETSON, supra note 34, at 39-41; infra text accompanying notes 510-13.

^{506.} See generally Reichman, Designs and New Technologies, supra note 176.

^{507.} See Reichman, Designs Before 1976, supra note 162, at 1260-64.

^{508.} See Reichman, Programs as Know-How, supra note 27, at 662-67; supra notes 194-96, 432.

^{509.} See generally Reichman, Designs and New Technologies, supra note 176, part III.

know-how, notably computer programs and nonpatentable products of genetic engineering, pose even thornier problems for any standard-setting exercise. Official documents concerning the TRIPs negotiation stress the need for uniform standards of protection in these areas, on certain multinational companies insist that what appears good for them today must be good for the international market forever. In reality, there is no consensus on the proper level of protection for new technologies falling between the copyright and patent paradigms, and proposals for some form of direct protection of applied scientific know-how are only now receiving serious attention.

Deep divisions of opinion exist even with regard to more traditional subject matters that seem uncontroversial from a distance. For example, the copyright laws of industrialized countries belonging to the Berne Union appear to resemble one another, and the harmonizing influence of the Berne Convention is often credited for these congruities.⁵¹⁴ Yet, major differences exist with respect to such important issues as the right of

^{510.} See, e.g., 1988 U.S. Proposal, supra note 5, at 357-58; 1988 EC Guidelines, supra note 32, at 329 (acknowledging, however, that a 25-year term for computer programs may suffice, in view of France's adoption of this solution); see also supra text accompanying notes 195-201.

^{511.} See, e.g., BASIC FRAMEWORK, supra note 1, at 60, 67; see also Kindermann, The International Copyright of Computer Software: History, Status, and Developments, 24 COPYRIGHT 201, 204-14 (1988); Clapes, Lynch & Steinberg, Silicon Epics and Binary Bards: Determining the Proper Scope of Copyright Protection for Computer Programs, 34 UCLA L. Rev. 1493 (1987); J. Gorlin, supra note 201, at ii, 8-44. Messers. Clapes and Kindermann are senior attorneys for IBM, the world's leading supplier of business machines; Gorlin is a consultant to the same corporation.

^{512.} See, e.g., Reichman, Programs as Know-How, supra note 27, 656-68 (citing authorities); cf. J. Gorlin, supra note 201, at 40 (proposing interim copyright protection for new technologies "as part of a broad policy that recognizes the evolving nature of the subject matter"). See generally Reichman, Legal Hybrids, supra note 199.

^{513.} See, e.g., id.; see generally W. Kingston, supra note 199; F. MAGNIN, supra note 199 at 14-22, 93-94, 381-88; Reichman, Programs as Know-How, supra note 27, at 661-68, 714-17. Even the appearance of consensus regarding the protection of computer programs as copyrightable literary works has begun to break down. See, e.g., id. at 688-89 (discussing elevated standard of originality in the Federal Republic of Germany), 663, 696 (discussing assimilation of computer programs to applied art in France and resulting sui generis regime). See also J. Gorlin, supra note 201, at 7 n.8 (French law provides only 25 years of protection, does not recognize software as a literary work, and includes the patent concept of a right to control end use). Unless care is taken the GATT exercise could either accelerate the balkanization of intellectual property solutions dealing with applied scientific know-how or precipitate a premature and overprotective fiat dictated by special interests. See infra text accompanying notes 605-21.

^{514.} See, e.g., S. RICKETSON, supra note 34, at 41 (stating that "the Berne Convention can now be regarded as a limited kind of international copyright code").

distribution or the treatment of cinematographic works, while the formulation of protected rights lends itself to conflicting interpretations, notably in the case of broadcasting and cable distribution. Moreover, significant differences of national treatment affect even such fundamental copyright doctrines as originality, nonliteral imitation, fair use, and moral rights. The state of the stat

Doctrinal disparities of this kind are then compounded by conflicting judicial interpretations at the local level and by the tendency of decision-makers at all levels to evaluate the desirable balance between monopoly and competition differently at different phases of the business cycle. These disparities cast doubt on the prospects for a harmonized copyright law in the European Community, ⁵¹⁷ and they continue to plague the implementation of harmonized patent laws notwithstanding the significiant progress attained in recent years. ⁵¹⁸ Transposed to an arena in which intellectual property disputes overtly raise questions of international trade law, these disparities could become a source of endless friction because "the actual availability or the excessive operation of patent [and copyright] protection generally hinges upon points of legal detail," and even minor differences of interpretation or implementation of an agreed standard could produce litigiable trade issues. ⁵¹⁹

^{515.} See, e.g., id. at 917.

^{516.} See, e.g., id.; Geller, International Copyright, supra note 35, § 2[3][b], [c]. For example, Geller states that the standard criteria of originality and creativity:

lead to much the same results . . . in the most ordinary and easy cases [but not] as one moves on to hard, especially novel, cases. Nor do the results in these border-line cases always depend on express differences in legal criteria rather than on often-implicit judgments of policy or, still less clearly, of culture and taste. Finally, within given jurisdictions, these criteria may be applied more liberally to some types of works and more stringently to others.

Id. § 2[3][c].

^{517.} See, e.g., Schricker, supra note 504, at 483-84.

^{518.} See supra note 72 and accompanying text. For surveys of the prodigious efforts undertaken in recent years to render patent laws more uniform throughout the entire world, see generally Foyer, supra note 38, at 402-36 (including the Paris and Strasbourg Conventions in Europe, the creation of regional patent agreements in Africa, the Nordic Countries, the Andean Group, the Patent Cooperation Treaty, and other recent conventions); 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 559-701.

^{519.} Ullrich, GATT, supra note 44, at 139, 139-42. Professor Ullrich criticizes the Uruguay Round negotiators for attempting by "trade muscle... to achieve on a global level what European countries have only achieved on a very narrow scale within decades of continuous harmonization efforts." Id. at 140; see also Hartridge & Subramanian, supra note 92, at 903, who warn that "[t]here are . . . significant differences between these [current] proposals in the coverage of IPRs and the specified standards of protection suggested."

Assuming that agreement could be reached on a set of standards applicable to states willing to incur a stricter discipline despite these difficulties, their implementation in the relevant domestic laws will not be costfree in view of the acquired rights that must be overridden in the name of a collective need to exclude noncomplying or substandard imports from the common domain. 520 Moreover, these measures will work only so long as the participating states remain willing to enforce them vigilantly. If the enforcement machinery in any given country lacks sufficient zeal, cracks will appear in the defensive wall that could significantly undermine the overall effectiveness of any agreement covering an enlarged. transpational domain.

Once suitable laws and adequate enforcement machinery are set in place by like minded Contracting Parties, considerable efforts are still required to keep a defensive alliance operationally efficient over time. Some standards may become unworkable in practice, others will require fine tuning, still others will have to be strengthened or modified as new needs arise. The application of general standards to particular products may also cause problems when, for example, the parties advance different interpretations of a standard or raise defenses admitted in domestic law that are not addressed in the Code of Conduct.

Innovation is a dynamic process, in short, and the erection of a transnational system to protect it will require a much higher degree of coordination and cooperation at the international level than is necessary when states independently pursue their own intellectual property experiments. 521 The progressive revisions of the Berne and Paris Conventions up to 1958 do make it feasible to envision exercises of a similar nature being conducted by a relatively homogeneous group of states intent on adapting their laws as future needs require. 522 Nevertheless, participat-

^{520.} See, e.g., Kastenmeier & Beier, supra note 35, at 297-98. According to these authors, for example, the United States would have to make considerable changes in its trademark, copyright, and patent laws besides adopting a federal trade secret statute and eliminating the discriminatory effects of section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337 (1988). The willingness of industries in the United States to accommodate these and other changes, such as a federal moral rights law, remains to be seen.

^{521.} See supra text and authorities accompanying notes 497-98.

^{522.} For the progress made at successive Revision Conferences of the Paris Convention between 1900 and 1958, see, e.g., Foyer, supra note 38, at 358-60. For similar progress at Revision Conferences of the Berne Convention between 1896 and 1948, see S. RICKETSON, supra note 34, at 81-113. According to Professor Foyer, the progressive development of international industrial property law was checked by the emergence of a heterogeneous international society, by the explosion of technology in the modern period, and by the trend toward economic regionalism. Foyer, supra note 38, at 361. The Stockholm Conference of 1967 nonetheless achieved some modest forward movement in regard

ing states should not assume that an integrated system will continue to function smoothly without periodic adjustments requiring the kind of onerous diplomatic undertakings typical of past revision processes.

The political will to sustain the requisite degree of international cooperation and to accept a concomitant reduction of national economic sovereignty should not be presumed in a world in which the economic selfinterest of states is as likely to diverge as converge in response to circumstances that change over time. One may concede that future disputes in the common domain would not differ in principle from those that currently arise in domestic litigation. The TRIPs negotiators should nonetheless be aware that decisions about such matters by beefed-up GATT panels could become binding internationally, whether or not consistent with the domestic laws of the litigating states and whether or not palatable to their respective Chambers of Commerce or to their legislative and administrative authorities. In this connection, the zeal for stronger international tribunals manifested to date by some delegations during the Uruguay Round is hardly commensurate with the behavior of their governments before existing international tribunals, including the disputeresolving panels of the GATT itself. 523

B. Reconciling International Minimum Standards with National Development Policies

A transnational market for intellectual goods defended by a harmonized legal regime and by agreed border control measures would not satisfy those circles bent on establishing international minimum standards of protection applicable to all Contracting Parties of the GATT.⁵²⁴ These circles fear that absent further undertakings of this nature, Contracting Parties not dependent on exports of intellectual goods to major markets could, in effect, ignore a GATT Code of Conduct dealing with intellectual property rights. Such parties could lose this immunity, however, once a GATT Code of Conduct enabled signatories directly or in-

to the Paris Convention. See, e.g., id. at 358-59. The discredited Protocol proposed for the developing countries under the Berne Convention emerged, however, from the Stockholm Conference, and this triggered a crisis in international intellectual property relations that led to the failure of efforts to revise the Paris Convention in the 1980s. See supra notes 311-16, 334-40 and accompanying text; Foyer, supra note 38, at 360-66.

^{523.} See supra text and authorities accompanying notes 35, 383, 399 (tensions over United States border control measures and United States position on conditional MFN with respect to subsidies); see also Military and Paramilitary Activity in and Against Nicaragua (Nicar. v. U.S.), 1986 I.C. J. 14.

^{524.} See supra text and authorities accompanying notes 31-37, 353-54.

directly to hold all Contracting Parties to certain international minimum standards of protection.⁵²⁵ In this event, nonsignatory countries that deviated from agreed standards could become vulnerable to sanctions if they tolerated the unauthorized use of foreign intellectual goods on their territories even in connection with national development policies unrelated to exports.⁵²⁶

An offensive strategy of this kind, however, raises even thornier legal and political questions than those pertaining to a defensive intellectual property alliance. Nor should it lightly be assumed that such a strategy would be consistent with the general GATT framework.

1. The Case of GATT Contracting Parties That Adhere to Intellectual Property Conventions

a. Traditional subject matters of protection

Notwithstanding the rejection of material reciprocity by all three of the Great Conventions regulating intellectual property, ⁵²⁷ commentators have observed that the act of membership in any of these Conventions carries with it an implied undertaking to provide a significant level of protection for the subject matter they cover. ⁵²⁸ This obligation follows in part from the concept of International Unions, as created by the Paris and Berne Conventions, whose essential purpose is to foster "the protection of industrial property" or "the protection of the rights of authors in their literary and artistic works." ⁵²⁹

The level of protection incumbent on Union members is spelled out more concretely in the minimum standards adopted with varying degrees

^{525.} See supra text and authorities accompanying notes 32-37; Hartridge & Subramanian, supra note 92, at 901, 907.

^{526.} Direct sanctions could presumably be obtained through the GATT's own dispute settlement machinery, although matters have rarely proceeded this far in the past. See, e.g., Hartridge & Subrmanian, supra note 92, at 908; see also Note, supra note 32, at 394-95. Direct sanctions could also be applied through unilateral acts of retorsion, as under section 301 of the U.S. Tariff Act of 1974 or the denial of GSP benefits. See, e.g., Gadbaw & Richards, supra note 8, at 21-23. But see Hartridge & Subramanian, supra note 92, at 909 (stating that it is "hard to see why many states should accept new multilateral commitments in this area if they remain vulnerable to unilateral actions"). Indirect sanctions could be applied by actions tending to facilitate or obstruct requests for assistance from international organizations that provide financial and economic assistance. See, e.g., Gadbaw & Richards, supra note 8, at 28.

^{527.} See supra text and authorities accompanying notes 122-25, 443-44.

^{528.} See supra text and authorities accompanying notes 443-48, 458.

^{529.} See Paris Convention, supra note 21, art. 1(1); Berne Convention, supra note 22, art. 1; supra notes 439-40, 456-62 and accompanying text.

of density by all three Conventions.⁵³⁰ It also inheres in the open-ended duty to provide "adequate and effective" protection for literary and artistic works under the Universal Copyright Convention.⁵³¹ Even the Paris Convention, much criticized recently for the high degree of discretion left to states in this regard,⁵³² now requires all Member States to "adopt . . . the measures necessary to ensure the application of this Convention."⁵³³ It further requires all new members, at the time of accession, to "be in a position under its domestic law to give effect to the provisions of this Convention."⁵³⁴

Against this idealistic notion of International Unions dedicated to the protection of intellectual property rights, it is sometimes objected that many developing countries were not free to reject unequal treaties when seeking to secure recognition as independent states. As a result, some of these countries became involuntary members of the Unions as a condition of their emancipation from colonial status. Over time, however, these moral disclaimers seem no more persuasive than appeals to some transcendental concept of Union. That certain states were to some extent coerced into retaining Union membership at the time they acquired independence hardly vitiates treaty obligations still in force long after they became the masters of their own destinies. Because they have not subsequently denounced the intellectual property treaties they signed, their continued adhesion brings with it the same direct and indirect benefits that accrue to other Member States, and it presumably imposes the same obligations under international law.

^{530.} See supra notes 446-51, 456-74 and accompanying text.

^{531.} See U.C.C., supra note 23, art. I; A. Bogsch, supra note 343, at 5. The minimum standards required by the U.C.C. were potentiated in the Paris Revision of 1971. See supra note 342 and accompanying text.

^{532.} See, e.g., Kunz-Hallstein, U.S. Proposal, supra note 97, at 268; supra text accompanying notes 95-99. But see, e.g., text and authorities accompanying notes 100-03, 458 (suggesting that weakness of Paris Convention stems in part from lax state practice).

^{533.} See Paris Convention, supra note 21, art. 25(1).

^{534.} See id. art. 25(2); G. BODENHAUSEN, supra note 89, at 208-09; supra note 458 and accompanying text.

^{535.} See, e.g., Foyer, supra note 38, at 361, 364-65, 384-86.

^{536.} For the different reasons that induced the developing countries to stay with the intellectual property treaties over time, see *id.* at 385.

^{537.} See, e.g., Vienna Convention on the Law of Treaties, arts. 21, 31(3)(b), U.N. Doc. A/Conf. 39/27 (1969), reprinted in 8 I.L.M. 679 (1969).

(1) Legitimizing force of a preferential regime

To have joined the International Unions or the U.C.C., however, hardly commits a member state to respect the highest standards of protection that have only lately become fashionable in certain industrialized countries. Signariant Nor can those seeking to impose elevated standards demonstrate that their proposals are consistent with rational development policies for states operating under relatively disadvantageous economic conditions. Public interest exceptions to exclusive proprietary rights, which are recognized in all domestic intellectual property laws, signariant vary with the social and economic conditions of the states concerned. Empirical evidence suggests, moreover, that special, more limited forms of patent protection, such as patents of importation, were instrumental in stimulating European economic growth during the early stages of the Industrial Revolution. Some authors believe comparable institutions would suit the needs of many developing countries at least as well as mature patent systems like those of the OECD countries.

^{538.} See, e.g., Ullrich, GATT, supra note 44, at 132-33 (stressing that current proposals would "requir[e] all countries to raise their protective level to that of the most industrialized countries"); id. at 132 n.10, 133 n.11 (stressing the relatively low levels of patent protection in many Western European countries prior to the wholesale revision of domestic patent law that took place after the Munich Patent Convention entered into force). See also Haertel, The Harmonizing Effects of European Patent Law on National Patent Laws, 14 I.I.C. 719 (1983).

^{539.} See supra notes 38-56 and accompanying text.

^{540.} See, e.g., 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1904-05; supra notes 308-09 and accompanying text.

^{541.} See, e.g., 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1884, 1887-88; Foyer, supra note 38, at 386, 390-94. "Is it really so difficult to understand that countries suffering from starvation and epidemic diseases . . . have a different approach to the patentability of foodstuffs and pharmaceuticals than most industrialized countries . . . half a century after their industrialization . . . ?" Ullrich, GATT, supra note 44, at 142 n.41.

^{542.} See, e.g., PLASSERAUD & SAVIGNON, PARIS 1883, supra note 54, at 83-93 (discussing patents of importation, of introduction, and of extension). See also Paris Convention, supra note 21, art. 1(4) (recognizing these patents); G. BODENHAUSEN, supra note 89, at 26 (describes patents of importation or introduction as being "of relatively short duration [and] granted for an invention . . . already . . . patented in a foreign country and which has therefore lost its novelty, but which is nevertheless protected . . . in the expectation that the patentee will exploit the patent in the country concerned").

^{543.} See, e.g., 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1902-03; Foyer, supra note 38, at 367; see also Kunz-Hallstein, Revision of International System, supra note 34, at 668. In principle, these legal institutions do not so much stimulate inventive activity as encourage local entreprenuers to install a type of production that does not yet exist in a particular country. See, e.g., Foyer, supra note 38, at 367. A true

Others believe that laws protecting utility models are especially appropriate for developing countries, even though most industrialized countries ignore this institution.⁵⁴⁴ Similar observations apply to the copyright side of the ledger, where different domestic laws reflect different cultural and social policies,⁵⁴⁵ and even an industrialized country such as the United States acquired the capacity to endure high standards of protection for literary and artistic works only in 1989.⁵⁴⁶

What seems historically undeniable is that elevating the standards of protection for intellectual property in a treaty that applies to "haves" and "have nots" alike becomes more feasible when the quest for standards beneficial to the former is combined with derogations and concessions of importance to the latter. Much therefore depends on whether developing-country signatories to the Great Conventions are confronted with a demand for higher standards of intellectual property protection within an international trade framework that acknowledges the principle of special and preferential treatment recently embodied in the basic GATT instrument. Such an approach might offset the objection that a general elevation of standards deviates from the sector-by-sector evaluation of injury typical of past GATT practice. It would also help to legitimate the claim that a GATT Code of Conduct aims to alleviate trade distortions and not to curtail competitive advantages stemming from cheap labor and growing technical skills.

One could reply that a two-tiered approach to international trade law

- 545. See Remarks of Goldstein, supra note 69; Remarks of Oman, supra note 127.
- 546. See Berne Implementation Act of 1988, H.R. Doc. No. 609, 100th Cong., 2d Sess. 1 (1988), Pub. L. 100-568, 102 Stat. 3853 (1988) (effective Mar. 1989).
 - 547. See supra text and authorities accompanying notes 311-52.
 - 548. See supra text and authorities accompanying notes 328-33, 349-52.
 - 549. See, e.g., Ullrich, GATT, supra note 44, at 132.
- 550. See, e.g., id. (fearing a "shadow of protectionism on what otherwise would be legitimate protection").

patent system may nonetheless remain of primary importance for attracting foreign technology and investment. See, e.g., 3 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 1892-94; Kunz-Hallstein, Revision of International System, supra note 34, at 659-61, 666-69. Even so, managing a patent system exceeds the technical capabilities of some developing countries and costs more than it is worth for many others. See, e.g., Remarks of Yoichiro Yamaguchi, 22 Vand. J. Transnat'l L. 325, 327 (1989) [hereinafter Remarks of Yamaguchi] (Symposium Part I); Remarks of Alice T. Zalik, 22 Vand. J. Transat'l L. 329, 330 (1989) (Symposium Part I).

^{544.} See, e.g., Ullrich, GATT, supra note 44, at 153; Kunz-Hallstein, Revision of International System, supra note 34, at 668. Utility models, narrowly construed, deal with novel functional designs; but the modern trend is to convert utility model laws into petty patent laws that protect minor inventions on softer terms than utility patent laws. See generally 2 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 949-64.

has itself become counterproductive over time and that the strictest MFN discipline under article I of the GATT⁵⁵¹ is needed to keep both sides from catering to local special interests at the expense of their respective long term interests.⁵⁵² This thesis, admirably put forward by Professor Hudec,⁵⁵³ suggests that the developing countries—or at least their most visible representatives—may be transforming the notion of preferential treatment into a global system that could subtly reintroduce the kind of protectionist barriers the GATT set out to dismantle in the first instance.⁵⁵⁴ One could then argue by extension that recognition of a preferential regime in the context of an Intellectual Property Code would be similarly counterproductive for the developing countries in the long run,⁵⁵⁵ and that, in any event, it would further postpone the day of reckoning needed to save international trade law from its present doldrums.

Professor Hudec's prescription for purging the GATT of its ills by the reinstatement of a strict MFN discipline remains a long way from being filled, however, as he is the first to concede. In the meantime, the developing countries show no sign of retreating from the principle of special and differential treatment that entered the basic GATT framework as a direct result of the Tokyo Round of Multilateral Trade Nego-

^{551.} See GATT, supra note 2, art. I.

^{552.} See generally R. Hudec, Developing Countries, supra note 9, 159-235; see also Abbott, The Trading Nation's Dilemma: The Functions of the Law of International Trade, 26 Harv. Int. L.J. 501, 502-04, 525-32 (1985).

^{553.} See supra note 552. Hudec's thesis fits the view of the world emerging from writings on public choice theory, and it suggests the kind of legal strategy to which that theory may lend itself. Cf. D. FARBER & P. FRICKEY, PUBLIC CHOICE AND THE FUTURE OF PUBLIC LAW, at 1-16 (1990) (forthcoming; citations to manuscript version).

^{554.} See R. Hudec, Developing Countries, supra note 9, at 108-12 (describing UNCTAD's proposed Global System of Trade Preferences), 132-35, 208-24 (criticizing these policies).

^{555.} See, e.g., Kunz-Hallstein, Revision of the International System, supra note 34, at 666-68 (warning that reforms of either the international or domestic patent systems that reduce incentives to foreign patentees will harm the developing countries in the long run); Cabanellas, supra note 250 (warning against over reliance on the requirements to work patents locally, which can produce negative economic effects). See also Abbott, Protecting First World Assets in the Third World: Intellectual Property Negotiations in the GATT Multilateral Framework, 22 VAND. J. TRANT'L LAW 689 (1989) (Symposium Part I) (recognizing role of short term concessions but insisting on use of international standards to ensure self-discipline of developing countries).

^{556.} See R. Hudec, Developing Countries, supra note 9, at 217 (Despite the potential value of strictly enforcing it, "the difficulties of restoring the MFN obligation are so great that it looks like an impossible task in the near future, no matter how it is approached.").

tiations.⁵⁶⁷ To reject that principle in the present context could therefore be construed as an effort to instrumentalize the intellectual property question in order to frustrate rights the developing countries had already acquired in prior negotiations. Yet, the world's precarious intellectual property system seems hardly the appropriate point of departure for a campaign to rid the GATT of a pragmatic heritage acquired over some fifty years of intense negotiations,⁵⁶⁸ and even the hint of such a tactic would discredit the whole TRIPs enterprise in the end.

Even if one could demonstrate that a preferential regime harmed the long term interests of the developing countries in the field of international trade, it would not necessarily follow that a similar approach worked comparable harm in the field of intellectual property. A growing body of evidence suggests that mature intellectual property systems produce harmful results when transposed to the developing country milieu without proper adjustments for local needs and conditions. 559 Historically, progress in international intellectual property relations has entailed a gradual elevation of minimum standards, built on a process of consensus, that enabled all participants to determine the desired balance between monopoly and competition for themselves, in the light of their own cultural and economic needs. 660 Carefully balanced compromise solutions that enabled developing countries to recapitulate the evolution of the industrialized countries have much to recommend them in this respect.⁵⁶¹ To the extent that these solutions helped host countries effectively to absorb imported technology, they would seem particularly desirable. 562 To be feared, instead, are proposals tending to freeze relevant international law at such unacceptably high levels of reciprocity that it would turn the developing countries away from the kind of system they will need as they acquire greater technical expertise. 563

^{557.} See supra text and authorities accompanying notes 59-67, 349-52.

^{558.} See supra text and authorities accompanying notes 320-52.

^{559.} See supra notes 41-51 and accompanying text; 3 S. LADAS, INDUSTRIAL PROP-ERTY, supra note 68, 1888-96; see also Abbott, supra note 55, at 698-99 (implying that increased levels of intellectual property protection should not be justified as directly beneficial to developing countries). But see Kunz-Hallstein, Revision of International System, supra note 34, at 665 (citing studies showing that dominance of foreign patents in Third World does not produce harmful effects and that there is a positive correlation between the GNPs of these countries and both the number of foreign patent applications and the level of patented products they import).

^{560.} See supra notes 70, 122-25, 272 and accompanying text.

^{561.} See infra text accompanying notes 570-603; see also supra notes 53-54, 284, 542-44 and accompanying text.

^{562.} See infra text accompanying notes 578-85.

^{563.} See, e.g., 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 26-28, 265-70

Absent a consensual quest for an appropriate two-tiered adjustment of international intellectual property relations, thinly disguised attempts to export regional standards of protection via a trade-based approach are unlikely to succeed, 564 and the legality of any sanctions used to enforce them remains doubtful. 665 The developing countries, like all Contracting Parties, have acquired rights under the GATT, quite apart from their GSP privileges, and they are entitled to invoke the GATT's own dispute settlement machinery if sanctions that violate article XXIII should nullify or impair their rights. 666 If these sanctions derived from the application of universal minimum standards to which the sanctioned parties had not consented, without offsetting preferences and concessions, claims of nullification and impairment would appear especially compelling. Conversely, those applying sanctions would find it hard to prove to an impartial international tribunal that heretofore legitimate acts of developing countries that refused to sign a new Code of Conduct had somehow nullified benefits that the industrialized countries had acquired under no treaty or customary law yet in existence. 567

A standoff is the most likely result of such a confrontation. On the

(deleterious effects of freezing the law through reciprocity requirements in the past); supra notes 122-25, 448 and accompanying text. For current trends in this direction, see Kunz-Hallstein, Present Situation, supra note 53, at 434-40.

564. See, e.g., Ullrich, GATT, at 132-33, (fearing increased resort to subsidization coupled with denials of protection to foreign intellectual goods that are themselves the fruit of direct or indirect subsidies); id. at 141-42, 158-59 (fearing extraterritoriality in disguise).

565. See, e.g., Meesen, supra note 4, at 72-73; Hart, supra note 32, at 59 (querying legality of asking other nations to adopt United States standards of protection); Yusuf, supra note 61, at 498-502 (contending that side code benefits without commitment to differential treatment would violate Contracting Parties' Decision of 26 November 1979 (see supra notes 61, 332-33)). There is a further question of proportional responses under articles XXII and XXIII of the GATT. See, e.g., Messen, supra note 4, at 72-73.

566. See GATT, supra note 2, art. XXIII (Nullification or Impairment); supra notes 401-06 and accompanying text.

567. See supra note 565; Remarks of Jackson, supra note 5, at 354 (stating that retaliations against nonsignatories to an intellectual property code for violations of intellectual property rights affecting international trade are unlikely to be upheld; suggesting that "alternative compensation, alternative concessions to the countries concerned" might attenuate a technical violation of the GATT under the proper set of circumstances; acknowledging that a "two-tier...or...a gradualist approach, a graduation approach" could constitute an appropriate set of circumstances). Professor Jackson stresses that articles I, II and XI would all be potentially involved in any such dispute. Id. at 350-51; see also Remarks of Hudec, supra note 37, at 322 (stating that GATT law does not entitle governments to condition trade access on adequate protection of intellectual property rights).

political plane, attempts to pressure the developing countries into granting new rights by withdrawing or threatening to withdraw existing rights or privileges could provoke corresponding actions to curtail existing rights of the industrialized countries in defiance of present treaty obligations. The real losers in such a contest would be those private authors, inventors and trademark proprietors, all over the world whose livelihood depends on the continued operation of the international intellectual property system that the Paris and Berne Conventions set in place over a century ago.

(2) Dimensions of a two-tiered approach

One of the hidden advantages of a two-tiered approach is that it could improve the present international intellectual property system even if more ambitious reform efforts failed either for lack of political leverage or of time or because other items on the Uruguay Round's agenda required trade-offs at the expense of intellectual property. For example, negotiations premised on the need for compromise should begin by establishing the duty of all Contracting Parties to respect national treatment in regard to intellectual property rights, regardless of the applicability of the GATT's own Article III⁵⁷⁰ or of the relevant norms under the Great Conventions. This would thwart the discriminatory aspirations of certain states and ensure that the Uruguay Round closed any remaining loopholes in the one universal norm underlying all evolutionary progress in this field.

At the same time, national treatment should not become an end in itself. If the industrialized countries accept the principle of preferential treatment, the developing countries that adhere to both the GATT and major intellectual property conventions should expect to strengthen the applicable standards under those conventions. The surrender of bare national treatment under existing minimum standards should be seen as a

^{568.} For tendencies in this direction, see Kunz-Hallstein, Revision of International System, supra note 34, at 659-61; Foyer, supra note 38, at 384; supra note 563. See also Kastenmeier & Beier, supra note 35, at 299 (fearing unilateral reactions in response to United States actions).

^{569.} See, e.g., Kastenmeier & Beier, supra note 35, at 300 (noting view that "failure to secure optimal results on intellectual property rights is not worth jeopardizing significant improvements that may be secured in the fields of agriculture and services").

^{570.} See supra text and authorities accompanying notes 424-30.

^{571.} See supra text and authorities accompanying notes 443-51, 456-90.

^{572.} See supra notes 122-25, 291, 443-48, 473, 485-90 and accompanying text. But see Oddi, supra note 34, at 856-58 (contending that developing countries should discriminate in regard to foreign intellectual property rights).

sine qua non of a good faith negotiating effort aimed at securing "adequate and effective" protection for all authors and inventors covered by these conventions without undermining the developing countries' overall drive to attain economic parity with the industrialized world.⁵⁷³

Negotiations along these lines could make fairly rapid progress in reinforcing the traditional subject matters of copyright law owing to the two-tiered regimes already in place under the existing Copyright Conventions.⁵⁷⁴ Rather than attempting to spell out an array of additional standards that numerous Member States on both sides of the aisle might find unacceptable, the Uruguay Round could more profitably seek to perfect the existing Appendix⁵⁷⁵ and to ensure that Member States respect both the modalities of this preferential regime and the remaining minimum standards from which no derogations are permitted. Lax enforcement measures and dubious administrative procedures not covered in the text of the treaties themselves should also be addressed.⁵⁷⁶

On the industrial property side, efforts to add minimum standards to the Paris Convention are more delicate in view of the aborted efforts to revise this Convention, under WIPO's aegis, during the period 1979-1985.⁵⁷⁷ It should be remembered, however, that only a fraction of the technological lore needed by developing countries is ever under patent at any given time, ⁵⁷⁸ and that the transfer of unpatented innovation to these same countries has proved no less troublesome than transfers of technology covered by intellectual property rights as such. ⁵⁷⁹ In this connection,

^{573.} See supra notes 294-302 and accompanying text.

^{574.} See supra notes 340-48 and accompanying text.

^{575.} See supra note 341 and accompanying text.

^{576.} See supra text and authorities accompanying note 35.

^{577.} See supra text and authorities accompanying notes 312-16.

^{578.} See, e.g., M. HIANCE & Y. PLASSERAUD, supra note 38, at 95-99 (arguing that developing countries place too much emphasis on reforms of the patent system and not enough emphasis on facilitating transfers of unpatented technology); Kunz-Hallstein, Present Situation, supra note 53, at 427. Developing countries that unduly restrict the foreign patentees' scope of protection may simply diminish their own access to the most up-to-date technology. See, e.g., Kunz-Hallstein, Revision of International System, supra note 34, at 660-61.

^{579.} See supra note 578. The concerns of the developing countries in this regard are reflected in key United Nations resolutions that cast a long shadow over the current round of negotiations. See, e.g., U.N. NIEO Declaration, supra note 221, paras. 4(g) (regulation and supervision of the activities of transnational corporations), 4(p) (access to science, transfer of technology, and creation of indigenous technology); U.N. Economic Rights Resolution, supra note 221, arts. 2 (regulation of foreign investment and of activities of transnational corporations), 9 (cooperation in the field of technology), 13 (transfer of technology on favorable terms). See generally Fikentscher & Lamb, supra note 42.

the developing countries have advanced serious proposals concerning the regulation of restrictive business practices,⁵⁸⁰ unfair trading,⁵⁸¹ and the transfer of technology in general⁵⁸² that do not necessarily require derogations from the established international regime governing patents under the Paris Convention.

Because all these proposals "can be seen to form a single, multifaceted but interrelated pattern of general business . . . regulation," compromises with regard to some should facilitate agreement with regard to others. The more the industrialized countries facilitated the transfer of all technology, including unpatented technology, in ways that met the needs of developing countries, the less these countries might want to insist on major derogations from the international regime governing patents under the Paris Convention. By the same token, the industrialized countries, which control more than ninety per cent of all the patents issued at any given time, can hardly expect to strengthen minimum international standards governing patent protection while continuing to

^{580.} See, e.g., Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices [RBP Code], U.N. Doc. TD/RBP/CONF/10 Rev. 1, reprinted in 19 I.L.M. 813 (1980); Draft U.N. Code of Conduct on Transnational Corporations, reprinted in 23 I.L.M. 626 (1984) [hereinafter Draft TNC Code]; Fikentscher & Lamb, supra note 42, at 84-89 (citing authorities).

^{581.} See, e.g., Draft TNC Code, supra note 581; Fikentscher & Lamb, supra note 42, at 89-91.

^{582.} See, e.g., Draft International Code of Conduct on the Transfer of Technology, U.N. Doc. TD/Code TOT/47 (June 20, 1985) [hereinafter Draft TOT Code] (latest version); Fikentscher & Lamb, supra note 42, at 92-94. "The revision of the Paris Convention deals with... patent protection. In their desire to profit from transfer of technology, developing countries proposed a further Code governing... transfer of technology transactions, including issues of intra-enterprise transfer, contracting, applicable law, investment, patent, trademark, and restrictive practices (anti-trust)." Id. at 92.

^{583.} Fikentscher & Lamb, supra note 42, at 84.

^{584.} While undue restrictions on the rights of foreign patentees can turn against the developing countries in the end, see supra note 578, they will harm industrialized countries that become increasingly dependent on exports of technology in an integrated global economy. See, e.g., Kunz-Hallstein, Revision of International System, supra note 34, at 667-68. An impasse thus looks counterproductive from every angle.

^{585.} UNCTAD estimates that:

developing countries grant only 6% of all patents, and that enterprises in the developing countries hold about 0.6% of the patents granted worldwide to foreigners . .

^{.. [}T]he overwhelming share of the patents granted by developing countries, namely about 85%, are found in the hands of foreign enterprises, which in turn work only about 5% of these patents via their own production operations or through granting licenses.

Kunz-Hallstein, Revision of International System, supra note 34, at 658 (quoting and citing authorities valid for the 1970s).

obstruct agreements that could enhance the developing countries' capacity to absorb both patented and unpatented technologies.

As regards revision of the Paris text itself, the most promising approach calls for a flexible application of reasonable standards drawn from the actual practice of states belonging to different geopolitical groupings. 586 Were the GATT negotiators to avoid the polemics that prevented their WIPO counterparts from reaching a compromise solution, 587 it might prove possible to institute a general duty to provide "adequate and effective protection" for most patentable subject matters recognized by developed legal systems. 588 Unlike the comparable clause in the U.C.C., 589 however, which depended largely on the good will of domestic legislators, 500 such a duty could become justiciable within the framework of the GATT's own dispute resolution machinery. 591 Those GATT panels called upon to evaluate such a standard would thus be empowered to determine, for example, that a total denial of patentability to certain subject matters or an unduly short term of protection violated minimum rather than maximum international standards, as evidenced by state practice and, perhaps, an agreed set of guidelines. 592 GATT panels could thus give due weight to different levels of economic development and to the particular needs of disadvantaged states, in conformity with other provisions of this tenor already incorporated into the GATT instrument itself.593

TRIPs negotiations could further require the developing countries to acknowledge that systematic free use of industrial property recognized as protectable under developed legal systems was inconsistent with member-

^{586.} Cf. Abbott, supra note 555, at 43-44 (citing and summarizing a 1988 proposal by Switzerland, GATT TRIPs Doc. MTN.FNG/NG11/W/25 (June 29, 1988)).

^{587.} See supra text and authorities accompanying notes 62-65, 312-16.

^{588.} See supra note 586.

^{589.} See U.C.C., supra note 23, art. I ("Each Contracting State undertakes to provide for the adequate and effective protection of the rights of authors and other copyright proprietors in literary, scientific, and artistic works, including writings, musical, dramatic, and cinematographic works, and paintings, engravings, and sculpture."). The U.C.C. bridges relations between the Berne Union countries and states affording a lower level of copyright protection.

^{590.} See, e.g., A. Bogsch, supra note 343, at 5-7.

^{591.} See supra note 36 and accompanying text.

^{592.} See, e.g., Abbot, supra note 555, at 43-44 (discussing Swiss proposal, supra note 586); cf. A. Bogsch, supra note 343, at 6 (referring to the U.C.C.).

^{593.} See supra notes 328-33 and accompanying text; Understanding Regarding Notification, Consultation, Dispute Settlement and Surveillance, in Tokyo Round Codes, supra note 325, annex, para. 2 [hereinafter GATT, Understanding Regarding Dispute Settlement].

ship in the Paris Union, with the duty to compensate for takings implicit in the present version of article 5A of that Convention, and with the protection of other forms of alien property under public international law.⁵⁹⁴ Preferential concessions regarding either the compulsory licenses already available under article 5A or other matters of concern to the developing countries,⁵⁹⁵ could therefore receive serious consideration only if these countries abandoned the confiscatory aspirations that surfaced, or appeared to surface, during the last Revision Conference.⁵⁹⁶ The GATT framework should in turn reassure the industrialized countries that local decisions implementing any agreed concessions, including those pertaining to article 5A, would be subject to review at the international level.⁵⁹⁷

At the same time, the quest for a workable two-tiered regime could lead to an agreement institutionalizing unorthodox modalities of protection (like those that facilitated some states' industrial growth in the past), which may be better suited to the current needs of some developing countries than the standard patent model.⁵⁹⁸ In other words, the principle that states must pay to use intellectual property can be linked with the right to facilitate the effective "translation" of technology from one milieu to another, in the same way that the Appendix to the Copyright Conventions facilitated the translation of cultural products.⁵⁹⁹ However, participation in a two-tiered regime should confer no rights on the beneficiary states to export the products resulting from special concessions.⁶⁰⁰ Only graduation to full membership in the Code of Conduct should per-

^{594.} Paris Convention, supra note 21, art. 5A; see generally 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 519-38; G. BODENHAUSEN, supra note 89, at 67-73; supra notes 218-27, 290-93, 303-10. But see 1 S. LADAS, INDUSTRIAL PROPERTY, supra note 68, at 535 (noting that previous United States refusal to accept the inclusion of a requirement for remuneration in all cases, including antitrust abuses, still casts some shadow on the general duty of compensation under Article 5A).

^{595.} See supra notes 313-15 and accompanying text (discussing issues raised during the Paris Revision Conference of 1979-1985).

^{596.} See supra note 315; Foyer, supra note 38, at 393-94 (discussing the "danger-ously innovative" proposal to introduce exclusive, "non-voluntary" licenses that would prevent the expropriated patentee from competing with the local licensee for a considerable period of time).

^{597.} See GATT, Understanding Regarding Dispute Settlement, supra note 593; Hudec, GATT Disputes, supra note 36, at 185-97 (1980) (analyzing procedures in regard to dispute settlements by panels operating under the Side Codes and assessing the status of the panels' advisory reports to the parent plenary body).

^{598.} See supra text and authorities accompanying notes 542-44.

^{599.} See supra notes 303-10, 339-48 and accompanying text.

^{600.} Cf. supra text and authorities accompanying note 347 (discussing similar provision in Appendix to the Berne Convention and in the U.C.C.).

mit exportation of this kind as a matter of right, a possibility likely to appeal to more states as they acquire the capacity to compete on equal terms.⁶⁰¹

While a multitude of issues raised during the last Revision Conference would still remain on the table, 602 the ability of the GATT to muster either the expertise or the institutional framework needed to produce a revision of the Paris Convention within the time constraints of the Uruguay Round is open to doubt. The TRIPs negotiations could set parameters and guidelines for a future Revision Conference, as well as deadlines for reaching an agreed end product, while leaving the experts to work out the details under WIPO's experienced supervision. Besides providing ancillary measures to ensure proper administration and enforcement of the final result, a GATT arrangement could conceivably stimulate the Paris negotiating process by deferring certain benefits accruing to both sides under the main body of the Uruguay Round until agreement had been reached on basic industrial property measures. The negotiators should also provide clauses and guaranties to discourage states that seek to withdraw from existing intellectual property Conventions in order to avoid the results of a compromise agreement, in much the same way that the Copyright Conventions, as revised in 1971, discouraged the developing countries from quitting Berne for the U.C.C. by introducing higher minimum standards under the U.C.C. and preferential treatment under both Conventions. 603

Once a two-tiered project got under way, in short, the TRIPs negotiations could ensure that the industrialized countries obtained real improvements in the present level of protection in return for real improvements in the legal regulation of technology transfers generally plus some additional but temporary concessions to the developing countries' immediate needs. Such a regime, buttressed by workable machinery for the settlement of disputes and a clearly stated principle of graduation, could in turn align the world's intellectual property system on a common axis with its international trade system in a manner that served to reinforce both.

^{601.} For the role and importance of the graduation principle in recent GATT developments, see R. Hudec, Developing Countries, supra note 9, at 196-201; see also supra notes 330-31 (graduation principle in recent GATT agreements), 348 (graduation principle in preferential regimes under Copyright Conventions).

^{602.} See supra note 315 and accompanying text.

^{603.} See supra notes 341-42 and accompanying text.

b. Applied scientific know-how

If, as suggested earlier, building consensual norms concerning traditional subject matters of intellectual property law is a slow and difficult task, the chances of establishing universal norms for the protection of new technologies that fall outside the standard patent and copyright systems are poor indeed. New technologies, such as biotechnology, computer technologies and data bases, industrial designs (including integrated circuit designs), and methods of medical treatment challenge the world's intellectual property system because they do not fit within the historical dichotomy between "inventions" and "artistic works" on which it rests. While the bulk of today's most valuable innovations flow from incremental improvements in applied scientific know-how, products embodying this know-how "seldom behave in a manner consistent with the standard assumptions underlying the international patent and copyright systems."

Legislative and judicial efforts to adapt domestic intellectual property laws to these new technologies have led to a proliferation of ad hoc protective solutions in all industrialized countries. 608 Because these solutions

^{604.} See supra text and authorities accompanying notes 68, 122-25, 195-98, 512-13. This was demonstrated, if any demonstration was necessary, at the recent Washington Diplomatic Conference concerning a treaty to regulate semiconductor chip designs. See, e.g., 'U.S., Japan Refuse to Sign WIPO Treaty on Protection of Semiconductor Chips,' 38 Pat. Trademark & Copyright J. (BNA) 123 (June 1, 1989).

^{605.} See, e.g., K. Hodkinson, Protecting and Exploiting New Technology and Designs 72-100, 121-47 (1987).

^{606.} See, e.g., Reichman, Programs as Know-How, supra note 27, at 651-62, 660-661. Patent law's

substantive requirement of 'nonobviousnesss' can effectively exclude the bulk of scientific achievements in new technological fields even after subject-matter eligibility becomes established and despite the intrinsic commercial value such achievement may otherwise possess At the same time, because of their functional character, the new technologies are alien to the spirit of the copyright paradigm, which historically rewards works of art and literature without encroaching upon the domain of industrial property.

Id. at 652, 660-61.

^{607.} Id. at 641, 651-62; see also W. Kingston, supra note 199, at 2-3, 31-34, 61; F. Magnin, supra note 199, at 14-22, 93-94, 381-88 (1974) (emphasizing the distinctive phenomenology of know-how as a basis for its positive recognition in international industrial property law). See further Reichman, Legal Hybrids, supra note 199.

^{608.} See Reichman, Programs as Know-How, supra note 27, at 641, 651-62, 714-18.

The end result is a patchwork quilt of protective devices . . . that has strained the classical intellectual property system to the breaking point [T]hese devices reveal the extent to which applied scientific know-how, inadequately served by the

tend to err either on the side of overprotection or on the side of underprotection, 609 they result in unstable legal formulations likely to cause the effective level of protection to vacillate from one extreme to the other over time. 610 Attempts to impose international minimum standards based on these ad hoc modalities therefore run the risk of internationalizing the disequilibrium currently experienced in the various domestic laws. 611

This does not mean that applied scientific know-how can be left to the mercy of transnational free riders simply because existing intellectual property laws do not adequately cover it. It does mean, as one author recently suggested, that some temporary, emergency agreement would prove more beneficial in the short run than efforts to squeeze square pegs into the round holes carved out for "artistic works" and "inventions" under the Berne and Paris Conventions. A primary task for the TRIPs negotiators, in other words, is to establish a temporary norm against misappropriation of applied scientific know-how that would prohibit slavish duplication by processes that eliminate the need for reverse engineering. Such a gentlemen's agreement, vetted by the industralized countries, could then serve as a basis for a "nonaggression pact" with the developing countries, with specific regard to the economically most significant technologies that fall between the patent and copyright paradigms.

An anti-piracy norm of this kind, backed up by the GATT, could be assimilated to article 10bis of the Paris Convention, which seeks "to as-

traditional patent law matrix, now poses a serious threat to the stability of an international system built around a static notion of 'industrial property' that no longer corresponds to empirical reality.

Id. at 667.

- 610. See, e.g., Reichman, Designs and New Technologies, supra note 176, part III.
- 611. See supra notes 606, 608-09.
- 612. See generally Dreyfuss, supra note 201.
- 613. See supra note 606.

^{609.} See id. at 662-67, 717 (finding that "legal hybrids falling between the patent and copyright paradigms tend inherently to trigger alternating currents of underprotection and overprotection" and that the "resulting 'social bargain' remains unbalanced and, perhaps, counterproductive"); see also Samuelson, Creating a New Kind of Intellectual Property: Applying the Lessons of the Chip Law to Computer Programs, 70 MINN. L. REV. 471, 511-14 (1985).

^{614.} See, e.g., Dreyfuss, supra note 201; Reichman, Programs as Know-How, supra note 27, at 666, 666 n.138 (discussing new Swiss law of unfair competition, which follows the direction indicated in the text), 716-17. Recourse to unfair competition law for these purposes could bring such an agreement within the ambit of article 10bis of the Paris Convention. See infra note 616 and accompanying text.

^{615.} See supra notes 606-07, 613 and accompanying text.

sure . . . effective protection against unfair competition" to nationals of all signatory states. ⁶¹⁶ It would also serve notice that the industrialized countries viewed applied scientific know-how as different from subject matters traditionally regulated by the Great Conventions and as partially exempt from the territorial immunities of classical intellectual property law. ⁶¹⁷ In this way, new technologies supported by the proposed emergency treaty could spring into being with a presumption of entitlement to some minimum level of international protection. And the TRIPs negotiations could help to crystalize a consensus around the principle that slavish imitation of applied scientific know-how was inconsistent with an emerging customary international norm applicable to new technologies as such. ⁶¹⁸

To be effective, however, any emergency agreement governing applied scientific know-how would require the backing of the GATT's own dispute resolution machinery, and those using this machinery must have the power to distinguish cases of misappropriation from hardship situations faced by the poorer countries. The legality of measures taken to resolve disputes concerning applied scientific know-how outside the confines of an agreement within the Uruguay Round could not be assured. Yet, there is no reason why enlightened pursuit of a two-tiered industrial property solution, coupled with sufficient progress on other Agenda items, could not produce enough good will and positive economic incentives to induce the developing countries to accept an emergency anti-piracy agreement of this kind. It seems no exaggeration to suggest that if such an accord looks modest in terms of the ambitious goals

^{616.} See supra notes 91, 153-57 and accompanying text. Such an "anti-piracy" norm for unpatented applied scientific know-how could eventually be added as a fourth prohibited act to article 10bis(3) and made applicable to all signatories of a GATT Intellectual Property Code via Article 19 of the Paris Convention. See supra notes 436-38 and accompanying text.

^{617.} See supra text and authorities accompanying notes 117-20, 264-93.

^{618.} See Reichman, Programs as Know-How, supra note 27, at 661-62 (stressing that the "extent to which a new intellectual property right is needed to protect interested parties against the misappropriation of unpatentable industrial know-how has . . . become a crucial issue for world economic development"); see also W. Kingston, supra note 199, at 33-34; F. MAGNIN, supra note 199, at 16.

^{619.} See supra notes 538-50, 559-65 and accompanying text.

^{620.} See supra notes 564-66 and accompanying text.

^{621.} For the view that such an agreement is not as chimerical as past experience would indicate, see Dreyfuss, *supra* note 201. The whole purpose of the Uruguay Round is, indeed, to overcome resistance to such measures by a combination of sticks and carrots that make winners of all the participants. See, e.g., Remarks of Jackson, supra note 5, at 350.

preselected for the Uruguay Round, future generations might see it as one of that Round's most signal achievements.

2. The Case of GATT Contracting Parties Not Adhering to One or More Intellectual Property Conventions

a. Limits of territorial sovereignty

The premises discussed at the outset of this Article suggest, however, that a totally intransigent position has become untenable in the present period. For example, the duty of all Contracting Parties to respect at least a minimum requirement of national treatment when appropriating foreign intellectual property for national development purposes seems inescapable, and the Uruguay Round should end any lingering doubts concerning the legitimacy of further discriminatory measures. Equally clear is the proposition that no Contracting Party has the inherent right to bootstrap its own indifference to the proprietary rights of creative and inventive nationals into a one-way fencing operation for converted foreign intellectual goods. Outside these fairly clear markers, however, lies a delicate zone at the limits of established public international law as it pertains to intellectual property rights. In this zone, two basic principles come into conflict. One is the right of each developing country to organize its national development strategy as it sees fit and along lines

^{622.} See supra notes 109-20 and accompanying text.

^{623.} See supra text and authorities accompanying notes 52-56; Meesen, supra note 4, at 70; see also Gadbaw & Kenny, supra note 95, at 186-98, 207-10 (discussing implications of India's reluctance to adhere to the Paris Convention, including its policy of banning the importation of consumer goods bearing foreign trademarks).

^{624.} See supra text and authorities accompanying notes 291, 570-71.

^{625.} See supra text and authorities accompanying notes 355-56, 494-96 (concerning legality of a "transnational market for qualified intellectual goods defended against free riding imports by border control measures and international machinery for the settlement of disputes").

consistent with its natural advantages and particular handicaps.⁶²⁶ The other is the need to assimilate the systematic taking of aliens' intangible intellectual property to the international legal regime that already protects aliens' tangible property under the doctrine of state responsibility.⁶²⁷

Viewed this way, the question becomes how to reduce the friction between blocs of states during a transitional period in which alien intellectual property is gradually weaned away from its exclusive foundations in territorial law and integrated into the standard framework of public and private international law. One approach is to identify a group of least developed countries for whom the need to resolve this problem can be postponed for a relatively lengthy period of time. Such states could be relatively insulated from legalized forms of pressure that participants in an Intellectual Property Code within the GATT framework might develop to discourage systematic, unauthorized use of their nationals' intellectual goods.

But such measures will not suffice to head off the conflict identified above, if only because the industrialized countries cannot indefinitely permit certain developing countries that flout GATT-agreed regulations to enjoy economic advantages denied to other developing countries that make a good faith effort to comply with the emerging international regime. States that ignored this regime would otherwise have little incentive to join the existing intellectual property conventions, while states already adhering to these conventions who found their new obligations burdensome would have every incentive to withdraw and to combine forces with the unruly outsiders.

Sooner or later, in other words, states that insist on converting non-membership in the Great Conventions and in a GATT Code of Conduct into a formula for systematic exploitation of foreign intellectual property will expose themselves to retaliatory sanctions on the part of signatory states that will, in effect, begin to assert rights of diplomatic representation heretofore reserved for the defense of tangible forms of alien property. For the economic necessity will bring this about, given that the future harm accruing from unauthorized takings of intangible property will so disproportionately outweigh the benefits accruing from the con-

^{626.} See supra text and authorities accompanying notes 294-302.

^{627.} See supra text and authorities accompanying notes 264-93, 303-07.

^{628.} See supra text and authorities accompanying notes 216-31, 264-93.

^{629.} See supra notes 328-29 and accompanying text, infra note 645 and accompanying text.

^{630.} See supra text and authorities accompanying notes 290-97.

tinued protection of tangible alien property in public international law. During this interim period, the right of states to confiscate foreign intellectual property will remain uncertain under public international law; transfers of title to intellectual goods resulting from de facto acts of confiscation will become increasingly destabilized in private international law; and states that are victims of retaliation will themselves retaliate while counterclaiming that their rights under the GATT have been impaired and nullified.⁶⁸¹

b. Changing customary international law

How retorsion or retaliation in defense of alien intellectual property can be squared with the GATT obligations to provide nondiscriminatory MFN treatment⁶³² will have to be elaborated, to the extent possible, by those knowledgable in the technical legal lore of the GATT.⁶³³ There is, for example, a gray area at the margins of article XXIII in which the Contracting Parties can authorize countermeasures in response to government measures that upset the balance of benefits without violating any explicit legal obligation as such.⁶³⁴ Although the concept of nonviolative nullification and impairment has so far been limited to the benefits of tariff concessions on a de facto test of foreseeability,⁶³⁵ its underlying rationale is the continuation of the status quo that constituted a basic assumption upon which the initial Agreement was made.⁶³⁶ The notion that GATT Contracting Parties should pay for new benefits obtained from an adjustment of their long-term relation is equally relevant in this

^{631.} See supra text and authorities accompanying notes 215-31, 291-93, 401-05.

^{632.} See GATT, supra note 2, art. I; Remarks of Jackson, supra note 5, at 354-55; Meesen, supra note 4, at 72-73.

^{633.} Even if intellectual goods as such were viewed as exempted from some or all of the basic GATT obligations, see supra text accompanying notes 377-88, the need for retorsion or retaliation against non-intellectual goods covered by the GATT would pose delicate problems of proportionality as well as of specific GATT rights. See, e.g., Meesen, supra note 4, at 72-73.

^{634.} See GATT, supra note 2, art. XXIII(1)(b); Hudec, Subsidies Code, supra note 398, at 3; supra text and authorities accompanying notes 401-06.

^{635.} See, e.g., Hudec, Subsidies Code, supra note 398, at 4.

^{636.} See, e.g., id.; Gadbaw, Merger or Marriage, supra note 8, at 232. But see Remarks of Hudec, supra note 37, at 322 (stating that a GATT panel would not accept a theory of nonviolation nullification and impairment in this situation because the industrialized countries knew there was no intellectual property protection at the time trade concessions were made and there was "no basis for expecting the contrary"). Nevertheless, Professor Hudec is open to an argument based on changed circumstances that transcends article XXIII as such. See id. at 322-23; infra note 640 and accompanying text.

context;⁶³⁷ and interesting proposals have begun to emerge concerning modalities of payment for both short-term and long-term economic dislocation attributable to improved protection of foreign intellectual property rights in countries heretofore unaccustomed to such a regime.⁶³⁸

The one insight that the intellectual property specialist can contribute is that these and other tactics cannot succeed without establishing a preferential regime, geared to the needs of the developing countries, to which recalcitrant states can be prodded to accede. Given both a sound preferential approach and adequate compensatory incentives, a state's surrender of unlimited economic sovereignty in the face of changed circumstances would be offset by a compromise solution that balanced one bloc's development strategy against that of the other bloc in a concerted effort to redefine the overall public interest on the world market for intellectual goods. Absent such a preferential regime, the recalcitrant

^{637.} See, e.g., Abbott, supra note 555, at 737 (Because GATT did not address the issue, "member countries have been free to adopt national policies that do not favor intellectual property protection If this freedom is now impaired, there is an economic cost to be absorbed . . . [T]he developing countries . . . should be compensated for agreeing to a change. . .").

^{638.} See, e.g., Abbott, supra note 555, at 740-42 (discussing payments for short term dislocation; reduced royalty payments under preferential compulsory licenses; trade concessions in regard to agricultural exports; conditional GSP privileges; and debt reduction); Remarks of Hudec, supra note 37, at 323 (predicting that trade concessions on "agriculture, or safeguards, on textiles or something else" will "have to be made"). For economic analysis of the kinds of dislocation that developing countries may experience, see generally Primo Braga, supra note 7.

^{639.} See supra text and authorities accompanying notes 569-603, 637-38.

^{640.} See supra notes 636-37 and accompanying text. The failure of a basic assumption as a justification for derogating from treaty obligations is well established in public international law. See Vienna Convention on the Law of Treaties, supra note 537, arts. 62, 62(3) (recognizing "fundamental change of circumstances" as a "ground for suspending the operation of a treaty" if certain preconditions in article 62(1)(a) and (b) are met). For applications of this principle to the TRIPs exercise, see Abbott, supra note 555, at 734-37; Remarks of Hudec, supra note 37, at 322-23. Professor Hudec states: "The GATT is a living instrument. Situations change. All the participants of GATT are going to have to be satisfied with the basic workability of the GATT Agreement." Id. at 323. This, however, is a claim that can be made by other parties concerning these and other issues, and it usually invites the payment of a quid pro quo. Id.; see also Remarks of Jackson, supra note 5, at 354-55; infra note 644 (Brownlie's caveat).

^{641.} See, e.g., Abbott, supra note 555, at 734-37, 738-740; Remarks of Jackson, supra note 5, at 354-55. Professor Jackson recognizes the possibility of setting up a side code having the powers mentioned in the text "with the explicit recognition that when some action done under the code with limited membership is in fact a violation of the GATT, there will be a price to pay[,]... which may be in compensation, alternative compensation, alternative concessions to the countries concerned, and so on. You ...

state, in surrendering its own economic autonomy, would merely succumb to the power of another bloc without obtaining anything in return, a form of economic coercion that seems no more acceptable in today's international legal arena than is the wholesale usurpation of alien intellectual property rights.⁶⁴²

There is no escaping the fact that the public international law governing the right of states to use alien intellectual property without compensation has to change in the long term. The only solid normative foundation on which such a change can be premised is the continuing disposition of international law to protect tangible alien property in general. Unless the industrialized countries become less shy about invoking this underlying premise, however, they may soon find that mere appeals to economic necessity and changed circumstances are likely to boomerang and will not of themselves suffice to justify actions that challenge international law in order to change it.

A negotiated, two-tiered regime within the framework of a GATT Code could provide a gradualist approach that takes account of each developing country's particular situation. It could also ensure that the legal and financial commitments made to or by the developing countries under such an agreement would not remain idle promises. Endorsed by a representative segment of the international community, a regime predicated on preferential treatment could serve as a vehicle for justifying even retaliatory sanctions devised to stimulate participation in a regulated market and to reward conformity with its rules. A country of the country of the same predicated market and to reward conformity with its rules.

If, in short, the process of change is characterized by a spirit of moder-

hope that the process will discourage violators" Id. at 354.

^{642.} See, e.g., Abbott, supra note 555, at 734 (criticizing use of brute economic coercion as antithetical to GATT principles); Ullrich, GATT, supra note 44, at 137-38; supra text accompanying notes 294-302.

^{643.} See supra text and authorities accompanying notes 291-93.

^{644.} See, e.g., I. Brownlie, supra note 118, at 465 (stating that "necessity as an omnibus category probably does not exist, and its availability as a defense depends on specialized rules . . . [T]he propriety of economic reprisals and the plea of economic necessity is still a matter of controversy"); see also supra note 290 (views of Maier and Charney).

^{645.} See supra text accompanying notes 569-603. On the need for gradualism, see also Ullrich, GATT, supra note 44, at 141-42. In effect, a multi-tiered regime would emerge over time in which some states operated on the basis of reciprocity; others would enjoy preferential treatment so long as they met certain preconditions; still others would remain virtually exempt from all but national treatment; while some states that attained significant levels of economic growth would become candidates for reciprocity under the graduation principle built into the Code of Conduct itself.

^{646.} Cf. Meesen, supra note 4, at 72-73.

ation and compromise, the resulting legal reforms can be adjusted to allow for slow, differential, but steady progress towards the goal of outlawing systematic misappropriation of alien intellectual property rights in all countries that participate in the international trading system. If, however, the process of change is driven by maximalists who reject a two-tiered approach out of hand and who ignore the evolutionary progress of intellectual property law over the past one hundred years, then it will provoke equally strong and fervidly nationalistic reactions that will jeopardize the cause of improved international relations in this field. In a confrontation between states that insist on a right to free-ride and states that insist on the highest protective standards, all intellectual property owners risk heavy losses.⁶⁴⁷

IV. OPPORTUNITIES AND RISK OF A GATT CONNECTION

The foregoing analysis suggests that the Uruguay Round presents a real opportunity to strengthen the world's intellectual property system even without reaching agreement on a broad set of international minimum standards. At the same time, the TRIPs negotiations will make all countries more aware of the extent to which their intellectual property laws serve or disserve a public interest that is hard to define and that, once defined, keeps changing in response to external conditions. Whether, at the end of the exercise, the gains will outweigh the losses depends in large measure on the capacity of the negotiators to eschew maximalist posturing in order to achieve goals that most participants can implement in good faith.

A. Feasible and Reasonable Negotiating Goals

For example, acceptance of national treatment as a sine qua non of all international intellectual property relations, whether occurring within or without the Great Conventions, would eliminate the residual threat of discrimination and ensure that any country with a non-protectionist pol-

^{647.} Accord Ullrich, GATT, supra note 44, at 137-138, 142-44. But see Remarks of Simon, supra note 6, at 369 (stating that any two-tiered solution that institutionalizes lower levels of obligation for developing countries, "whether . . . realistic . . . or unrealistic . . . within the international environment . . . is simply an 'unsellable' solution within the United States domestic environment").

^{648.} See, e.g., Gadbaw & Kenny, supra note 95, at 186-200 (discussing fluid situation in India where "no clear line may be drawn between groups in favor of and groups opposed to intellectual property . . . reform" and "[s]ome of the players in industries affected by . . . [these] laws seem to sit in both camps").

^{649.} See supra text and authorities accompanying notes 441-49, 456-90.

icy towards foreign innovation must bear the costs of a similar policy as applied to its own citizens. Stipulation of the long-pending Anti-Counterfeitng Code would likewise eliminate universally condemned commerical practices without requiring a broad consensus regarding the protection of true intellectual creations.

Beyond these ground-level goals, aspirations to purge major markets of unauthorized imports seem not unrealistic if the basic concept of the proposed Anti-Counterfeiting Code is extended to illicit copies of products protected by traditional copyright and patent laws. No state or group of states can acquire vested interests in practices that strain commercial comity when the effects of these practices extend beyond the home territories and disrupt a regulated transnational market for intellectual goods. Nondiscriminatory border measures that discouraged illicit imports into the regulated common domain could thus be viewed as an emerging norm of international unfair competition law that a GATT Code of Conduct had reinforced. Code of Conduct had reinforced.

Moreover, certain fall-out benefits will accrue from the TRIPs initiative that are relatively cost free and valuable in their own right, regardless of the ultimate success or failure of the Uruguay Round. United States adherence to the Berne Convention is a prime example. 654 Adoption of a United States ornamental design law could constitute another, 655 if it does not become a pretext for instituting disguised trade barriers as the United Kingdom's unregistered design law of 1988 may have done. 656 In the long run, the GATT exercise will further accelerate the harmonization of intellectual property laws in industrialized countries, regardless of its success in elevating the standards of protection in developing countries. It will thus strengthen the protection afforded creators everywhere by narrowing the opportunities for free-riding firms to exploit loopholes in the domestic laws of industrialized countries that tend to undermine the system as a whole. 657 The TRIPs negotiations could also serve as a springboard for an agreement prohibiting the misappropriation of applied scientific know-how that would avoid the excesses of ad hoc solutions and help to ensure that incremental innovation

^{650.} See supra text and authorities accompanying notes 452-55.

^{651.} See supra notes 88, 356, 500 and accompanying text.

^{652.} See supra note 88 (recent OECD practice); Levin, supra note 3, at 442-43.

^{653.} Paris Convention, supra note 21, arts. 10bis and 10ter; supra note 91 and accompanying text.

^{654.} See supra text and authorities accompanying note 546.

^{655.} See Kastenmeier and Beier, supra note 35, at 297.

^{656.} See supra notes 432-33, 481 and accompanying text.

^{657.} See supra text and authorities accompanying note 16.

proceeds at a healthy pace. 658

Another advantage of the GATT negotiations is that unilateral and bilateral pressures exerted on behalf of nationals' proprietary rights should diminish as intellectual goods become anchored in the multilateral process that has advanced the cause of world trade since the Second World War. Experience teaches that bilateral pressures in the intellectual property area become sterile and counterproductive over time unless they trigger a broader range of negotiations, as occurs at regular intervals within the framework of the Paris and Berne Conventions.⁶⁵⁹

In this connection, it should prove possible to reopen the stalled Paris Revision talks with a mandate to reach an accord within parameters set by the Uruguay Round but without the constraints that govern the logic and timetable of the trade negotiations themselves. Such a mandate could seek to provide the industrialized countries with more adequate and effective protection of their industrial property rights on the territories of the developing countries in exchange for measures augmenting transfers of technology in general and enhancing the absorption of this technology by legitimate means. Special and preferential measures incorporated into the Paris Convention should also permit the developing countries to adapt this proven instrument of economic development to their unique situations and conditions. 660 Incentives and sanctions built into the Uruguay Round's end product could then ensure the rapid and successful completion of this project, once an agreement in principle was reached. 661 These and other provisions could encourage Contracting Parties that still held aloof from the Great Conventions to fall into line with minimum standards of protection recognized by representative states from all geopolitical blocs.

Still other advantages may accrue from a serious negotiating round that could help to improve the general climate for artists and inventors everywhere. As intellectual goods are assimilated to traditional industrial goods for purposes of international trade, for example, the anachronistic distinction between tangible and intangible goods becomes inherently weakened. This bodes well for the long-term elimination of abuses currently shielded by the notion of absolute territorial freedom with regard to the protection of intellectual property rights. Finally, opportu-

^{658.} See supra text and authorities accompanying notes 604-21.

^{659.} See supra text and authorities accompanying note 272.

^{660.} See supra text accompanying notes 578-601.

^{661.} See supra text accompanying notes 602-03.

^{662.} See supra text accompanying notes 228-31.

^{663.} See supra text accompanying notes 289-97.

nities exist to exchange trade concessions covering more traditional goods for increased recognition of intellectual property rights, a process that should sweeten the pill for developing countries that are less than fully committed to this cause. 664 Success in this venture would in turn facilitate the kind of readjustments that will become increasingly necessary if industrialized and developing countries are to stabilize their future relations within an integrated world economy. 665

Were achievements of this magnitude to emerge from any single conference or series of conferences to revise the Berne or Paris Conventions, seasoned intellectual property lawyers would marvel that so much could have been accomplished in so little time, as compared with the slow accretion of consensual norms over the one hundred years since the International Unions were founded. Yet, it is repeatedly stated at the very highest levels that such a result would constitute a failure that could torpedo the Uruguay Round as a whole because it would frustrate the expectations of those circles that had pressed the hardest to include intellectual property on the GATT agenda in the first instance. Theirs, indeed, is a maximalist agenda that measures the intrinsic worth of any negotiated solution strictly in terms of its consistency with the homespun tenets of domestic law.

B. The Hidden Costs of Failed Illusions

Disregarding questions about the propriety of coercion in the progressive development of international economic law, 667 the maximalist agenda suffers from two possibly fatal defects that make it both self-indulgent and dangerously shortsighted. The first is that the maximalists' home states exhibit a rather limited capacity for living with the high international standards they wish to impose upon the rest of the world in the name of natural justice. The second is that the empirical division of the world into economic "haves" and "have nots" will not disappear however much a one-sided code of standards may pretend otherwise. It follows that the more the wealthy and powerful states combine to impose universal intellectual property norms upon nonconsenting weaker states, the more likely it becomes that these weaker states will take matters into their own hands and develop legal institutions that are more consonant with the realities of an empirically divided world. 668

^{664.} See supra text accompanying notes 637-38.

^{665.} See supra text accompanying notes 8-11.

^{666.} See supra note 65 and accompanying text.

^{667.} See supra notes 294-300 and accompanying text.

^{668.} Professor Ullrich observed that the industrialized countries in negotiations con-

1. Uses and Abuses of Existing International Standards

The literature describing the failure of the industrialized countries to live up to their own intellectual property standards would fill a sizeable library. Even the alleged weakness of the Paris Convention for the Protection of Industrial Property results as much from posterior state practice tolerating lax implementation as from gaps in the express obligations of the treaty itself. Needless to say, such violations should not be tolerated and the TRIPs initiative should seek to eliminate them. Nevertheless, this shows that, absent overriding incentives and legal duties imposed by regional economic integration, governments in the industrialized countries have found it politically painful to deal with those circles that acquire vested interests in continuing violations of existing international legal standards. It should come as no surprise, therefore, that governments in the developing countries experience similar pain in eradicating similar vices from their own economic communities.

Apart from this historical tendency to institutionalize a certain degree of chronic nonperformance under the Great Conventions in periods between one revision conference and another, there is a new tendency to abuse the existing legal framework that seems qualitatively different and more alarming. In recent years, for example, the industrialized countries have taken liberties with the most fundamental of all the norms in this field, that of national treatment. Legislation instituting intellectual property regimes on condition of reciprocity is increasingly fueled by claims that new technologies, such as semiconductor chip designs, or new modalities of protection, such as an unregistered design right for functional designs, are immune from the national treatment requirement of the Great Conventions simply because they were not known to the Founding

cerning the Revision of the Paris Convention and the Code of Conduct on the Transfer of Technology, supra notes 312-16, 582, showed no disposition to reconcile "the high-level intellectual property protection" they wanted from developing countries with "the equally high public interest these countries claim with respect to the exploitation of such property on their domestic markets." He warned that "[u]nless the industrialized countries impose their entire economic philosophy . . . they will permanently have to face national legislation and . . . practice in competing countries which limit the exercise of intellectual property according to the interests of such countries." See Ullrich, GATT, supra note 44, at 137-38.

^{669.} See, e.g., supra notes 450-51, 475-84 and accompanying text; infra text and authorities accompanying notes 671-72.

^{670.} See text and authorities accompanying notes 89-103. In the sphere of patents, nevertheless, there are gaps in the text concerning subject matter and duration that unnecessarily facilitate a lax approach where the signatory states are otherwise so inclined. See supra note 458 and accompanying text.

Fathers.⁶⁷¹ But this approach disregards the efforts of the Founding Fathers to paint industrial property in the broadest possible terms—indeed, by drawing verbal pictures—and then to subject all industrial property to the cardinal norm of national treatment.⁶⁷²

The latest and boldest form of abuse is to be found in the very object of protection singled out by the United Kingdom's unregistered design law of 1988.⁶⁷³ This law necessarily styles itself an intellectual property law for purposes of avoiding the basic GATT discipline under the exceptions of article XX(d).⁶⁷⁴ Yet, it can be construed as protecting purely functional designs under a standard of zero creativity that rewards no innovative activity familiar from the history of intellectual property laws, while proclaiming itself exempt from the national treatment provision that governs all industrial property under the Paris Convention.⁶⁷⁵ Bills to enact a similar law are pending before the United States Congress.⁶⁷⁶ Protectionist legislation of this ilk arguably uses intellectual property laws to create disguised barriers to trade, contrary to article XX(d) of the GATT and to the express mandate of the Uruguay Round.⁶⁷⁷

Beyond these questionable uses of domestic and international intellectual property laws, there is the still more dangerous tendency to disobey public international law when it pinches a powerful foot. The belated willingness of the United States, for example, to accept an adverse decision of a GATT panel concerning section 337 of its Tariff Act still casts a shadow over the current negotiations.⁶⁷⁸ Continued resort to section

^{671.} See supra text and authorities accompanying notes 475-86.

^{672.} See supra text and authorities accompanying notes 463-74.

^{673.} See supra note 481 and accompanying text.

^{674.} See supra notes 358-88 and accompanying text.

^{675.} See supra notes 432, 481 and accompanying text. It remains to be seen, however, if the courts will construe the unregistered design law this way. See Fellner, supra note 194 (predicting a relatively high, judicially imposed standard of "originality" or creativity). Should the courts develop a requirement of significant creativity, the United Kingdom's law would approach utility models from the direction of copyright law and could become an interesting experiment en route to a law that protects embodiments of technological and scientific know-how as such. See supra text accompanying notes 604-21; Reichman, Designs and New Technology, supra note 176, part III.

^{676.} See, e.g., Fryer, Industrial Design Protection in the United States of America—Present Situation and Plans for Revision, 27 INDUS. PROP. 115 (1988); Brown, supra note 168, at 1399-1403 (criticizing these bills); supra note 432.

^{677.} See supra text and authorities accompanying notes 428-33.

^{678.} See GATT Council Finds that Section 337 Discriminates Against Foreign Companies, 39 Pat. Trademark & Copyright J. (BNA) 29-30 (Nov. 9, 1989); GATT Council Adopts Dispute Panel Reports on U.S. Section 337, Korean Beef Quotas, 6 Int'l Trade Rep. (BNA) 1466-67 (Nov. 15, 1989); Heinz Sees Difficulty in Changing U.S. Law Found to Be Incompatible with GATT Rules, 6 Int'l Trade Rep. (BNA) 1467

301 of the Trade Act of 1974, as recently amended, is viewed by the Director General of the GATT as a serious threat to the stability of the world's multilateral trading system.⁶⁷⁹

The lesson to be drawn is that the industrialized countries cannot condemn the developing countries for past or future violations of international intellectual property law unless they themselves resolve to forego similar violations. The costs of making such a commitment mount, however, with the level of the standards in force because the price of compliance is the elimination of powerful violators at home. Moreover, high standards of protection that seem to lock in economic advantages today can turn against those who promoted them tomorrow. When market power shifts and states having newly acquired economic capabilities arrive on domestic markets demanding respect for their internationally guaranteed proprietary rights, today's maximalists could well find themselves hoisted on their own petards.

2. Universalist Threat to a Fragile System

The strong arm tendencies inherent in the maximalist program could jeopardize the international intellectual property system in ways that require careful evaluation. The most immediate danger is that, by fueling intransigence on the other side, this program deflects attention and energy away from the kind of productive negotiations that are unlikely to take place in a confrontational climate. Maximalist demands thus play into the hands of minimalist delegations by limiting the scope of the agenda that can effectively be negotiated once the threshold hurdles are crossed. The more that unrealistic aspirations are indulged on either side, the less feasible it becomes to achieve the solid, attainable goals that were within reach at the start of the negotiations.

More profound risks stem from a tendency to underestimate the stabilizing effects of the two-tiered approach that has become a constant feature of the international economic system after the disarray of the mid-

⁽Nov. 15, 1989).

^{679.} See Omnibus Trade and Competitiveness Act of 1988, Pub. L. No. 100-418, § 1301, 102 Stat. 1164 (1988) (as amended 19 U.S.C. 2411-20 (1988); GATT's Dunkel Sees U.S. Japan Talks as Sign of Softening on U.S. Approach to Super 301, 6 Int'l Trade Rep. (BNA) 973, 977-78 (July 26, 1989).

^{680.} See, e.g., Kastenmeier & Beier, supra note 35, at 296-98.

^{681.} See, e.g., Reichman, Programs as Know-How, supra note 27, at 699-700 (predicts that full copyright protection of computer programs will hurt the United States once foreign firms expand their share of the market).

1970s.⁶⁸² Any assault on the integrity of that approach, as recently institutionalized within the GATT,⁶⁸³ would be perceived as an assault on acquired rights generally at a time when the developing countries appear weaker and more heterogeneous than in the recent past. But this strategy could backfire if it stiffened the resolve of these countries to resist any compromise on intellectual property lest they be viewed as surrendering the larger goals of a New International Economic Order.⁶⁸⁴

To the extent that maximalist illusions rekindle the passions of the mid-1970s, they obscure the potential instability that could overtake both the intellectual property system and the international trading system in the wake of confrontational wrangles ending in a failure of the Uruguay Round. Those who complain the loudest about the steady erosion of proprietary rights, indeed, seem most unaware of the extent to which they depend on the continued vitality of the very system whose stability they have begun to undermine. That the system functions fairly well on a day-to-day basis, despite its manifest shortcomings and discontents, serves to conceal the centrifugal forces actually at work and the degree of chaos to which they could lead. The widespread hankering after reciprocity, in particular, typifies this outlook and reflects the extent to which the benefits of the relevant multilateral agreements are taken for granted with little understanding of the pre-existing evils from which they arose and of the struggles needed to overcome them. 686

When reciprocity governed international intellectual property relations, it was—in Ladas' view—a formula for the despoliation of honest

^{682.} See supra text and authorities accompanying notes 320-52.

^{683.} See supra notes 328-33 and accompanying text.

^{684.} See U.N. NIEO Declaration, supra note 221; U.N. Economic Rights Resolution, supra note 221.

^{685.} For the view that the industrialized countries will not allow the intellectual property negotiations to destabilize the GATT, despite the threats and risks inherent in the exercise, see Abbot, *supra* note 555, at 736. *But see* Kastenmeier & Beier, supra note 35, at 300 (fearing erosion of support for GATT).

^{686.} See supra text and authorities accompanying notes 448, 490; 1 S. Ladas, Industrial Property, supra note 68, at 269-71. Ladas observes that, while the national-treatment principle of ... [the Paris] Convention may lead to inequalities among the advantages enjoyed by the nationals of each country, [these] inequalities are to be preferred to the confusion arising from the regime of reciprocity In effect, it is a regime of bipartite agreements . . . [that] does not tend to harmonize and make uniform the various national laws, as the national treatment principle necessarily tends to do.

Id. at 269. See also supra note 31 (discussing U.S. drive for reciprocity in trade relations generally).

creators and inventors outside their home territories.⁶⁸⁷ If this notion has once again become a respectable rallying cry in certain circles, it is surely because those who are quickest to condemn the shortcomings of the present system have not directly experienced the chaos that preceded it, lack the imagination to envision how international relations would. They also break down in a world without national treatment and agreed minimum standards of protection.⁶⁸⁸

Comparative intellectual property experts remain acutely aware of these dangers, and they regard the Uruguay Round with trepidation. In part, they fear that intellectual property interests will be sacrificed for progress on other agenda items, ⁶⁸⁹ a risk that inheres in the nature of the multilateral trade negotiations. But in the main, there is a growing perception of how much authors, inventors, and trademark proprietors stand to lose if unremitting pressure to install a universal system of industrial property protection ends by persuading disaffected segments of the developing world to form an unholy "Union" of their own. A division of the intellectual property world into two hostile and non-cooperating camps would provide all of the disadvantages of a two-tiered system based on reciprocity and none of the advantages of a two-tiered system that combined national treatment with adequate—rather than maximum—standards of protection. ⁶⁹⁰

To be sure, the two camps would ultimately have to bridge the gap between them by a series of consensual understandings that balanced the long term interests of both, much as has routinely occurred since the Paris and Berne Unions were established in the 1890s and the Universal Copyright Convention went into force in the 1950s. In the short and medium terms, however, a confrontational environment could subvert the present system and disrupt international intellectual property relations without improving the lot of its principal beneficiaries. The path of wisdom would thus seem to lie in adopting a two-tiered approach that strengthened and consolidated the existing legal framework rather than suffering through some Dark Age of intellectual property law only to resurrect a similar system out of the ruins of the Great Conventions and of the monumental Unions to which they gave rise.

^{687.} See 1 LADAS, INDUSTRIAL PROPERTY, supra note 68, at 26-28, 269-70.

^{688.} See supra text and authorities accompanying notes 27, 122-25, 272, 491-93, 527-34, 686.

^{689.} See, e.g., Kastenmeier & Beier, supra note 35, at 290-300 (expressing similar fears).

^{690.} See supra text and authorities accompanying notes 568, 586-601.