

1996

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Ruth L. Gana, Prospects For Developing Countries Under the TRIPs Agreement, 29 *Vanderbilt Law Review* 735 (2021)

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Prospects For Developing Countries Under the TRIPs Agreement

Ruth L. Gana*

ABSTRACT

This Article focuses on the future impact of the TRIPs Agreement on developing countries with regard to patent and copyright protection. While some scholars have suggested that the intellectual property protection provided by the TRIPs Agreement significantly benefits developing countries just as well as such protection has benefited developed countries in terms of increased economic growth and development, the author of this Article disagrees. Upon close analysis of the TRIPs Agreement's impact on developing countries, including the use of illustrative examples and a case study of the People's Republic of China with regard to copyright protection, this author concludes that developing countries will not enjoy such economic development unless they implement the legal, economic, and political structures associated with free market systems. According to the author, transformation in the legal, economic, and political structures of developing countries is vital in order to encourage economic growth. However, such changes must be relevant to the social and cultural framework of developing countries. The patent and copyright protection provided by the TRIPs Agreement will not, by itself, transform developing countries into the thriving technology producers that they aspire to become.

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I. INTRODUCTION: DEVELOPMENT CONCERNS AND INTELLECTUAL PROPERTY IN THE GATT SYSTEM

Any attempt to evaluate the impact of the TRIPs Agreement¹ in developing countries must begin with an examination of the broader question: what do developing countries aspire to under the multilateral trade system?² Like the developed countries, developing countries seek the large scale economic gains which dominant economic theory assures are offered by a multilateral system of trade.

1. Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization [hereinafter WTO Agreement], Annex 1C, LEGAL INSTRUMENTS—RESULTS OF THE URUGUAY ROUND vol. 31; 33 I.L.M. 1144, 1197 (1994) [hereinafter TRIPs Agreement].

2. For one perspective of the general impact of the Uruguay Round on developing countries see Michael Rom, *Some Early Reflections on the Uruguay Round Agreement as Seen from the Viewpoint of a Developing Country*, J. WORLD TRADE, Dec. 1994, at 5, 6 (concluding the Round may result in more benefits than losses in terms of concessions for developing countries as a whole but "there seems to be a real regression from the achievements [previously] attained").

Yet, for most of the history of the multilateral trading system, developing countries clearly remained on the periphery, their relationship to developed countries tainted deeply with mistrust stemming from the colonial experience. Thus while developing countries desired to participate in the existing international economic framework *as sovereign states*,³ their attitude was often belligerent. They demanded compensation, in the form of concessions, from developed countries for the wrongs of colonialism without a corresponding commitment to shoulder the full obligations of membership in the multilateral system.

In the last decade, changes in the domestic economic capabilities of some former developing countries in Asia and Latin America and the need for large scale capital generation in developing countries as a whole yielded a conscious commitment to be more deeply integrated in the world trade system. Undoubtedly, the requirement for large volumes of commerce as a stimulant to achieve greater levels of growth and development remains the primary motivation behind developing countries' interests in participating in the multilateral trade system. In tension with this objective is the concomitant requirement to relinquish sovereign freedom to pursue policies presumed to stimulate indigenous innovative activity in a manner that had been inconsistent with pre-TRIPs Agreement intellectual property agreements. Intellectual property as enshrined in the TRIPs Agreement directly implicates a vital and consistent demand by developing countries, namely, the freedom to use transborder technology flows to accomplish socio-economic objectives. The merger of trade and intellectual property under the Uruguay Round is, thus, for developing countries, a matter of *means* rather than *ends*. Although trade-offs between developed and developing countries under the Uruguay Round deflected the usual conflict between developed and developing countries over intellectual property protection,⁴ the salient issue still remains whether, in this new era of greater involvement at the multilateral level, the TRIPs Agreement signals an end to the use of intellectual property as an instrument for development or whether the TRIPs Agreement still affords a possible means to pursue development objectives. Indeed,

3. As former colonies, developing countries were involved in the international economic system through the policies of individual colonial authorities. The result of this participation in the international economic system placed the direction and growth of developing countries' economies in primarily European hands, where developing countries were used as producers of raw materials.

4. J. H. Reichman, *Implications of the Draft TRIPs Agreement for Developing Countries as Competitors in an Integrated Market*, UNCTAD Discussion Paper No. 73, at 3, U.N. Doc. UNCTAD/OSG/DP/73 (1993).

the persistent conundrum is whether intellectual property protection has a determining impact on development, as some have suggested,⁵ or if, as this author argues, its transformative potential is freed only by the existence of legal, economic, and political structures associated with free market systems in which property rights play a pivotal role. To be taken seriously in developing countries, intellectual property rights must interact with existing social structures to promote indigenous technological innovation and capital development. Without the specific conditions of strong property systems, stable government, free market capitalism, and zealous protection of corporate interests, it is unlikely that—modern intellectual property in and of itself has the potential to transform developing countries into the technology producers they aspire to become. Consequently, the likely success of TRIPs Agreement enforcement, and of intellectual property rights in general, will correspond with the degree to which each developing country has implemented reforms that are somewhat consistent with free market democratic principles.

The question of whether it is possible to pursue traditional strategies for development within the TRIPs Agreement regime provides an important framework for evaluation, not only because the TRIPs Agreement is an integral part of the WTO system,⁶ but also because the multilateral trade framework envisages economic relationships based on trade-offs between countries.⁷ No country in

5. See ROBERT M. SHERWOOD, *INTELLECTUAL PROPERTY AND ECONOMIC DEVELOPMENT* (1990); Richard T. Rapp & Richard P. Rozek, *Benefits and Costs of Intellectual Property Protection in Developing Countries*, *J. WORLD TRADE*, Sept. 1990, at 75, 77-90.

6. The Uruguay Round Agreement overhauled the pre-existing trade regime. Significantly, the Round introduced new subject matters, such as intellectual property and trade in services, into the multilateral trade framework. It established an institutional apparatus, the World Trade Organization (WTO), for the administration and enforcement of the Agreement and established a new dispute resolution process. The integration of these vital aspects of the new system was accomplished by a "single package" principle which requires nations to ratify all of the core agreements which comprise the new system. Membership in the new WTO is accomplished by accession or original membership. See WTO Agreement, *supra* note 1, arts. XI-XII. Adherence to the Charter automatically subjects a state to all the annexed agreements with the exception of the optional Plurilateral Agreements. The mandatory annexes are Annex 1A, which comprises GATT 1994, Annex 1B, which comprises the General Agreement on Trade in Services (GATS), Annex 1C, which comprises the TRIPs Agreement, Annex 2, which comprises the Dispute Settlement Rules, and Annex 3, which comprises the Trade Policy Review Mechanism. *THE RESULTS OF THE URUGUAY ROUND OF MULTILATERAL TRADE NEGOTIATIONS* 20, 325, 365, 404, 434 (GATT Secretariat ed., 1994).

7. The theory of comparative advantage, which informs the multilateral trade system, assumes countries will trade in goods they are better at producing relative to other countries. Multilateral free trade, based on this theory, envisages

the specific history of the General Agreement on Tariffs and Trade (GATT) or in the general history of international economic relations has come away from multilateral negotiations with total victory. Rather, the significant objective has been that each country benefits from new and improved concessions in specific areas at the end of the negotiating process. Indeed, the lack of avid participation by developing countries in pre-Uruguay Round trade negotiations is attributable to the perception that the system yielded no concrete benefits to them.⁸ This was a strongly felt and legitimately held conviction, particularly since developed countries had long maintained barriers against key exports from developing countries in the area of textiles and agricultural products.⁹ At the same time, the GATT system made these countries vulnerable to arbitrary unilateral actions by developed countries. The Uruguay Round made substantial inroads into these concerns by reforming the dispute resolution system, accomplishing cuts in tariffs on tropical products, and completing an agreement to phase out the Multifiber Arrangement over a period of ten years.¹⁰ The relationship of developing countries to the TRIPs Agreement thus may be regarded as a bargained-for-exchange—intellectual property protection for fair trade rules in specific industries¹¹ that should have been in place for

tradeoffs by participating countries in the form of worker displacement in less competitive domestic industries, dependency on imports, and, to some degree, reduced control over national trade balances. In return, countries benefit from increased opportunities to penetrate new markets abroad, and global welfare is increased by efficiencies engendered by specialization and increased production. See generally CHARLES P. KINDLEBERGER, *INTERNATIONAL ECONOMICS* (5th ed. 1973) (examining the theory of comparative advantage with respect to multilateral free trade).

8. See Michael W. Gordon, Remarks, *Economic Development in the Third World: What Can Be Expected from the GATT Uruguay Round?*, in 81 PROC. OF THE AM. SOC. OF INT'L L. 578, 579 (1987) (noting a 1949 analysis by the U.S. Tariff Commission "showed that concessions granted to developing nations in the 1947 Geneva negotiations were insignificant" and a report commissioned by GATT and prepared by trade experts concluded that "developing countries were losing under the GATT").

9. Historically, textiles and agriculture have been controversial in the course of trade negotiations. Under the auspices of the GATT, trade in textiles was governed by a separate agreement which legitimated protectionism by developed countries. Similarly, trade in agriculture enjoyed special treatment, deviating from the general GATT rules against non-discrimination and quotas. See Sanjoy Bagchi, *The Integration of the Textile Trade into GATT*, J. WORLD TRADE, Dec. 1994, at 31 (advocating the basic obligations in the GATT as a measure to combat protectionism); see also, Emmanuel O. Awuku, *How Do the Results of the Uruguay Round Affect the North-South Trade?*, J. WORLD TRADE, Apr. 1994, at 75.

10. JOHN H. JACKSON ET AL., *LEGAL PROBLEMS OF INTERNATIONAL ECONOMIC RELATIONS* 1125 (3d ed. 1995).

11. The Uruguay Round has been referred to as a "global negotiation with a global result." See Statement of the Chairman of the Trade Negotiations

the system to work the way that it purports to work. While it appears that the Uruguay Round achieved some sort of procedural balance in the negotiating process, close examination of the TRIPs Agreement reveals an overall disproportionate burden in the area of intellectual property protection in developing countries¹² without any tangible development benefit. In other words, developing countries may have gotten some "benefits" in the agreements over textiles and agriculture,¹³ but the concerns over the impact of an international intellectual property regime on development objectives remain unchanged from what existed in the pre-TRIPs Agreement era, and their ability to avoid those principles of protection which undermine development goals has been severely restricted by the TRIPs Agreement.

The central concern of this Article is how developing countries will fare under a TRIPs Agreement regime and correspondingly, how the TRIPs Agreement will fare in developing countries. The Article does not attempt to distinguish among developing countries. However, it is important to point out that the countries which are the primary targets of the TRIPs Agreement are most notably countries, such as India, Brazil, and China, which are on the cusp of development. These countries are in the process of transition from underdeveloped to developed and thus, are legitimate "developing" countries. The immense potential their markets offer to foreign investors and the increasing level of technological sophistication

Committee, Peter Sutherland, reproduced in 081 NEWS OF THE URUGUAY ROUND OF MULTILATERAL TRADE NEGOTIATIONS (Info. & Media Rel. Division of the GATT, Geneva, Switz.), Dec. 21, 1993, at 2. Participation by developing countries was more significant than previously had been the case. A report on developing countries and the global trading system, supported by the Ford Foundation, indicates that the differences between developed and developing countries over trade matters have undergone more change during the Uruguay era than at any other time since World War II. As a result, the report concludes there may be more willingness on both sides to support the system and enjoy its benefits while also paying its costs. See John Whalley, *The Uruguay Round and Beyond: The Final Report from the Ford Foundation Supported Project on Developing Countries and the Global Trading System* (1989), excerpts reproduced in JACKSON ET AL., *supra* note 10, at 1118-24 (discussing the interest of developing countries in the trading system and the impact of changes in this system on the Uruguay Round).

12. See Carlos M. Correa, *TRIPs: An Asymmetric Negotiation*, 1993 THIRD WORLD ECON. 9, 10 (arguing the TRIPs Agreement does not reflect interdependence, but rather is "essentially asymmetric, non-transparent and autocratic" and reflects imbalances in the comparative effects on developing countries' intellectual property laws).

13. The concessions given to developing countries in textiles and agriculture are certainly an improvement over what previously existed in these areas. However, the value of these concessions, particularly in the area of textiles, cannot be used to offset the costs of higher protection for intellectual property since the restrictions were contrary to the GATT arrangements in the first place.

already evident in these economies were significant factors in the motivation to merge trade and intellectual property rights.

This Article examines the prospects for strategies of economic development which hold access to technology as a central element of the development process. Because the primary concern is the impact of the TRIPs Agreement on traditional development strategies, the focus of this Article is limited to patent and copyright law and some specific provisions in these two areas of the TRIPs Agreement, which ostensibly leave some margin for maneuverability by developing countries. This margin, even if limited, is an important point of focus for several reasons.

First, the Uruguay Round, through its accomplishments,¹⁴ is indicative of a general movement in the Western hemisphere to re-order the basis of economic relationships.¹⁵ This is the case particularly for the United States which, in the early 1980's, began a gradual but fundamental transformation from a manufacturing to an information-based economy. Trade in information goods is regulated primarily by copyright principles, which also encompass the protection of new technologies.¹⁶ The "public goods problem,"¹⁷ intrinsic to information goods, and the ease with which these goods are duplicated necessitated a restructuring of rules which govern international economic conduct. The embodiment of this

14. See *supra* note 6 and accompanying text.

15. See Harry B. Ensley, *Intellectual Property Rights in the GATT*, 15 *NEW MATTER* 1 (1990) (quoting Arthur Dunkel).

16. The incorporation of new technologies such as computer software and digital technologies within copyright has generated significant debate among scholars. Currently, most countries protect new technologies under the auspices of copyright legislation as opposed to *sui generis* protection. See Arthur R. Miller, *Copyright Protection for Computer Programs, Databases, and Computer-Generated Works: Is Anything New Since CONTU?*, 106 *HARV. L. REV.* 978 (1993) (arguing the protection of computer software, databases and computer-generated works under the copyright statute has proved to be a valid option for the United States). For an opposing perspective, see Pamela Samuelson, *CONTU Revisited: The Case Against Copyright Protection for Computer Programs in Machine-Readable Form*, 1984 *DUKE L.J.* 663, 663 (1984) (recommending *sui generis* legislation for computer programs and arguing that CONTU "failed to take into account the historical [role] of disclosure . . . as a fundamental goal of . . . copyright" and the fact that the U.S. copyright "statute and the case law make clear that utilitarian works are not copyrightable").

17. This characterization refers to the fact that unlike manufactured goods, the market value of an information good does not diminish necessarily with its use. On the economics of public goods in general, see Harold Demsetz, *The Private Production of Public Goods*, 13 *J.L. & ECON.* 293 (1970); see also Wendy J. Gordon, *Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors*, 82 *COLUM. L. REV.* 1600, 1610-14 (1982) (identifying public goods as a type of market failure that intellectual property attempts to solve).

restructuring is the TRIPs Agreement, that focuses on the capture of economic rent from the international exploitation of intellectual property. However, unlike domestic legislation, which seeks to balance the economic interests of owners of intellectual property against the public interest in having access to new knowledge,¹⁸ the TRIPs Agreement is concerned primarily with protection and not, as such, with dissemination.¹⁹ To this end, the Agreement provides no meaningful or cognizable balance within the framework of international economic relations.²⁰ There certainly is a public interest in free competition which makes possible efficiency gains,

18. Anglo-American jurisprudence, in both the copyright and patent areas, has a rich tradition of justifying the intellectual property system on the basis of perceived gains thereby bestowed on society at large. In the area of patent law, early cases established the primacy of disclosure to the public as a crucial tenet of the patent grant. In *Househill Co. v. Neilson*, reprinted in THOMAS WEBSTER, REPORTS & NOTES OF CASES ON LETTERS PATENT FOR INVENTIONS (1601-1843) 719, the court observed, for example, that "[h]e is not called the inventor who has in his closet invented it, but who does not communicate it: the first person who discloses that invention to the public is considered as the inventor . . . (though) another may have invented it and concealed it." See also *Dolland's Case*, reprinted in *id.* at 43 (explaining the timing of the invention's disclosure is the source of argument); *Lewis v. Marling*, reprinted in *id.* at 496 (stating "if I make a discovery . . . it is no objection that someone else has to my claim to a patent made a similar discovery by his mind, unless it has become public"). Similarly, in the area of copyright law, American courts have long held that copyright envisions use by members of the public. See *Loew's, Inc. v. Columbia Broad. Sys.*, 131 F. Supp. 165, 174-75 (S.D. Cal. 1955); *Karll v. Curtis Publ'g Co.*, 39 F. Supp. 836, 837 (E.D. Wis. 1941). The notorious fair use doctrine, as applied by American courts, is used to balance these rights in a manner deemed by the judiciary as best reflecting the purposes of the American copyright system, namely, the enhancement of public welfare. Fair use jurisprudence is deployed to achieve this end by limiting control of a copyrighted work. See *Harper & Row Publishers, Inc. v. Nation Enter.*, 471 U.S. 539, 545 (1985) (stating "copyright is intended to increase and not impede the harvest of knowledge").

19. There is a token attempt made in favor of dissemination in the area of patents under Article 29 of the TRIPs Agreement. Article 29 provides:

Members shall require that an applicant for a patent shall disclose the invention in a manner sufficiently clear and complete for the invention to be carried out by a person skilled in the art and may require the applicant to indicate the best mode for carrying out the invention known to the inventor at the filing date or, where priority is claimed, at the priority date of the application.

TRIPs Agreement, *supra* note 1, art. 29. As patent lawyers are well aware, however, there are means, in practice, to prevent full disclosure.

20. The implications of this are serious with regard to developing countries. Access to new knowledge is key to development objectives. Development as a process of transformation is, like innovation, dependent on the infusion of new methods and new advances into a society, thereby increasing social welfare by enhancing standards of living. For this purpose, technology is not just a commodity in the stream of commerce but, in addition, a means to achieve necessary ends for the improved living conditions of a people.

such as lower prices, diversification, and specialization. The question which continues to plague domestic proprietary regimes and which is aggravated at the international level by the wide gap between rich and poor countries is where to set the balance between access and competition. Antitrust rules and sophisticated regulatory institutions in developed countries make the balance a feasible, even if difficult, objective. The same cannot be said of the international system. If, contrary to the position of this Article, the protection of intellectual property is vital for development,²¹ then developing countries have much more at stake under this new system than ever before.²²

Second, most developing countries continue to remain on the periphery of international economic relations.²³ The nature and scope of their participation in the multilateral trade framework has long been a contentious subject of international law. The protection of intellectual property under the multilateral trade system has raised, anew, concerns about prospects for developing countries to progress beyond current levels of development which remain, with few exceptions, very low. The allocation and enforcement of intellectual property rights are directly relevant to transborder technology flows which, in turn, have an impact on development objectives. The TRIPs Agreement, if strictly enforced, should therefore be understood as a significant factor in shaping the course of development in several countries over the next few years. Indeed, the point the TRIPs Agreement attempts to legitimize is not whether intellectual property rights may, or should, be used as a vehicle to achieve national development and prosperity, but rather, how the control of these rights *determines the direction and beneficiaries of that development*. The extent to which conflicting local law and

21. See Friedrich-Karl Beier, *The Significance of the Patent System for Technical, Economic and Social Progress*, 11 INT'L REV. OF INDUS. PROP. & COPYRIGHT L. 563, 569 (1980) (arguing that the patent system "constitutes a proven, indispensable instrument for technical, economic and social progress"). One of the reasons developing countries acceded initially to other major intellectual property treaties was the emphasis that intellectual property protection was a key part of Western industrial success and development. This point continues to dominate the economic literature about intellectual property protection and to justify encouraging developing countries to join the system.

22. See Hanns Ullrich, *GATT: Industrial Property Protection, Fair Trade and Development*, in GATT OR WIPO? NEW WAYS IN THE INTERNATIONAL PROTECTION OF INTELLECTUAL PROPERTY, 11 STUDIES IN INDUS. PROP. & COPYRIGHT L. 127 (Friedrich-Karl Beier & Gerhard Schricker eds., 1989).

23. The Uruguay Round is credited with having drawn the participation of developing countries in the trade negotiations at an unprecedented level. However, only a handful of developing countries were notably active. These include Brazil, India, South Korea and several Latin American countries which led developing country resistance to the merger of intellectual property in the international economic system.

custom may impede the application of the TRIPs Agreement and the implications of the potential incompatibility of TRIPs Agreement with other social institutions in developing countries are not substantively addressed by the Agreement.²⁴ Yet this issue is of significant importance in assessing enforcement prospects, as well as in determining the feasibility of the system for the benefit the of developing countries. This Article agrees with the prevailing wisdom which suggests that the TRIPs Agreement is skewed to benefit the economic interests of developed countries. However, even if the Agreement were a perfect balance of competing interests, there is still a fundamental need for the bulk of developing countries to implement policies in critical areas, such as education and research and development funding, and to develop a sound infrastructure if an intellectual property regime will contribute at all to national prosperity.

The TRIPs Agreement leaves some room for developing countries to develop domestic laws which conform to specific national concerns and thus to use intellectual property to further development goals. This may be accomplished, in part, by drawing on existing limitations in the domestic legislation of *developed* countries which remain valid within the auspices of the TRIPs Agreement. Thus, this Article's analysis proceeds in three parts. Part II examines developing countries and patent protection under the TRIPs Agreement. Part III examines developing countries and copyright protection under the TRIPs Agreement. Finally, Part IV examines the possibilities of enforcement.

II. DEVELOPING COUNTRIES AND PATENT PROTECTION UNDER THE TRIPs AGREEMENT

The failed attempts to revise the Paris Convention for the Protection of Industrial Property²⁵ in light of requests by developing countries froze the status quo of international patent protection for thirteen years.²⁶ Some developing countries chose not to join the

24. It may be argued, quite validly, that ratification of the TRIPs Agreement requires countries to do away with any conflicting laws. This point, however, fails to recognize the role and strength of extra legal institutions in many developing countries, as harbingers of what the population considers "binding" as a matter of law. Later sections of this paper examine this phenomenon.

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

26. The last revision conference was held in Geneva in 1982. For an overview of the sessions in light of developing country concerns, see Hans Peter Kunz-Hallstein, *The Revision of the International System of Patent Protection in the Interest of Developing Countries*, 10 INT'L REV. OF INDUS. PROP. & COPYRIGHT L. 649

Paris Convention, while those who did join often used procedural mechanisms²⁷ to avoid implementing terms of the Paris Convention deemed unsuitable or unfavorable to their needs and interests. Thus, developing countries were able to impose restrictions and conditions on patent rights during the pre-TRIPs Agreement era.²⁸ This has been severely limited, if not wholly prohibited, under the TRIPs Agreement.²⁹

Several areas may be isolated as being of critical importance to the interests of developing countries in the international patent system prior to the conclusion of the TRIPs Agreement. The issues primarily relate to the subject matter of patent protection, the working of patents, the protection for process patents, and the availability of compulsory licenses. The underlying concern in all of these areas is a determined effort on the part of developing countries that access to technology be a viable prospect for domestic business. Recently, issues have also arisen regarding the protection of traditional medicinal knowledge, biotechnology, and seed varieties. Close examination of this new group of issues discloses what is at the heart of the conflict between developing and developed countries; namely, a conflict of ideologies over what constitutes proper subjects of property rights. This conflict is reinforced on the part of developing countries by a deep distrust of policies and programs initiated at the behest of Western nations, even if they purport to enhance global welfare. The TRIPs Agreement, like its predecessor the Paris Convention, softens the edge of its overall purpose by recognizing some limitations on patent rights in the interests of public health, nutrition, and development. This section examines the pre-TRIPs Agreement situation, and the effect of the TRIPs Agreement on these concerns.

(1979) (concluding that attempts to weaken the international system undermine rather than facilitate development objectives for developing countries). For a contrary opinion, see A. Samuel Oddi, *The International Patent System and Third World Development: Reality or Myth*, 1987 DUKE L.J. 831.

27. The most prominent examples of such mechanisms are reservations to specific clauses of the Convention. A reservation is an international law concept defined as a "unilateral statement, however phrased or named, made by a State, when signing, ratifying, acceding to, accepting or approving a treaty, whereby it purports to exclude or to vary the legal effect of certain provisions of the treaty in their application to that State." See LOUIS HENKIN ET AL., *INTERNATIONAL LAW, CASES AND MATERIALS* 444-45 (3d ed. 1993).

28. For a good overview of some of these restrictions in various developing countries, see Alan S. Gutterman, *The North-South Debate Regarding the Protection of Intellectual Property Rights*, 28 WAKE FOREST L. REV. 89, 93-94 (patents), 96-97 (copyrights) (1993).

29. See TRIPs Agreement, *supra* note 1, arts. 27-28 (providing for scope of patentable subject matter and rights conferred).

A. *The Nature and Scope of Patent Protection With Regard to Subject Matter and Conditions for Protection*

Prior to the TRIPs Agreement, several countries excluded certain subjects from the purview of patent protection. Such objects typically included chemicals, inventions in agriculture and horticulture, plants, animals, or medical diagnostics.³⁰ The principle of national treatment under the Paris Convention³¹ extended the low terms of patent protection afforded local patentees to foreign patent applicants. This often ensured that domestic industries had greater access to technology embodied in the invention—for example, through compulsory licensing or requirements that the product be worked locally.

All of this is not to say, however, that developing countries simply exploited the weaknesses of the international system by taking advantage of foreign patentees.³² Refusal to patent inventions in certain areas was also common to developed countries. Prior to the Paris Convention, for example, Spain and Bolivia did not grant patents for inventions unless such inventions, in addition to being new, also established a new industry in the country. Similarly, Germany did not grant patents for chemical products; France did not grant patents for non-medical pharmaceutical compositions; and Austria did not grant patents for food products.³³ These decisions often reflected ethical, political, and economic concerns at the national level. This is also the case with regard to developing countries' intellectual property laws.³⁴ Low standards of patent protection in countries such as India and Brazil, for example, facilitated the development of industries, particularly in the pharmaceutical field.³⁵ For example, a National Working Group on

30. See PATENTS THROUGHOUT THE WORLD N-40, I-6, C-20 (Alan Jacobs ed., 4th ed. 1996).

31. See Paris Convention, *supra* note 25, art. 2.

32. Developed country literature typically implies that this was the case. See, e.g., Gutterman, *supra* note 28, at 89; Willard A. Stanback, Note, *International Intellectual Property Protection: An Integrated Solution to the Inadequate Protection Problem*, 29 VA. J. INT'L L. 517, 522 (1989). While this is certainly the case in some countries, this position does not reflect the entire circumstances surrounding low patent protection in all developing countries.

33. See I STEPHEN P. LADAS, PATENTS, TRADEMARKS AND RELATED RIGHTS, NATIONAL AND INTERNATIONAL PROTECTION 22 (1975).

34. See Anil K. Gupta, Debate on Biotechnology and Intellectual Property Rights: Protecting the Interests of Third World Farmers and Scientists, Paper Presented at the National Seminar on Commercialization of Biotechnologies, Biotech Consortium, New Dehli (1992).

35. Patent protection for pharmaceuticals has proved to be the most contentious point in international patent relations between developed and developing countries. A study by the Pharmaceutical Manufacturers Association reports unauthorized sales in 1984 of U.S. pharmaceuticals in five developing

Patent Laws established by the Indian Government in 1988 argued that the then-current state of Indian patent law, which excluded patents for biotechnological products and plant varieties, "has served Indian interests well."³⁶ Developing countries' refusal to adhere to higher standards for patent protection cannot therefore, as is often the case, simply be explained as "ignorant," "backward," or conscious decisions to exploit the system. Rather, refusals often represented conscious policies to use the system to serve national interests, however those interests may have been defined. This is a *natural* use of the patent system, which like other categories of intellectual property, has historically served as a means to accomplish national welfare objectives.³⁷

At first glance, the TRIPs Agreement seems to rely substantially on the Paris Convention.³⁸ Indeed, some scholars have concluded that the two agreements may successfully, if not happily, coexist.³⁹ Closer examination, however, shows that the Paris Convention simply provides a *context* for the TRIPs Agreement and not a standard. The Agreement, in reality, derogates from the effects of the Paris Convention, which left great scope for governmental initiative and adaptation of the patent grant, a situation which was never acceptable to developed countries. The first point in this regard is the extent to which the Paris Convention relies on domestic law.⁴⁰

countries as \$192 million, as opposed to genuine sales which amounted to \$162 million. Gerald J. Mossinghoff, *Research-Based Pharmaceutical Companies: The Need for Improved Patent Protection World Wide*, 2 J.L. & TECH. 307, 309 (1987).

36. Gupta, *supra* note 34, at 10 (noting the fear by Third World farmers of the impact of patenting biotechnological processes and products on Third World agriculture). The author also notes that government agencies such as the Delhi Chamber of Commerce, and interest groups, such as the Indian Drug Manufacture Association, urged the government not to change the patent law as it served national interests well.

37. See, e.g., *Kendall v. Winsor*, 62 U.S. (21 How.) 322, 329 (1858) ("Whilst the remuneration of genius and useful ingenuity is a duty incumbent upon the public, the rights and welfare of the community must be fairly dealt with and effectually guarded. Considerations of individual emolument can never be permitted to operate to the injury of these.")

38. See, e.g., TRIPs Agreement, *supra* note 1, art. 2(1) (requiring members to comply with Paris Convention Articles 1-12 and 19).

39. See Hans Peter Kunz-Hallstein, *The U.S. Proposal for a GATT-Agreement on Intellectual Property and the Paris Convention for the Protection of Industrial Property*, in GATT OR WIPO? NEW WAYS IN THE INTERNATIONAL PROTECTION OF INTELLECTUAL PROPERTY, 11 STUDIES IN INDUS. PROP. & COPYRIGHT L. 75 (Friedrich-Karl Beier & Gerhard Schrickler eds., 1989).

40. See Paris Convention, *supra* note 25, art. 2:

2. Under the *Patents of invention* are included the various classes of industrial patents granted by the laws of the contracting

Under the Paris Convention, domestic law determined, to a large extent, the subject matter of patent protection.⁴¹ It did not, however, specify how this protection was to be effected.⁴² Article 1 of the Convention simply established a floor of protection which was limited to patents without further qualification. The TRIPs Agreement, although importing Article 1 into its text,⁴³ states as terms for a patent grant that it must be "new, [it must] involve an inventive step, and [it must be] capable of industrial application."⁴⁴ This phrase is an outright replica of European conditions for a patent grant.⁴⁵ Within the TRIPs Agreement context, the terminology is synonymous with the requirements for "non-obviousness" and "utility" under U.S. patent law.⁴⁶

This deceptively simple terminology will prove difficult for most developing countries, not only for the obvious reason that they are

States, such as patents of importation, patents of improvements, etc.

But see TRIPs Agreement, *supra* note 1, art. 1:

1. The words *Industrial Property* are to be understood in their widest acceptation, in the sense that they apply not only to the productions of industry properly so called, but equally to the productions of agriculture (wines, grains, fruits, cattle, etc.) and to mineral productions used in commerce (mineral waters, etc.).

41. The definition of industrial property under the Paris Convention was introduced at the Revision Conference of the Hague in 1925. The Convention, however, did not define what a patent is. As such, member countries were free to define for themselves the subject matter to which a patent would apply. See G.H.C. BODENHAUSEN, *GUIDE TO THE APPLICATION OF THE PARIS CONVENTION FOR THE PROTECTION OF INDUSTRIAL PROPERTY (AS REVISED AT STOCKHOLM IN 1967)* 21 (1968).

42. To the contrary, the Revision Conference at the Hague "expressly stated that the enumeration of industrial property rights would *not* oblige the member states to legislate on *all* the specific rights enumerated." *Id.* at 24. Further, there was no obligation under the Paris Convention for member countries to grant patents for the subjects listed in Article 1. The list was illustrative and not definitive. *Id.* at 24-25.

43. See TRIPs Agreement, *supra* note 1, art. 2.

44. *Id.* art. 27.

45. See, e.g., German Patent Act of December 16, 1980, pt. 1 § 1, (amended Dec. 9, 1986), reproduced in BEIER ET AL., *GERMAN INDUSTRIAL PROPERTY, COPYRIGHT AND ANTITRUST LAWS*, 6 *STUDIES IN INDUS. PROP. & COPYRIGHT L.* 19 (2d ed. 1989); see also United Kingdom Patent Act, 1977, art. 1(1) (using terms identical to those in the German law); see generally GERALD PATERSON, *THE EUROPEAN PATENT SYSTEM: THE LAW AND PRACTICE OF THE EUROPEAN PATENT CONVENTION* (1992).

46. See 35 U.S.C. §§ 101, 103 (1994); see also TRIPs Agreement, *supra* note 1, art. 27 n.5 (stating the terms "inventive step" and "capable of industrial application" may be synonymous with the terms "non-obvious" and "useful" respectively).

new standards to which they must conform, but also because there exists no judicial or administrative history to provide content to these terms.⁴⁷ An overview of patent law decisions in U. S. courts, for example, reveals that behind the innocuous word “new” lies a complex application of rules to determine who was first to invent a specific device and what was the state of “prior-art” in the field. “Non-obviousness,”⁴⁸ on the other hand, refers to a requirement that the invention be non-trivial.⁴⁹ These requirements invoke a body of jurisprudence which has been carefully developed and applied by courts in developed countries for years. In contrast, patent systems in developing countries have had very little judicial involvement in the creation or maintenance of the rudimentary bodies of law which regulate their domestic patent systems. Indeed, in most developing countries, patent law, as with most other categories of intellectual property laws, are primarily statutory. In other words, they represent the results of developing countries’ accession to international agreements, rather than the working out of ideals about the patent system emanating from the individual countries themselves. How will the rights protected under the TRIPs Agreement translate into meaningful legal concepts in developing countries? Are developing countries expected to look to developed countries for the content of these terms, as well as apply the same body of jurisprudence? The following hypothetical questions serve to highlight certain problems this situation portends.

The TRIPs Agreement requires that an invention be “new.” May a national court in a developing country refuse to enforce a patent for a particular drug for malaria, holding that it is not “new,” since traditional native doctors have historically used the components of the drug in more rudimentary forms prior to its “discovery” by a modern patentee?⁵⁰ A developing country patentee attempting to

47. The mere fact that these standards are *foreign* also portends difficulty. As mentioned in a later section of the paper, some of these concepts will prove incompatible with existing social and legal norms in these countries. The greatest fallacy of international intellectual property protection is the assumption, which permeates all of the major treaties, that developing countries have little or no norms with regard to the protection of intangible goods. If this were so, creating a global model, as the TRIPs Agreement has done, would simply be a matter of introducing “new” concepts. It is, however, not realistic to presuppose that superimposing a new *and* foreign model on preexisting local norms which regulate the same subject matter will take place easily, if at all.

48. See 35 U.S.C. § 103 (1994).

49. For a seminal case on the American exposition of nonobviousness, see *Graham v. John Deere Co.*, 383 U.S. 1 (1966).

50. See Steven R. King, *The Source of Our Cures*, CULTURAL SURVIVAL Q., Summer 1991, at 19, 19 (noting that the antimalarial drug known as quinine was first used by Native Americans. The author also notes several other modern cures which were “known” in the patent sense in areas of the Third World.).

patent traditional medicine in the United States could be faced with the invocation of a statutory bar under Section 102(b) of the Patent Act for public use of the product.⁵¹ Developed countries are likely to treat such traditional medicines or cultural knowledge as a product of nature or decide that they do not satisfy novelty requirements.⁵² It is possible, however, that a pharmaceutical company could take the raw formula or components of a native medicine and work on it until it satisfies the patentability requirements.⁵³

Continuing along the same vein, may a developing country patent an invention that fulfills the requirement of "non-obviousness," assuming all other conditions are present, even though it may be a *trivial* invention?⁵⁴ Yet another related question under the TRIPs Agreement: whether the "novelty" requirement is an absolute novelty requirement or a modified novelty requirement? Obviously, low level inventions are an important stimulus for local inventiveness in developing countries. A construction of Article 27 which permits developing countries to recognize inventions, even where the level of inventiveness is not as high as what obtains in developed countries, is important for development goals. Stimulation of local inventiveness is even more crucial in a post TRIPs Agreement era; developing countries cannot afford, nor should they aspire, to piggyback on western technology as a primary means of achieving a strong technology base. The limited success of this strategy was clearly manifest in the pre-TRIPs Agreement era, and the TRIPs Agreement is specifically targeted at measures which dilute the strength of the patentee's monopoly. Adjusting novelty standards is feasible since there is no universal rule for novelty.⁵⁵ It is currently

51. 35 U.S.C. § 102(b) (1994).

52. See *Hodosh v. Block Drug Co.*, 786 F.2d 1136, 1142-43 (Fed. Cir. 1986) (A 2,000 year old Chinese text which discussed medicinal uses of saltpeter was cited against a U.S. invention which used potassium nitrate in toothpaste.); *Morton v. New York Eye Infirmary*, 17 F. Cas. 879, 882-84 (C.C.S.D.N.Y. 1862) (No. 9, 856) (holding the new use of ether for anesthesia was unpatentable).

53. Recently, a U.S. company, W. R. Grace & Co., patented a pesticide made from Indian neem seeds. The pesticide is based on an extraction process widely known to Indian farmers. The company discovered a way to treat the traditional extract in a way that significantly increases its shelf life, thus meeting the standards for patentability under U.S. law. It is unlikely that any indigenous Indian farmer opposed the patent under the procedures available under U.S. law. However, a U.S. based group representing a coalition of critics described the patent as an example of "genetic colonialism" and filed a petition to have the patent revoked. See *Seeds of Conflict*, TIME MAG., Sept. 25, 1995, at 67.

54. Trivial inventions are currently not patentable in Europe or in the United States. The "inventive step" and "non-obviousness" requirements have been construed to require a significant advance in a given field. These are primarily judicial interpretations of the statutory terms. As such, they have little weight in developing countries even under the auspices of the TRIPs Agreement.

55. See HAROLD WEGNER, PATENT HARMONIZATION—BY TREATY OR DOMESTIC REFORM (1993).

unclear, however, whether developing countries may amend their laws to provide protection for non-absolute novelty inventions.⁵⁶ There is also the concern that under the national treatment rule, a lower standard of inventiveness would also apply to foreign inventions, giving an advantage to foreigners to hold a monopoly in the domestic market. This concern may not be as serious if one considers the relatively high transaction costs for a foreign investor to develop an obvious invention since the product would not be patentable in most developed countries. The developing country could assess fees and other ancillary costs to discourage foreign investors from embarking on trivial innovations. The important issue is to stimulate local inventiveness; the suggestion simply is that a lower level of innovation may contribute to wide scale indigenous creative activity. Western requirements of novelty and nonobviousness should be adjusted by developing countries to facilitate domestic innovation.

The requirement that an invention be "new" without further clarification is also sure to prove controversial for developing countries⁵⁷ in the area of biotechnology. The use of cultural knowledge to facilitate the innovative process⁵⁸ has recently been widely documented.⁵⁹ For example, the most effective treatment for post-therapeutic neuralgia is hot pepper;⁶⁰ the cream capsaicin was

56. See, e.g., James O. Odek, *The Kenya Patent Law: Promoting Local Inventiveness or Protecting Foreign Patentees?*, 38 J. AFR. L. 79, 96-101 (1994) (concluding that Kenya as a WTO member must amend its patent laws to conform to the requirements of the TRIPs Agreement, but that it impedes national ability to facilitate local inventiveness through several provisions such as the novelty requirement).

57. Some U.S. scholars have also questioned the efficacy of the nonobviousness standard for promoting creativity. See generally, A. Samuel Oddi, *Beyond Obviousness: Invention Protection in the Twenty-First Century*, 38 AM. U. L. REV. 1097 (1989) (suggesting that the modern utility patent may not provide the conditions conducive for sustained creativity in the future); Robert P. Merges, *Uncertainty and the Standard of Patentability*, 7 HIGH TECH. L.J. 1 (1993) (discussing the relationship between patent standards and the economic incentive to develop technology).

58. In another work, this author has suggested that the time is coming, or indeed is now, when a distinction must be drawn between "innovation" and "creation" for the purposes of effectuating contemporary features of intellectual property protection. Innovation is used loosely to refer to the process by which the results of creativity is exploited in a free market state. See R. L. Gana, *Has Creativity Died in The Third World? Some Implications of the Internationalization of Intellectual Property*, Paper Presented at the Annual Law and Society Meeting (June 1-4, 1995).

59. See, e.g., Christopher Joyce, *Prospectors for Tropical Medicines*, NEW SCIENTIST, Oct. 1991, at 36.

60. See William A. Check, *Hot Pepper as Medicine: Modern Science Makes Use of an Ancient Pain Reliever*, L.A. TIMES, Oct. 30, 1989, at B3.

developed as a result of observations of the use of hot pepper by South American indigenous tribes.⁶¹ Pilocarpine, used to treat glaucoma, was first utilized by indigenous peoples in Brazil.⁶² D-tubocurarine, a skeletal muscle relaxant used in anesthesiology, was derived from a concoction of arrow poison used by Amazonian Indians.⁶³ The TRIPs Agreement neither grants rights to reflect these forms of contribution to inventiveness, nor does it provide a framework for the allocation of rights between indigenous knowledge and the use of this knowledge to develop drugs which are patented under modern patent laws. Ironically, if one were to strictly construe "new," particularly with regard to the developed country application of the standard under domestic patent laws, such a patent should not be issued for want of novelty.⁶⁴

The TRIPs Agreement significantly extends the scope of patent protection. Article 27 of the TRIPs Agreement provides patent protection for processes and requires that patents be available "in all fields of technology," ostensibly including biotechnology. This scope of protection was formerly not granted under domestic patent laws of

61. *Id.*

62. *See King, supra* note 50, at 19.

63. *Id.*

64. In developed countries, there may also be a question as to whether the use of raw plants, even in some combination, would not be considered a product of nature. Section 102 of the U.S. Patent Act requires that an invention be novel. To satisfy this requirement, an invention must not have been known or used in the United States, or described in a printed publication in the United States or a foreign country before the invention of it by the patent applicant. *See In re Hall*, 781 F.2d 897 (Fed. Cir. 1986); *Hodosh v. Block Drug Co.*, 786 F.2d 1136 (Fed. Cir. 1986). While traditional medicinal knowledge may fall outside the terms of the U.S. novelty requirement (since it usually is not published or used in the U.S.) it nonetheless will present difficulty if a developing country refuses to recognize such an invention on the grounds that it is not "new." One question is whether traditional knowledge and use, not documented, constitutes some form of prior art. Another, more serious question is how to adequately recognize the innovation that goes into making the "known" product or process marketable internationally. Clearly, indigenous experts cannot explain in chemical (and thus commercially reproducible) terms that in the plant or mix of plants causes the cure of illness. For example, Andean Indians used the plant *chincona* as a prophylactic for malaria and introduced it, via the Jesuits, to the rest of the world. French scientist Pierre-Joseph Pelletier discovered in 1820 that *chincona* worked because of quinine, a chemical component in the plant. *See generally* DANIEL R. HEADRICK, *THE TOOLS OF EMPIRE: TECHNOLOGY AND EUROPEAN IMPERIALISM IN THE NINETEENTH CENTURY* 65-66 (1981). Under the rules of the patent system today, the patent belongs to Pelletier. How does this promote or encourage invocation among Andean Indians? What kind of reward, if any, should they receive for their knowledge?

several developing countries,⁶⁵ and arguably, was not required by the Paris Convention.⁶⁶

Developing countries have been extremely concerned about the impact of patenting biotechnological processes and products. These concerns range from ethical issues, e.g., should plant life be patented, to legal issues, e.g., are they "new," to economic issues, e.g., how are rights to be allocated between farmers in developing countries and patentholders who usually are multinational corporations.⁶⁷ Ethical and developmental issues also permeated developing countries' concerns over extending patents to pharmaceuticals and chemical products.⁶⁸ The TRIPs Agreement overrides these concerns by granting transitional arrangements to developing countries.⁶⁹ The success of the TRIPs Agreement in this area, at least for enforcement purposes, is dependent on the extent to which individual countries can, within this time period, transform the legal and social barriers to patentability in certain areas.⁷⁰ For some countries, this may implicate national constitutional prerogatives which regulate issues of public morals⁷¹ and which determine what may properly be designated as the subject of private ownership.⁷²

The TRIPs Agreement has enhanced the possibility of dissemination of technological information by requiring that a patent application sufficiently disclose the invention which is the subject of

65. See, e.g., *USTR Releases Annual Trade Report on Restrictions Around the World*, 5 WORLD INTELL. PROP. REP. (BNA) 121 (1991) [hereinafter USTR Report] (process patents were not protected in Brazil or Argentina).

66. See Gupta, *supra* note 34 and accompanying text.

67. For an overview of Third World concerns and some suggestions about the allocation of rights, see Gupta, *supra* note 34.

68. Notably, India, Brazil and Argentina were cited by the U.S. Trade Representative as having inadequate patent protection for pharmaceutical products and processes, as well as chemical products. See USTR Report, *supra* note 65, at 7-9, 19-24, 113-21 (respectively discussing Argentina, Brazil, and India).

69. See TRIPs Agreement, *supra* note 1, arts. 65(2), 66.

70. The TRIPs Agreement expands the scope of patentable subject matter so that WTO members are required to protect plant varieties and other agricultural products. See generally TRIPs AGREEMENT, *supra* note 1, art. 27.

71. This concern is shared to some respect in Europe, for example in the debates regarding the patenting of life. See generally, D. MacKenzie, *Europe Debates the Ownership of Life*, 133 NEW SCIENTIST 9 (1992); Angus J. Wells, *Patenting New Life Forms: An Ecological Perspective*, 3 EUR. INTELL. PROP. REV. 111 (1994).

72. See David Hurlbut, *Fixing the Biodiversity Convention: Toward a Special Protocol for Related Intellectual Property*, 34 NAT. RESOURCES J. 379, 382-90 (1994) (noting that different cultures do not define property and private ownership in the same manner).

the application.⁷³ The application must describe the invention in enough detail that a person skilled in the art may carry out the invention from the information disclosed.⁷⁴ Since increased dissemination of technical information was a prime issue in developing countries' interests in reforming the international patent system, this result under TRIPs Agreement is welcome. It is, however, only theoretically so.

The thrust of the international patent system is that the award of a monopoly grant within the system gives the patentee the exclusive right to make, use, offer for sale, sell, or import the product.⁷⁵ Thus, while the information may be disseminated, the ability to *utilize* the invention for domestic purposes or to adapt the invention to suit peculiarities in other countries is still not legally available.⁷⁶ Indeed, the more that information is disclosed in a patent application in developing countries, the greater the scope of a foreign patentee's control over similar inventions or improvements to the invention patented.⁷⁷ Developing countries may alleviate this effect by enacting stringent "claims" requirements in their domestic legislation.⁷⁸ Claims represent the heart of a patent grant in the sense that they determine the external boundaries of the invention that the patent covers. The more narrowly a claim is required to be drawn, the more narrow the scope of the property right granted by the patent. Additionally, since there is no agreement on the doctrine of equivalents, courts in developing countries may encourage local adaptations of the patented product.⁷⁹

73. See TRIPs Agreement, *supra* note 1, art. 29.

74. *Id.*

75. See *id.* art. 28(1)(a).

76. As one developing country scholar points out, patent systems in developing countries have tended to have no benefits for the countries, but rather "restrict[] their technological advance through initiation and adaptation." C. VAITSOS, *THE INTERNATIONAL PATENT SYSTEM: LEGAL CONSIDERATIONS FOR A THIRD WORLD POSITION* (1976); see also C.V. Vaitsos, *Patents Revisited: Their Function in Developing Countries*, J. DEV. STUD., Oct., 1972.

77. The doctrine of equivalents prevents the award of a patent grant to an inventor of a product which does the same or the equivalent function that is covered by a prior patent.

78. There are of course other doctrines on which developing countries could capitalize by implementing or, conversely, refusing to implement, in local patent legislation. For example, the doctrine of equivalents in U.S. law may be invoked by a patentee to prevent the grant of a patent for an invention which "do[es] the same work in substantially the same way, and accomplish[es] substantially the same result . . ." *Machine Co. v. Murphy*, 97 U.S. 120, 125 (1877); see also *Winans v. Denmead*, 56 U.S. (15 How.) 330 (1853) (seminal case).

79. Reichman, *supra* note 4, at 6. Literal infringement falls within Article 28 of the TRIPs Agreement. Developing countries' courts and administrative bodies must be careful to remain within the narrow space between literal infringement and equivalents.

Another concern for developing countries under the TRIPs Agreement is the extension of the period of protection to twenty years.⁸⁰ This prolongs the period of monopoly with a severely limited right of adaptation, effectively sealing off the opportunity to reap fully the benefits of having granted a patent to a foreign applicant. If the use of information obtained from a patent application is so severely curtailed, what is the practical benefit of the knowledge to the developing country? Even under a system of compulsory licensing, a developing country, by being prohibited from recognizing independent creations of a similar invention,⁸¹ may continue to pay more than the market value of a technology that is outdated.⁸² One scholar aptly points out:

It is true that one does not have to re-invent the wheel in order to ride a bicycle. It is true that each country that undertakes the modernization of its economy relies partly on the heritage of others [Technology is being bought and sold like a commodity but there is no world market, nor world exchanges for technology. The "late-comers" (developing countries) in this case are like spectators arriving at the last moment at a cup finale and having to buy tickets from vendors at an excessive price.⁸³

Articles 30 and 31 of the TRIPs Agreement foresee limited exceptions to the rights conferred by a patent grant. Article 30 provides a general exception to the exclusive rights afforded a patentee. On the other hand, Article 31 allows for "other use" of a subject matter of a patent grant, but imposes a long list of terms which describe certain uses deemed legitimate under the TRIPs Agreement. It is not yet clear how these two provisions fit together. The two Articles, however, determine the outer limits of the scope of initiative that developing countries may legitimately rely upon when pursuing national objectives. The need to provide pharmaceuticals and other medicinal goods or to combat shortages arising from outbreaks of disease or other national emergencies would clearly fall under these provisions. In addition, the availability of pharmaceutical goods at a rate which makes such goods available in real, i.e., affordable, terms to the population of a developing country should constitute a valid ground for invoking the exceptions afforded under the TRIPs Agreement.

80. See TRIPs Agreement, *supra* note 1, art. 33.

81. If the interpretation of the term "new" is drawn from a U.S. or European patent jurisprudence, this would be the effect of this provision under, for example, the doctrine of equivalents.

82. See D. GOULET, *THE UNCERTAIN PROMISE: VALUE CONFLICTS IN TECHNOLOGY TRANSFER* 34 (1977) (quoting Lord Ritchie Calder).

83. *Id.*

The bite of Article 31 appears to be the curtailment of working requirements which, in the opinion of developed countries, undermine a patentee's rights. The TRIPs Agreement eliminates the use of working requirements as a condition to granting a patent.⁸⁴ By virtue of Article 29, the only conditions on patent applications are: (1) sufficient disclosure, and (2) information concerning corresponding foreign applications.⁸⁵ Extreme working requirements undermine the degree of profit available to a patentee. Developing countries must use initiative to ameliorate the effects of this provision in the course of devising domestic legislation, either in the patent field or in a related area of regulation, such as competition law or technology transfer policies.

The combination of limitations to a patentholder's rights reflects much of what was recognized by the Paris Convention. The challenge still remains whether it is possible to assimilate concerns about economic development in a manner that is consistent with exclusive monopoly rights in technology products. The history of the international patent system suggests not, and the TRIPs Agreement, which cuts back even more on traditional strategies such as compulsory licensing and eliminates local working requirements, suggests more strongly than ever that development strategies which have their main focus on the acquisition of technology from developed countries must be re-examined within a broader policy of economic and political reform.

B. Domestic Patent Protection

The singular weakness of the pre-TRIPs Agreement international protection of intellectual property was its heavy dependence on protection afforded by national legislation. The result of this dependence, as was borne out by the failed revision attempts, was a disparity over certain fundamental features of the patent grant. As mentioned earlier, however, such disparities served to facilitate access to technology by developing countries. At the same time, the dependence on national laws reserved to countries the possibility and right to tailor the patent system to their respective benefits. The TRIPs Agreement overtly limits this possibility and, at the same time, significantly encroaches on the ability of developing countries to access technology. For example, the combined effect of Article 5A and 5quater of the Paris Convention is a restriction of the scope of a country's ability to diminish the economic value of a patent. Article 5A provides protection against national working requirements,

84. The Philippines and Argentina, for example, had stringent working requirements which, if not met, would lead to the lapse of the patent.

85. See TRIPs Agreement, *supra* note 1, art. 29.

compulsory licenses, and patent forfeiture. Article 5 quater, on the other hand, provides minimal protection against infringement of a process patent with regards to the importation of products manufactured abroad by that patented process. There is very little room to circumvent these provisions under the TRIPs Agreement. To the extent that compliance has a perceptible deleterious effect on a developing country, however, it is possible to envision the use of other bodies of law or invocation of one of the exceptions recognized by the TRIPs Agreement, such as Article 40 in the case of anti-competitive practices or Article 31 to limit such effects.

The function of the TRIPs Agreement is not to create a world-wide agreement on patent laws. However, there is a significant problem created by importing domestic requirements in *developed* countries into the Agreement and purporting that these requirements somehow translate into meaningful standards for *developing* countries. It is unrealistic to think that developing countries will learn the entire patent systems of developed countries in order to apply the TRIPs Agreement. They should, however, learn enough to enable them to use and adapt the patent system for identifiable development purposes.

It is possible, for example, under the TRIPs Agreement for developing countries to define the content of the standards imposed by the TRIPs Agreement. The singular requirement of international law is that this must be done in good faith.⁸⁶ Developing countries should utilize this opportunity to tailor domestic legislation in a way that promotes local inventiveness by, for example, permitting lower standards of inventiveness, preventing broad claims, avoiding elements such as the equivalence doctrine, protecting improvements as separate inventions, and employing a liberal test for nonobviousness. Clearly, these suggestions have their own limitations, particularly the implications that arise under the national treatment rule. What is important is that developing countries provide content to domestic legislation in a way that clearly benefits their immediate societies. Some scholars have suggested alternative proprietary regimes, such as utility models, patents of introduction, and other hybrid regimes.⁸⁷ Utility models are low level improvements on existing functional products. While they have been used successfully in countries like China to encourage domestic innovation and are widely praised for their success in encouraging

86. Vienna Convention on the Law of Treaties, *opened for signature* May 23, 1969, art. 26, S. TREATY DOC. NO. 92-1, 8 I.L.M. 679 (under the principle of *pacta sunt servanda*).

87. For a discussion of these, see Reichman, *supra* note 4, at 38-40.

adaptation and improvement of foreign inventions,⁸⁸ it is also true that no country has made significant progress in technological advancement through a regime of utility models. Indeed, in many rural areas of developing countries, these improvements take place without the incentive of a proprietary regime. Finally, it is certainly only a question of time before utility models and the patent regime conflict, particularly where developing countries attempt to work around foreign patents. This is sure to elicit claims of TRIPs Agreement violation. One scholar has already observed how "[o]ver time, utility model laws thus degenerated into longer and stronger petty patent regimes devoted to small inventions generally, which contradicts the economic and policy rationales that justify the patent monopoly."⁸⁹ One can be sure that it will only be a matter of time before developed countries object to utility models, should they focus merely on improvements to foreign patented products. The same concern may be expressed over patents of introduction which operate to encourage commercialization of foreign technologies that have not yet been protected under domestic patent law. These "patents" are given to individuals who work the patent in the domestic country. They are likely to run afoul of the TRIPs Agreement more quickly than utility models—unless the patentee fails to file a timely application in the developing country—since the TRIPs Agreement eliminates the prospect of linking protection to working requirements. Alternative regimes, for the most part, do not represent significant opportunities for developing countries where technology acquisition and development is concerned. The international patent system is based on a highly sophisticated, deliberate set of rules which have successfully captured the main avenues of transborder technology flows; it is not a system designed to encourage and facilitate the success of other regimes. Nonetheless, these alternative regimes offer developing countries a range of possibilities which each country may combine in different ways to pursue technological advancement and larger development goals. In the short term, the regimes are particularly attractive because they are not addressed under the TRIPs Agreement and are probably of limited interest to foreigners.

The critical feature of the TRIPs Agreement for developing countries is the extent to which the Agreement facilitates accessibility to technology and the costs of that technology as a function of the degree of control granted to a patentee in the international context. This situation presents a double-edged sword to developing countries. Developing countries stand to gain under the current patent systems of developed countries in the area of biotechnology

88. See *id.* at 39.

89. *Id.*

and the use of indigenous knowledge to develop new drugs.⁹⁰ It will, however, be difficult for developing countries to secure absolute gains from this because they cannot single-handedly operate within the current patent system. The patent application process in most developed countries is typically financially prohibitive. In addition, the amount and complexity of information about legal requirements an applicant is required to master in order to obtain a patent will prove a significant hurdle for developing country applicants.⁹¹ The Least Developing Countries, as well as some developing countries, and certainly their citizens cannot afford to go through this process. The key policy concern under the TRIPs Agreement, then, is how to draw a balance between maximum gains of an exclusive international right and minimum requirements that patent protection in a developing country should confer some meaningful benefit to that country.

III. DEVELOPING COUNTRIES AND COPYRIGHT PROTECTION UNDER THE TRIPs AGREEMENT

The impetus behind the TRIPs Agreement is a combination of two inextricable objectives: (1) to secure global economic rewards of an intellectual property grant, and (2) to facilitate the enforcement of these rights as a means to accomplish the first objective. By situating the TRIPs Agreement in the framework of multilateral trade relations, the Agreement benefits from the increased incentive for nations to enforce intellectual property rights through the threat of trade sanctions.⁹² Like a wheel, the TRIPs Agreement envisages that the threat of trade sanctions will propel the forward motion of respect and protection of copyrights worldwide. Is this a realistic proposition in the case of developing countries? Several issues intrinsic to the

90. See *id.* at 9 (describing cooperative efforts to promote research in biotechnology between some Latin American countries and the United Nations Industrial Development Organization (UNIDO)).

91. Obviously, this is where patent attorneys are required. Again, however, the cost of legal fees often proves prohibitive for these countries and their citizens.

92. As part of the GATT, violation of the TRIPs Agreement gives rise to the legitimate use of trade sanctions against the Contracting Party. While the TRIPs Agreement provides for dispute prevention and settlement, under the general framework of GATT a Contracting Party, after failure to resolve a dispute, may invoke trade sanctions against another Contracting Party who has acted inconsistently with its GATT obligations. See generally Final Act Embodying the Results of the Uruguay Round of the Multilateral Trade Negotiations, Apr. 15, 1994, LEGAL INSTRUMENTS—RESULTS OF THE URUGUAY ROUND vol. 1, art. XXIII (1994), 33 I.L.M. 1125 (1994).

TRIPs agreement in particular, and to the WTO structure as a whole, suggest not.

A. *The Carry Over of Pre-TRIPs Agreement Concerns*

The shortcomings of the pre-TRIPs Agreement international copyright system remain a continued and aggravated feature of the TRIPs Agreement. After the defeat of the Stockholm Protocol to the Berne Convention,⁹³ developing countries remained relatively inactive in international copyright relations. Yet, concerns over literacy and education remain a salient feature of domestic policy, as reflected in national copyright laws.

The natural corollary to the grant of an exclusive right is a level of absolute control over the use and availability of the protected work. To this extent, all the provisions of the TRIPs Agreement implicate developing country concerns over availability and cost of the protected work. A few examples will, however, serve to amplify these concerns.

Under the provisions for copyright and related rights,⁹⁴ the TRIPs Agreement allows for limitations or exceptions to exclusive rights "in certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holder."⁹⁵ This same exception extends to all rights covered by the TRIPs Agreement, not just the reproductive right. The terms "normal exploitation" and "legitimate interests" are, however, no more clearer under the TRIPs Agreement than they have been within the Berne Convention which utilizes the same language.⁹⁶ Historical notes on the interpretation of Article 9(2) of the Berne Convention suggest that conflict with "normal

93. Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, as last revised July 24, 1971, 828 U.N.T.S. 221 [hereinafter Berne Convention]. The Stockholm Protocol attempted to grant significant concessions to developing countries in response to their expressed concerns about the need to foster development and the costs and difficulties associated with obtaining copyrighted works through licensing agreements or outright sales of the work. The Protocol responded to these concerns by allowing developing countries to derogate from obligations under the Berne Convention, such as restrictions on authors' rights for educational purposes, termination of translation rights when these rights are not exercised within a specific time period, and the provision of compulsory licenses. For a history of events leading to the creation of the Protocol, and those leading to its defeat, see SAM RICKETSON, *THE BERNE CONVENTION FOR THE PROTECTION OF LITERARY AND ARTISTIC WORKS: 1886-1987*, 598-662 (1987).

94. See TRIPs Agreement, *supra* note 1, arts. 9-14.

95. See *id.* art. 13.

96. See Berne Convention, *supra* note 93, art. 9(2); see also RICKETSON, *supra* note 92, at 370 (noting the scope and content of the reproduction right was problematic from the very beginning).

exploitation" refers to such things as massive amounts of photocopying, particularly where it is done for industrial or economic gain.⁹⁷ Ultimately, however, the precise determination of what is normal is left up to independent countries.⁹⁸

The more problematic phrase is "legitimate interests." What constitutes a "legitimate interest" of a rights holder is dependent on the particular vision of copyright a country employs. Thus, in continental countries, a moral right is certainly considered "a legitimate interest" of the author, while this is not the case in most common law jurisdictions. Moral rights are excluded under the TRIPs Agreement; however, it may be argued that a country has the freedom under the TRIPs Agreement to determine its own copyright philosophy, and thus, to define the scope of the phrase "legitimate interests." The judiciary of such a country would then be free, within the auspices of the statute, to carve out principles which conform to the particular copyright philosophy. It is clear that a deliberate contravention of a TRIPs Agreement provision would not be perceived as a legitimate attempt to comply with its terms. Again, however, the determination of what is "legitimate" when conflict arises between national judicial construction and interpretation of the TRIPs Agreement is an open-ended matter which depends on the manner in which individual countries ratify the Agreement and reconcile it with domestic law.

Under the Berne Convention, one interpretation offered suggests that exceptions under Article 9(2) could take the form of compulsory licenses.⁹⁹ This interpretation is, however, problematic given the fact that an Indian proposal for a specific provision permitting compulsory licensing was rejected.¹⁰⁰ Thus, compulsory licenses, which have always been of interest to developing countries, may clearly be deemed as interference with the "normal exploitation" of the work. This interpretation is reinforced by the fact that during the TRIPs Agreement negotiations, albeit more in the patent context, developed countries explicitly expressed the view that restrictions of this sort interfere with the rights holders' exclusivity as guaranteed under the international agreements. Clearly then, the extensive use of compulsory licensing is out of the question under the TRIPs Agreement, except where permitted by the Berne Convention.¹⁰¹ Even if a compulsory license does not *per se* interfere with "normal exploitation" or "unreasonably prejudice . . . legitimate interests," its

97. See RICKETSON, *supra* note 93, at 482-83.

98. *Id.* at 483.

99. *Id.* at 484.

100. *Id.* at 485.

101. See TRIPs Agreement, *supra* note 1, art. 4(b).

use as an instrument to facilitate national development goals would still be limited to "special cases." Within the Berne Convention, these "special cases" were deemed to be very rare occasions,¹⁰² where national security concerns or other similar exigencies called for extreme state action. An extremely literal interpretation of the TRIPs Agreement may suggest that Article 73, which provides for security exceptions, is the only plausible framework within which to construe Article 13. It is more likely, however, that the exact scope and meaning of this provision will remain unclear until dispute resolution procedures are actually deployed.

One of the concerns expressed historically by developing countries is the ability to access products from the Western hemisphere.¹⁰³ Impediments to this objective are usually the high cost of obtaining licensing agreements and the restrictions on use that such agreements entail. Understandably, the TRIPs Agreement does not address these "impediments," since in developed country perspectives, these are normal costs associated with copyright protection. Article 11 of the TRIPs Agreement, which deals with rental rights, directly implicates these concerns.

Article 11 enlarges the scope of control for a right holder with respect to computer programs and cinematographic works. The provision requires members to "provide authors and their successors in title the right to authorize and prohibit the commercial rental to the public of originals or copies of their copyright works."¹⁰⁴ Two immediate effects of this provision are important for developing countries. First, it is possible under this provision to limit the availability of these products in a national market, should the right holder so desire. Yet, commercial rental, at least for some developing countries, is often the only avenue that ensures widespread dissemination. It is also usually cheaper, in economic terms, to rent rather than to purchase a work. In this regard, granting the copyright holder such strong control of *how* and *whether* a work is available in a country cuts directly across the developing country's desire for access. The second, albeit related, consequence is that the additional transaction costs which commercial renting requires from the perspective of the corporation or business which rents the work is automatically passed along to the consumers. The time involved in negotiating permission to rent an author's works and the fees associated with this negotiation will hinder accessibility to the work in question.

102. RICKETSON, *supra* note 93, at 482.

103. For a recent opinion on how accessing knowledge may be resolved in the context of digital technology, see Simon Olswang, *Access right: An Evolutionary Path for Copyright into the Digital Era?*, 5 EUR. INTEL. PROP. REV. 215 (1995).

104. *Id.*

As mentioned earlier, the problem with intellectual goods in developing countries is typically the cost at which they are made available to the general public. The control afforded a right holder under Article 11 effectively means that the costs of the product are likely to keep it inaccessible to developing country populations. This accessibility concern is not relieved by the fact that Article 11 allows exceptions for computer programs when the program itself is not the essential object of the rental. The exception for cinematographic works, "unless such rental has led to widespread copying . . . materially impairing the exclusive right of reproduction," alleviates this concern only by adding a degree of vagueness to Article 11. The provision seems to suggest that a determination, presumably by a TRIPs Agreement panel, that a country utilizing the exception has violated the terms thereof is the only way for an author to enjoy the benefits of exclusivity under Article 11. This is unclear from the terms of the Agreement. The point is, nevertheless, that peripheral limitations on rights granted to enable greater control of the actual object of the right will not make access any easier for a developing country.

The accessibility concern permeates other rights incorporated into the TRIPs Agreement under Article 2(1). An example of this is the translation right.¹⁰⁵ Where works are not available in the dominant *lingua franca* of a developing country, translation of the work is essential for accessibility. The Berne Convention Appendix which allows limited use of a compulsory license for such a purpose has hardly been relied upon by developing countries.¹⁰⁶ Reasons for this include the costs associated with licensing and the historical difficulties associated with the provisions of Article II of the Appendix.¹⁰⁷ The wholesale importation of the Appendix into the TRIPs Agreement, despite its non-use in the past, without addressing the barriers to its use appears simply to be a form of tokenism with no genuine possibility of yielding material benefits to developing countries. It is also likely to generate hostility to the TRIPs Agreement at the enforcement level.

Other significant articles for developing country accessibility concerns are Articles 11bis and 12 of the Berne Convention.¹⁰⁸ These articles deal with broadcasting and related rights, adaptation rights, arrangement, and other alteration. Again, the issue for concern relates to the cost of these goods and the lack of ability to adapt or

105. See Berne Convention, *supra* note 93, art. 8.

106. See RICKETSON, *supra* note 93, at 663.

107. *Id.*

108. These Articles are incorporated by reference into the TRIPs Agreement. See TRIPs Agreement, *supra* note 1, art. 9.

use them in a manner which facilitates the need to disseminate knowledge in forms and through mediums available to developing countries at their respective stages of development.

B. *The Politics of Culture*

The idea of intellectual goods as property, and further, the definition of property as including the right to exclude¹⁰⁹ meets with unprecedented resistance in the attempt to introduce the modern concept of intellectual property in many Asian and African countries. While governments in these countries may accede to international agreements recognizing and protecting intellectual goods, this will not, as history continues to bear out, translate into a culture which enforces intellectual property rights as currently envisaged by the TRIPs Agreement. Despite best efforts, reality suggests that for as long as there exists direct conflict with strongly held values and norms within the society, enforcement will be problematic. The classic case study for this argument is the Peoples Republic of China.

Shortly after the Uruguay Round came into effect, the United States threatened China with Section 301 action in retaliation for intellectual property infringement.¹¹⁰ The dispute resulted in a Memorandum of Understanding between the two countries.¹¹¹ China pledged again to enforce intellectual property rights as well as to set up another round of administrative mechanisms to accomplish this goal.¹¹² Recently, for the first time, a Chinese court sanctioned a local company for copyright infringement.¹¹³ But, as some have noted, these overt actions may be more symbolic than substantive, particularly since stealing a book is still considered an elegant offense.¹¹⁴

The United States-China dispute in this post-TRIPs Agreement era is a good case study primarily because China seeks admission to the WTO. More important for enforcement concerns, however, is the

109. See Morris R. Cohen, *Property and Sovereignty*, 13 CORNELL L.Q. 8, 12 (1927) ("The essence of private property is always the right to exclude . . .").

110. See Bob Davis, *U.S. to Propose Chinese Trade Sanctions to Curb Pirated CD, Films, Software*, WALL ST. J., Dec. 30, 1994, at A3.

111. See Helene Cooper and Kathy Chen, *China Averts Trade War with the U.S., Promising a Campaign Against Piracy—Accord Also Opens Market to U.S. Movies, Music and Computer Software*, WALL ST. J., Feb. 2, 1995, at A3.

112. *Id.*

113. See *World Pirate Soundcarrier Sales Exceed \$2.2bn*, FIN. TIMES: MUSIC & COPYRIGHT, May 24, 1995.

114. Shortly after the dispute was resolved, several scholars noted that it would be impossible for China to comply with the requirements to stop infringement. The attempt to reverse 2000 years of Chinese history by decree simply would not be successful. See Helene Cooper, *China's Hurdles to Making U.S. Accord a Success Spur Worries Among Analysts*, WALL ST. J., Feb. 28, 1995.

fact that both mainland China and Taiwan are significant sources of piracy and counterfeit goods.¹¹⁵ In 1982, 56% of all counterfeit goods confiscated by the United States reportedly originated in Taiwan.¹¹⁶ The figure rose dramatically in 1986.¹¹⁷

Although not a formal GATT member,¹¹⁸ China has long enjoyed most-favored-nation¹¹⁹ treatment with several countries within the GATT system, including, most notably, the United States. The first bilateral agreement on copyright protection between the two countries was negotiated in 1903.¹²⁰ Almost a century later, despite the threatened and actual use of trade sanctions, copyright infringement continues to haunt trade relations between the two countries; dispute over intellectual property protection in China has become a fixture of international trade between China and the United States. The reasons for this phenomena are more deeply embedded in the social structure of the Chinese society than developed countries have acknowledged.¹²¹ In addition, however, the mistaken premise of negotiations with China and indeed with most other developing countries is that these countries lack intellectual property laws.¹²²

115. See Roger Skrentney, *Fighting a Reputation as the 'Counterfeit Capital of Asia'*, L.A. DAILY J., May 19, 1986, at 3.

116. *Id.*

117. *Id.* The figure this year was 86%.

118. See Bhushan Bahree, *China Fails in Bid to Rejoin GATT by Own Deadline*, WALL ST. J. INT'L, Dec. 20, 1994, at A10.

119. Most-favored-nation (MFN) provisions are the cornerstones of most international trade and commerce agreements. The MFN clause is regarded as the central policy of the GATT and is embodied in Article I of the GATT. The principle is concerned with non-discrimination in international trade and requires Contracting Parties to the GATT to treat other Contracting Parties the way the "most favored nation" or "best friend" of that nation is treated. The practical result of this provision is that a nation like China, which is not a GATT member, by virtue of a bilateral trade agreement which incorporates an unconditional MFN clause, is automatically entitled to treatment afforded to a GATT member. Conversely, if by virtue of a bilateral trade agreement, a GATT member gives certain benefits to a non-GATT member, other GATT Contracting Parties are entitled to that same benefit. The principle thus eliminates the incidence of favoritism between trading partners. In addition, it promotes efficiency, security, equality and transparency in international economic relations. See JACKSON ET AL., *supra* note 10, at 436-38 (discussing the policies underlying the principle of the MFN provision).

120. See COPYRIGHT OFFICE, THE PROVISIONS OF THE UNITED STATES COPYRIGHT LAWS, Bulletin No. 9, at 39 (1905).

121. See William P. Alford, *U.S. Takes the Wrong Road in China*, CHI. TRIB., Feb. 17, 1995, at 23.

122. For a history of intellectual property in China, see WILLIAM P. ALFORD, *TO STEAL A BOOK IS AN ELEGANT OFFENCE: INTELLECTUAL PROPERTY LAW IN CHINESE CIVILIZATION* (1995).

A cursory study of indigenous approaches to the protection of intellectual goods reveals that most cultures recognize the material value engendered by the results of intellectual labor. The way that value is protected, however, differs significantly from what modern categories of intellectual property laws provide. The invention of printing came from China in the 6th century,¹²³ as did the invention of paper in A.D. 105.¹²⁴ Yet history records that China did not exploit these inventions and many others through the intellectual property system.¹²⁵ Consequently, several Chinese inventions were transferred to Europe, where the inventions were exploited by way of trade with Arabs.¹²⁶

With regard to printing, the sole aim of publishing in China was to supply a lay readership with knowledge. Knowledge, according to Confucian thought, cannot be owned or controlled, but rather, must be duplicated with exactity.¹²⁷ While a form of copyright did exist in imperial China, the purpose of the law was not to protect creativity or economic interests, but rather, to maintain social order.¹²⁸ As with the Stationer's copyright in England,¹²⁹ the use of copyright in imperial China was to control *how* and *what kind* of knowledge was disseminated to the society. In addition, copyright was used to prevent dilution of sacred texts; the prohibition of unauthorized reproduction of literature was primarily to protect the purity of knowledge, not necessarily the author or the author's "rights."¹³⁰

The Chinese attitude toward the protection of knowledge was shared to some degree by India in the 11th Century.¹³¹ The traditional approach to piracy was not that it was appropriate morally, but rather, that knowledge and its expression in works of creativity were like the ocean—"although robbed of its many jewels by gods, remains even to date a mine of jewels."¹³² This attitude seemed to indicate that while authors were being robbed, they would nonetheless not be depleted of knowledge goods. It is also interesting

123. This was in the form of block printing. See 26 THE NEW ENCYCLOPEDIA BRITANNICA 415 (1994).

124. *Id.*

125. *Id.*

126. *Id.*

127. See ALFORD, *supra* note 122, at 25 ("The Master [Confucious] said: I transmit rather than create.") (quoting from the Analects of Confucious, Book VII, Chapter 1 (Waley, trans.)).

128. *Id.* at 11-18.

129. See LYMAN RAY PATTERSON, COPYRIGHT IN HISTORICAL PERSPECTIVE (1968).

130. *Id.* at 11-13.

131. See T.S. Krishnamurti, *Copyright—Another View*, 15 BULL. COPYRIGHT SOC'Y U.S.A. 217, 218-20 (1969). For an abstract of Krishnamurti's 1969 lecture, see 17 BULL. COPYRIGHT SOC'Y U.S.A. 252 (1970).

132. T. S. Krishnamurti, *Copyright—Another View*, 15 BULL. COPYRIGHT SOC'Y U.S.A. 217, 219 (1969) (quoting the 11th Century poet Bilhann).

to note that in India, both ideas and expressions were considered the property of the author.¹³³ Indian society in this era acknowledged the absolute ownership of words with apparently few exceptions.¹³⁴

It is fair to say, then, with regard to copyright, that traditional societies often regard copyright as a matter of social cohesion, not purely or primarily one of economics.¹³⁵ In the case of modern China, this traditional underlay is reinforced by a political structure which purportedly continues to have low tolerance for individualist capital accumulation, while also employing state control over the avenues of commerce.¹³⁶ Since modern intellectual property forms are an intrinsic part of modern commerce, it is not surprising to find significant resistance to intellectual property protection in modern China. While the international intellectual property system may be indifferent to the validity of traditional models, these models, in part, explain the approach to piracy and counterfeit goods at the grassroots levels where this activity takes place. The persistence of piracy suggests that these traditional systems cannot be overridden by international treaty fiat. To this extent, they must be addressed by the international system.

An example of rights particularly vulnerable to infringement under cultural norms would be rights protected under Articles 11, 11bis, or 11ter of the Berne Convention. These articles, respectively, give authors of literary, artistic, dramatic or dramatic-musical works exclusive rights to authorize: (1) public performance,¹³⁷ broadcasting, or communication of their work,¹³⁸ (2) public recitation of their works, and (3) communication to the public of a recitation.¹³⁹ In several African countries where public recitation of plays and dramas are a part of rural village life,¹⁴⁰ could an African country permit the continuation of this practice without violating the TRIPs Agreement? This certainly is a plausible argument. The TRIPs Agreement recognizes limitations and exceptions to the exclusive rights it seeks to enforce.¹⁴¹ While earlier sections of this Article have considered the possible limits of the scope of these exceptions, it seems clear in

133. *Id.* at 218-19.

134. *Id.*

135. See Harlbut, *supra* note 72, at 382-90.

136. See generally Brian Barron, *Chinese Patent Legislation in Cultural and Historical Perspective*, 6 INTELL. PROP. J. 313 (1991) (discussing the influences of Confucianism and socialism on Chinese patent law).

137. Berne Convention, *supra* note 93, art. 11.

138. *Id.* art. 11bis.

139. *Id.* art. 11ter.

140. See KAREN BARBER, *THE POPULAR ARTS IN AFRICA* 1-10 (1986).

141. See TRIPs Agreement, *supra* note 1, arts. 13 (copyright limitations) & 30 (patent limitations).

the copyright setting that the common law doctrine of fair use is implicated by Article 13 of the TRIPs Agreement.¹⁴² If this is so, then the only real question is whether or not a national court would determine this type of local use to be fair use.

To extend this argument to a contemporary problem, one should consider the playing of copyrighted music in the waiting room of a doctor's office, pub, or other public setting. Such activity was recently attacked as an infringement of a copyright in the United States.¹⁴³ It may be argued, however, that since this activity is territorial and arguably not "commercial," it falls outside the auspices of the TRIPs Agreement, although perhaps not the Berne Convention.¹⁴⁴ It is clear that a developing country must grant foreigners the rights prescribed under the TRIPs Agreement through implementing domestic legislation.¹⁴⁵ This requirement, however, does not answer the question of whether the TRIPs Agreement has jurisdiction over *all* violations of intellectual property rights regardless of whether such violation is trade-related.

Finally, must a national court first determine, as a matter of procedure, that an infringement is not trade-related before proceeding to apply other legal arrangements? Determination of an answer to this question is dependent on the manner of implementation of the TRIPs Agreement in various countries. In the United States, the answer is certainly in the affirmative. In the European Union, debate continues over the method by which the TRIPs Agreement will be applicable to member states.¹⁴⁶ What seems clear is that the results in this regard are not going to be consistent. This will affect the substantive jurisdiction of the TRIPs Agreement in relation to the domestic judicial system of all member countries.

IV. ENFORCEMENT PROSPECTS FOR THE TRIPs AGREEMENT IN DEVELOPING COUNTRIES

The TRIPs Agreement requires that, at a minimum, intellectual property laws in member countries of the WTO must conform to its

142. Under the Berne Convention, which uses the same terminology, the doctrine of fair use was clearly contemplated. See Berne Convention, *supra* note 93, arts. 9(2) & 10*bis*; see also RICKETSON, *supra* note 93, at 477-548.

143. See Stephanie N. Mehta, *ASCAP to Sam: Play It Again, but Pay for It*, WALL ST. J., Sept. 27, 1994, at B1.

144. Assuming the developing country is a member of the Berne Convention.

145. See TRIPs Agreement, *supra* note 1, art. 1.

146. For one perspective on this, see Josef Drexl, *The TRIPs Agreement and the EC: What Comes Next After Joint Competence*, STUDIES IN INDUS. PROP. & COPYRIGHT L. (forthcoming 1996).

terms.¹⁴⁷ What this Article has tried so far to demonstrate is that the extent of this requirement, and more importantly, the specific content of this requirement, are unclear. Nonetheless, the probabilities of success for enforcement of the TRIPs Agreement must be examined from two perspectives, namely internal and external enforcement. Internal enforcement deals primarily with the possibility of private individual action within a developing country under the TRIPs Agreement. This is directly related to and determined by prevailing socio-economic and legal conditions in these countries. The prospect of internal enforcement also depends on the mechanisms used to implement the TRIPs Agreement in developing countries. External enforcement, on the other hand, deals with the use of trade sanctions or the threat of trade sanctions to force compliance with TRIPs Agreement provisions. The success of this form of enforcement is dependent on the legitimacy of the WTO dispute resolution process in other areas of the Agreement.

A. Internal Enforcement

The TRIPs Agreement requires member countries to ensure that enforcement procedures as specified in the Agreement are made available under national laws, particularly with regard to intellectual property rights covered under the Agreement.¹⁴⁸ In addition, the Agreement specifies the terms on which such enforcement procedures are to be administered. These terms include an expeditious process,¹⁴⁹ written decisions,¹⁵⁰ and an opportunity for judicial or administrative review.¹⁵¹ The Agreement, however, curtails the breadth of these requirements by not requiring special enforcement structures or processes be established.¹⁵² The construction of Article 41 leaves open the question of what exactly developing countries are required to undertake internally in order to comply with the TRIPs Agreement. Where, for example, a developing country does not have a judicial system that is equipped to provide the "due process" requirements of the TRIPs Agreement,¹⁵³ may such

147. See TRIPs Agreement, *supra* note 1, art. 41.

148. See *id.* This provision leads one back to a question which shadows this article—what precisely is a trade related intellectual property right? Put differently, at what point does a violation of the Paris Convention or the Berne Convention translate into a TRIPs Agreement violation? Or does a violation of one result in a *per se* violation of the TRIPs Agreement?

149. *Id.* art. 41(2).

150. *Id.* art. 41(3).

151. *Id.* art. 41(4).

152. *Id.* art. 41(5).

153. See *id.* art. 42.

a country rely on the built-in limitation to Article 41 which provides that there is no obligation to put in place a *distinct* judicial system for the enforcement of intellectual property rights? While one might perhaps argue that there exists an obligation under the Agreement to ensure that the existing judicial system is adapted to facilitate TRIPs Agreement enforcement, there is still the question of the extent that a developing country must go to comply with Articles 41(2), (3), (4), and (5) of the Agreement. This is particularly the case for developing countries which, for the most part, lack resources to devote to extensive judicial processes. It may be argued that Article 41(5), which specifically provides that members do not have to expend additional sums of money for the enforcement of intellectual property rights under the TRIPs Agreement, simply implies that developing country members have to use a "good faith" effort to comply with the enforcement provisions.

There is a significant question about the types of remedies that the TRIPs Agreement provision envisages.¹⁵⁴ Many of these remedies, such as injunctions or criminal penalties,¹⁵⁵ are unfamiliar to the subject matter of real property law, and thus, will not be easily imported into existing legal doctrines in these countries. In addition, the provisions for criminalizing counterfeiting or copyright piracy is sure to create unrest in those countries where, as explicated earlier, cultural models remain deeply embedded in the economic and legal structure. Indeed, the question will invariably arise as to whether the broader legal and political framework existing in these countries will not be largely incompatible with these sanctions.

Finally, there remains the question of invoking the TRIPs Agreement before a national court. Fundamental to the enforcement of TRIPs Agreement provisions is the existing knowledge base within the judiciary and practicing bar about intellectual property rights. The TRIPs Agreement requires the enforcement of all rights within a maximum of ten years—rights which developed countries were privileged to formulate, adapt, and assimilate over a period lasting more than a century. In addition, these rights and remedies resonate within the pre-existing legal, social, and economic framework of developed countries.

What the TRIPs Agreement ultimately asks of developing countries is that they conform to a system and philosophy of laws and values which are alien, and in some cases, in direct conflict with frameworks which historically have sustained these societies. While this is not impossible and in fact may be desirable, it would be wishful to assume that enforcement of the TRIPs Agreement will take place without some form of internal resistance, however this is

154. See *id.* arts. 44-46.

155. See *id.* art. 61.

manifested. After all, even countries must learn how to walk before being asked to leap.

B. *External Enforcement*

External enforcement refers to the prospects of trade sanctions as a motivating force to secure compliance by developing countries. The threshold question in this regard is the process by which the TRIPs Agreement is triggered under the broader auspices of the WTO system. Does triggering depend on the results or lack thereof of internal enforcement? If so, will a developing country be required under the TRIPs Agreement to enact legislation complying with a WTO Panel decision, even if compliance with such a decision arguably violates another WTO provision (e.g., Article 41(5))? What happens when a developing country simply cannot, for structural reasons, police the application of the TRIPs Agreement domestically? This was recently the case with the resolution of the United States-Chinese trade conflict over the protection of intellectual property rights.¹⁵⁶ Despite overt attempts by the government to enforce intellectual property rights, the number of obstacles in a country as big and geographically diverse as China simply proved too much. It appears again that in this context, just like the pre-TRIPs Agreement era, what may reasonably be required of a developing country is that the country employ consistent good faith efforts to secure compliance with the TRIPs Agreement.

The threat of trade sanctions, while useful, cannot in itself accomplish enforcement of the TRIPs Agreement. The core issue in developing countries is development—that is, the need for infrastructure, the provision of basic human needs, the guarantee of basic human rights, and the upward mobility of the people in general. Intellectual property rights, as a sub-set of a larger body of rights prescribed by public law, will remain difficult to enforce in countries whose priorities still remain the provision of fundamental amenities to its people. In light of such priorities, intellectual property rights, divorced from perceived immediate needs of a country, will likely be treated as luxuries. As a result, even the decision to use trade sanctions as a means of external enforcement must be circumscribed by political wisdom on the part of *developed* countries, depending on the internal situation of specific developing countries.¹⁵⁷ In the meantime, however, the substantive issue of

156. See *supra* note 114 and accompanying text.

157. The United States used this approach, for example, in the former U.S.S.R., with regards to intellectual property infringement and even human rights violations, preferring to turn a blind eye out of a higher concern to pursue political and economic stability in the region.

when to use either external enforcement or internal enforcement and the larger question—can both processes proceed simultaneously¹⁵⁸—must still be resolved.

C. Developing Countries and the Dispute Resolution Understanding

Developing countries faced a series of problems particular to them in the pre-Uruguay Round dispute resolution mechanisms provided under GATT.¹⁵⁹ As a result, special procedures were established to facilitate the effectiveness of the dispute resolution process on their behalf.¹⁶⁰ This "padding" attempt, however, was only barely used.¹⁶¹ The reason obviously was the economic disparity between developed and developing countries. This disparity was exemplified and brought to the forefront in 1983 with the United States-Nicaragua dispute over quotas for sugar.¹⁶²

A GATT panel ruling determined that the U.S. quota system violated GATT rules and constituted an impairment of Nicaragua's benefits under GATT.¹⁶³ The United States, however, indicated that it would not stop the practice.¹⁶⁴ Nicaragua obviously had the option of sanctioning the United States, but in reality, this option was unavailable to it as a developing country. Sanctions against a country as big as the United States would have barely made an impact. In addition, it could have exposed Nicaragua to other detrimental foreign policy actions taken against it by the United States.

An earlier complaint made by Brazil to the GATT panel against European Union sugar export subsidies also highlights the practical issues developing countries must confront in any multilateral regime.¹⁶⁵ Although the GATT panel ruled in favor of Brazil,

158. This author would argue yes, as internal enforcement may raise different legal issues or implicate a different body of intellectual property law than government pursued enforcement does. It is easy, however, to see an argument develop maintaining that such double routes of enforcement are *per se* illegitimate.

159. For a brief overview of these problems, see JACKSON ET AL., *supra* note 10, at 346.

160. See Procedures under Article XXIII, Apr. 5, 1966, GATT B.I.S.D. (14th Supp.) at 18.

161. JACKSON ET AL., *supra* note 10, at 347.

162. United States-Imports of Sugar from Nicaragua, Mar. 13, 1984, GATT B.I.S.D. (31st Supp.) at 67.

163. *Id.* at 74.

164. *Id.* at 72.

165. See European Communities—Refunds on Exports—Complaint by Brazil, Nov. 10, 1980, GATT, B.I.S.D. (27th Supp.) at 69; see also, Maria Marta Ching, *Evaluating the Effectiveness of the GATT Dispute Settlement System for Developing Countries*, 16 WORLD COMPETITION L. & ECON. REV. 81 (1992).

European Union compliance with the panel continued to be a source of complaint. The degree to which a defendant nation can ignore or prevaricate in complying with a final decision against it *and get away with it* is a significant problem for all multilateral agreements.¹⁶⁶

One of the great strengths of the WTO system is the new dispute resolution process which favors a rule-oriented approach to dispute resolution. The use of the system is mandatory under the WTO.¹⁶⁷ Under the DSU, the dispute resolution process is stream-lined, and time periods between decisions and enforcements effectively shortened.¹⁶⁸ The DSU eliminates the possibility of blocking a panel report which was a serious problem in the old GATT system. There is an appellate body which is authorized to consider issues of law and legal interpretations applied by the panel.¹⁶⁹ Under this new system, there is an increased chance that measures taken against developing countries by developed countries will be subject to greater scrutiny. Article 21.3 of the DSU requires a losing party to indicate what steps it plans to take in implementing the panel's recommendations. Where these recommendations are not implemented, the prevailing party is entitled to seek compensation or to suspend concessions.¹⁷⁰

As a package deal, the new process significantly reduces the possibilities of procedural abuse or manipulation by member states. The new and improved dispute resolution procedure, however, cannot avail to developing countries a system that delivers substantive gains for them. Where a major economic power like the European Union or the United States refuses to comply with a panel report, the unfortunate result is that the process is discredited. When this happens to a developing country outside of a TRIPs Agreement context, the legitimacy of TRIPs Agreement enforcement within the process is also implicated. The success of enforcement for the TRIPs Agreement is thus dependent on the general success of the DSU and the perception by developing countries that the system works for developed and developing nations alike.

166. See generally, Abram Chayes, *Nicaragua, the United States, and the World Court*, 85 COLUM. L. REV. 1445 (1985) (noting the U.S. withdrawal from submission to the compulsory jurisdiction of the International Court of Justice).

167. See Understanding on Rules and Procedures Governing the Settlement of Disputes, art. 23.1, Apr. 15, 1994, Annex 2, LEGAL INSTRUMENTS—RESULTS OF THE URUGUAY ROUND Vol. 1; 33 I.L.M. 112 (1994).

168. See, e.g., *id.* art. 17 (limiting appellate proceedings to 90 days maximum, although the recommended period is 60 days); *id.* art. 15 & Appendix 3 (regulating time for issuance of the panel report once the panel is established).

169. See *id.* art. 17.

170. See *id.* art. 22.1.

V. CONCLUSION

The TRIPs Agreement has certainly clipped the wings of developing countries, if only by accomplishing a *de facto* adherence to the two main conventions on international protection of intellectual property.¹⁷¹ But, as this Article has argued, the real challenge facing developing countries in their development objectives is a need to evaluate traditional strategies for overall development goals rather than focus primarily on the international proprietary system. Studies which find that foreign patent applications increase with the rate of economic development reinforce the need for developing countries to embark on comprehensive development strategies addressing areas such as education, market reform, and stable economic policies regarding foreign investment. In particular, poorer developing countries will find that focusing solely on technology transfer issues and devising ways to make the most of the TRIPs Agreement will not bring about the conditions or opportunities for growth that is so badly needed.

In addition to the specific areas discussed in this Article, the TRIPs Agreement has as its greatest obstacle the costs of education, administration, and implementation. Most developing countries will struggle with these issues for some time to come. Developed countries wrongly presume that the intellectual property system, as conceived in Western tradition, has an intuitive logic that developing countries will somehow grasp. Developed countries underestimate the degree to which local institutions, traditional ideas, and social values will resist a wholesale acceptance and application of the philosophy of intellectual property rights, and consequently, the TRIPs Agreement.

It is not possible to generalize about the impact of all the categories of intellectual property covered by the TRIPs Agreement. In some areas, such as trademarks, developing countries stand to benefit from increased protection which may limit the number of substandard goods circulating in their markets. These goods flow from piracy and counterfeiting activity, as well as from multinationals who are able to reduce costs of manufacture through the use of substandard materials. In the prime area of copyright, significant issues remain unresolved, particularly with regard to enforcement mechanisms and the interpretation of certain Berne Convention articles which were incorporated into the TRIPs Agreement. In the patent area, the incorporation of Article 5 of the Paris Convention—which has long been a sore spot in the international relations of the patent system and which essentially accomplishes a *de facto* revision

171. India, for example, did not adhere to the Paris Convention but now is subject to its major provisions via the TRIPs Agreement.

of the Paris Convention in directions previously resisted by developing countries—portends conflict over judicial constructions of terms not explicitly defined under the TRIPs Agreement or the Paris Convention.

An ingenious twist to the new WTO system is the distinction drawn between least developing countries and developing countries.¹⁷² The distinction appears to be more functional than anything else, at least in the context of the TRIPs Agreement. Quite clearly, countries categorized as least developing do not pose an immediate or significant danger in the area of intellectual property infringement. In addition, these countries may be of little or no significance to the economic interests of developed countries. Consequently, they are exempted from application of the TRIPs Agreement for ten years.¹⁷³ The battlefield, reminiscent of the attempts to revise the Berne Convention at Stockholm, will clearly be over the question of what a least developing country is,¹⁷⁴ and more importantly, over who gets to determine this.¹⁷⁵ The distinction is important, however, because it prevents free riding by developing countries who can afford the transition to the complex system of international intellectual property protection as envisaged under the TRIPs Agreement.

The overall prospects of TRIPs Agreement enforcement will be determined in large part by the general efficacy of the dispute resolution process of the WTO. The willingness of developing countries to comply with WTO decisions will correspond to the degree to which the system is perceived as being equitable, as well as the degree to which the TRIPs Agreement is interpreted to permit development objectives to be meaningfully implemented. Finally, it is important to observe that the protection of intellectual property rights within the auspices of the WTO effectively links the well-being of the entire system of world trade to the success of the TRIPs Agreement and vice versa. This perhaps is the greatest source of enforcement prospects for the TRIPs Agreement. History suggests, however, that this may also be its Achilles heel.

172. See TRIPs Agreement, *supra* note 1, art. 66.

173. See *id.*

174. See, e.g., Eleanor D. O'Hara, "Developing Countries"—A Definitional Exercise, 15 BULL. COPYRIGHT SOC'Y U.S.A. 83 (1967) (discussing various proposed definitions of "developing countries").

175. Currently, different standards determine what country is regarded as "developing." The United Nations, the International Monetary Fund, and the International Bank for Reconstruction and Development all use relatively different yardsticks in making this determination. While some countries invariably fall into all three classifications, others, such as Singapore or China, do not.

