2005

Traditional Knowledge & Intellectual Property: A TRIPS-Compatible Approach

Daniel J. Gervais

Follow this and additional works at: https://scholarship.law.vanderbilt.edu/faculty-publications

Part of the Contracts Commons, and the Intellectual Property Law Commons

Recommended Citation
Available at: https://scholarship.law.vanderbilt.edu/faculty-publications/830

This Article is brought to you for free and open access by the Faculty Scholarship at Scholarship@Vanderbilt Law. It has been accepted for inclusion in Vanderbilt Law School Faculty Publications by an authorized administrator of Scholarship@Vanderbilt Law. For more information, please contact mark.j.williams@vanderbilt.edu.
TRADITIONAL KNOWLEDGE & INTELLECTUAL PROPERTY: A TRIPS-COMPATIBLE APPROACH

Daniel Gervais*


TABLE OF CONTENTS

INTRODUCTION ............................................ 137
I. TRADITIONAL KNOWLEDGE & INTELLECTUAL PROPERTY .......... 140
II. COMPATIBILITY ANALYSIS ................................ 149
    A. Nature of the Owner .................................... 149
    B. Nature of the Object ...................................... 151
    C. Nature of the Right(s) ....................................... 155
    D. Term of Protection Issues ................................. 157
III. POSSIBLE WAYS FORWARD IN THE DOHA CONTEXT ............ 160
    A. Towards a Declaration on Traditional Knowledge and Trade 160
    B. (Draft) Ministerial Declaration on Traditional
       Knowledge and Trade ........................................ 162
       1. Text of the Proposed Declaration ...................... 162
       2. Comment .................................................. 163
    C. Documentation Issues ........................................ 164
    D. The Role of Dispute Resolution ............................. 165
CONCLUSION ............................................. 166

INTRODUCTION

This paper begins where the latest study commissioned by the World Intellectual Property Organization (WIPO)1 ends:

* Vice-Dean, Research and Professor of Technology Law, Faculty of Law (Common Law), University of Ottawa. Visiting Scholar, Stanford Law School (Spring ’04). Former Head of Section, World Intellectual Property Organization (WIPO); and Legal Officer, GATT/WTO. Professor Gervais is the author of THE TRIPS AGREEMENT: DRAFTING HISTORY AND ANALYSIS (2d ed. 2003). The author wishes to thank the editors of the Michigan State Law Review and in particular Joseph J. Gavin for their diligent editing work. The author was the 2004 Trilateral Distinguished Scholar at Michigan State University College of Law. Financial assistance from the Social Sciences and Humanities Research Council of Canada (SSHRC), Bell University Labs and the Law Foundation of Ontario is gratefully acknowledged.

IP [should] provide an important means for strengthening the range of incentives that local communities need for conserving genetic resources and associate TK. In fact, IP can also provide incentives for augmenting this knowledge and resource base. . . . In the absence of adequate mechanisms to provide protection for such efforts, proper incentives are not yet available to encourage more people to pursue such innovations. The ultimate test of any incentive system is whether it can nurture and augment the spirit of experimentation, exploration and sharing, so evident in traditional communities over the years. We need to find ways of ensuring that the value system of many of these communities does not become a reason for their remaining poor, and thus, ultimately, eroding their vitally important knowledge and resource base.\(^2\)

The challenges facing us are multiple: First, we need to continue to build, and then cross, a cultural bridge to explain current forms of intellectual property to holders of traditional knowledge. This will achieve a dual objective: we could all benefit from their insights to allow us to work towards improving the intellectual property system to better respond to their needs; it would also allow traditional knowledge holders to reap available benefits from extant forms of protection, including collective and certification marks\(^3\) and, where possible, patent and copyright protection.\(^4\) Tort and contract law may also offer some useful remedies.\(^5\) Second, we need to re-examine in depth the current forms of intellectual property. This is an indispensable first step before any new or “sui generis” form of protection is enshrined into a new international instrument.\(^6\) Then, if current intellectual property norms are

---

2. Id. at 163, Part III.
4. See Gupta, supra note 1, at 4-5.
5. See Gervais, supra note 3, at 973-75; Nuno Pires de Carvalho, Requiring Disclosure of the Origin of Genetic Resources and Prior Informed Consent in Patent Applications Without Infringing the TRIPS Agreement: The Problem and The Solution, 2 WASH. U. J.L. & POL’Y 371, 399 (2000) (suggesting that patent enforcement (rather than grant) be made subject to the disclosure of the origin of genetic material and evidence of informed consent of traditional knowledge holders concerned). With respect to contract law, traditional knowledge holders could negotiate with laboratories and/or pharmaceutical companies to obtain a share of the benefits generated by a product or process developed on the basis of traditional knowledge (about e.g., the medicinal properties of certain plants) without a preexisting intellectual or other statutory right in that knowledge.
6. See WIPO Intergovernmental Commission on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (Revised Version of Traditional Knowledge: Policy and Legal Options), WIPO/GRTKF/IC/6/4 (Feb. 19, 2004) [hereinafter WIPO Traditional Knowledge], at 21, stating

In the judgment of some communities and countries, however, the above-mentioned adaptations of existing IP rights systems may not be fully sufficient to cater to the
found to be inappropriate, we may need to consider new international norms, including a *sui generis* right and norms related to environmental protection.

Against that backdrop, this paper addresses one of the issues in that list, namely to what extent traditional knowledge is commensurate with intellectual property. The Article begins by situating the notion of "traditional knowledge" for the purposes of the paper. It then examines briefly the concept of "intellectual property" to determine the extent to which it can accommodate traditional knowledge protection. In a third part, the Article offers possible avenues to explore how to better protect traditional knowledge holders within the parameters of the Trade-Related Aspects of Intellectual Property Rights ("TRIPS") Agreement. This choice seems reasonable for a number of reasons. First, while one is perfectly free to criticize TRIPS or suggest that it be amended, the prospect and extent of any such modifications are unknown and difficult to predict. In addition, if amendments do happen, they are likely to require several years to negotiate and enter into force. Third, one would have to be an extreme optimist to think that TRIPS will be amended in ways that respond to every need and concern of holders of traditional knowledge. For all these reasons, finding solutions within the confines of the current TRIPS text seems a rational way to proceed—which does not mean that work on rewriting TRIPS is ill-conceived. Both approaches are complementary. One should also bear in mind that traditional holistic and unique character of TK subject matter. The call for *sui generis* measures generally arises from such perceived shortcomings of conventional IP rights.

---

7. See supra note 6 and accompanying text.


9. See infra note 48 and accompanying text.

10. Which may happen as part of the Doha Round. An attempt to update, e.g., the patent section (Articles 27-33), may prompt demands by others to reopen the copyright, trademark or enforcement sections. As of March 2004, there were ongoing consultations on how to convert the 30 August 2003 Decision on paragraph 6 of the Doha Declaration (on access to generic medicines) into an amendment of the TRIPS Agreement. DANIEL GERVAIS, *THE TRIPS AGREEMENT: DRAFTING HISTORY AND INTERPRETATION* 43-51 (2d ed. 2003).
knowledge and biodiversity are specifically mentioned in the Doha Ministerial Declaration.11

I. TRADITIONAL KNOWLEDGE & INTELLECTUAL PROPERTY

According to WIPO, "traditional knowledge" comprises: tradition-based literary, artistic or scientific works; performances; inventions; scientific discoveries; designs; marks, names and symbols; undisclosed information; and, all other tradition-based innovations and creations resulting from intellectual activity in the industrial, scientific, literary or artistic fields.12

In the above definition,

[i]tradition-based refers to knowledge systems, creations, innovations and cultural expressions which: have generally been transmitted from generation to generation; are generally regarded as pertaining to a particular people or its territory; and, are constantly evolving in response to a changing environment.13

Characteristically, traditional knowledge is thus knowledge that: is traditional only to the extent that its creation and use are part of the cultural traditions of a community—"traditional," therefore, does not necessarily mean that the knowledge is ancient or static; is representative of the cultural values of a people and thus is generally held collectively; is not limited to any specific

11. WTO Ministerial Conference, Doha Ministerial Declaration, WT/MIN(01)/DEC/1, at 4 (Nov. 20, 2001) [hereinafter Doha Declaration] which reads in part as follows: We instruct the Council for TRIPS, in pursuing its work programme including under the review of Article 27.3(b), the review of the implementation of the TRIPS Agreement under Article 71.1 and the work foreseen pursuant to paragraph 12 of this Declaration, to examine, inter alia, the relationship between the TRIPS Agreement and the Convention on Biological Diversity, the protection of traditional knowledge and folklore. . . .

Id.


13. Id.
field of technology or the arts; is "owned" by a community and its use is often restricted to certain members of that community.

By contrast, intellectual property protection, in the form of copyrights, trademarks, designs & patents usually applies to: "An identifiable author, inventor or other originator (who will be individually rewarded); An identifiable work, invention or other object; and Defined restricted acts." Traditional knowledge does not fit well within these three characteristics of intellectual property rights. There are rarely well-identified authors or inventors of creations, inventions and knowledge passed on and improved from one generation to the next. The knowledge is sometimes amorphous and hard to circumscribe for the purposes of a patent application or to identify as one or more copyrighted works. Finally, the types of acts that indigenous communities want to prevent are not necessarily those that propertization provides. For instance, benefit-sharing obligations, which can be based on

14. The concept of ownership is used loosely here to denote the right of a person or group over an object. At least some aboriginal nations recognize individual "ownership." See KARL N. LLEWELLYN & E. ADAMSON HOEBEL, THE CHEYENNE WAY: CONFLICTS AND CASE LAW IN PRIMITIVE JURISPRUDENCE 232-37 (1941). Llewellyn and Hoebel also noted that "no highly developed regime of incorporeal property in names, songs, and the like, appeared . . . ." Id. at 237. It seems that, in such a case, "ownership" fell on the default rule, which seemed to have been communal rather than individual property.


In applying the provisions of this Part of the Convention governments shall respect the special importance for the cultures and spiritual values of the peoples concerned of their relationship with the lands or territories, or both as applicable, which they occupy or otherwise use, and in particular the collective aspects of this relationship.

Id. The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), 25 U.S.C. §§ 3001-3013 (1994), also recognizes that there are certain "cultural" objects that cannot be alienated by individual members of an indigenous people and there are, therefore, forms of traditional knowledge that belong to the "collective." Collective property is the norm in several indigenous cultures. See Richard Herz, Legal Protection for Indigenous Cultures: Sacred Sites and Communal Rights, 79 VA. L. REV. 691, 697 (1993); see also Michael McDonald, Should Communities Have Rights? Reflections on Liberal Individualism, 4 CAN. J.L. & JURIS. 217, 218 (1991); Guérin v. The Queen [1984] S.C.R. 335 (Can.).

16. Duration is not a factor. While the Constitutional text seems to prescribe a limited duration for copyrights and patents, other intellectual property rights, in particular confidential information and trademarks, can be protected indefinitely.

ethical standards, or national or international legal norms, or a combination thereof, resemble more a liability-type regime, or perhaps a compulsory license, than a full intellectual property right, in large part because they do not include a right to exclude/prohibit.

To determine whether traditional knowledge protection meshes with intellectual property, one must first answer a fairly basic question: what is intellectual property? It is usually defined as a list of statutory rights, with

---

18. See Gupta, supra note 1, at 152-56.
19. There are examples in at least Bolivia, Brazil, Chile, Colombia, Mexico and Nicaragua. See S. James Anaya & Robert A. Williams, Jr., The Protection of Indigenous Peoples' Rights over Lands and Natural Resources Under the Inter-American Human Rights System, 14 HARV. HUM. RTS. J. 33, 59-63 (2001). There may also be a constitutional obligation in Canada to provide some form of protection to traditional practices and customs of Canadian Aboriginal peoples. See Gervais, supra note 17, at 492.

Each Contracting Party shall, as far as possible and as appropriate:

(j) Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices ....

Id.
21. See J. H. Reichman, Of Green Tulips and Legal Kudzu: Repackaging Rights in Subpatentable Innovation, 53 VAND. L. REV. 1743, 1777 (2000); WIPO Traditional Knowledge, supra note 6, at 23, stating that,

[s]uggestions have also been made for TK-specific innovation laws, built on modified liability principles. Such laws would entitle TK holders to compensatory contributions from TK users who borrowed traditional know-how for industrial applications of their own during a specified period of time. They would combine the equitable reallocation of benefits without constraining open access to know-how, and avoid the division or atomization of the community's shared TK base into ever-smaller parcels that are withdrawn from the TK holding community's own intellectual commons through the vehicle of private property rights. In some cases, there is concern that a web of exclusive rights over pre-existing TK, overlaying communal customary laws, could stand in tension with collective transmission and custodianship. The compensatory liability approach has also been used in cases where TK has already been published and publicly available for some time, so as to balance equitable benefit-sharing with prior use of TK undertaken in good faith.

Id.
some additional protection under contract\textsuperscript{22} or tort law.\textsuperscript{23} And as mentioned above, an intellectual property right usually involves a well-defined rightsholder (one or more identifiable persons) and a well-defined object (invention as claimed in a patent or copyrighted work). But are these characteristics historical accidents or truly essential elements of intellectual property? Put differently, which characteristics of intellectual property rights ("IPRs") are part of their nature and which are there only as a result of a process of evolution that is not necessarily complete? If all or some of these characteristics are not essential components of IPRs, one could contemplate changes and adaptations to the intellectual property regime to make it more culturally neutral. From the policy-setting angle, the question is this: How far can the intellectual property system be adapted to the needs of indigenous peoples (in an effort towards cultural relativism), without endangering the foundations of the system itself?\textsuperscript{24} While there may be rational justifications for what the law is or should be, the way laws are put in place and interpreted

\bibitem{} See, for example, confidential information protected by non-disclosure and other similar agreements.
\bibitem{} See, for example, certain forms of unfair competition, palming off or passing off which may not have been codified.
\bibitem{} The work of Karl Llewellyn is relevant in this context. Perhaps adapting the system to meet the needs of indigenous peoples will lead to improvements available to all, as Llewellyn suggested with respect to dispute settlement in his seminal book \textit{The Cheyenne Way}. \textit{Llewellyn \& Hoebel, supra} note 14. For a recent account of the impact of Llewellyn's thinking, see Ajay K. Mehrotra, \textit{Law and the "Other": Karl N. Llewellyn, Cultural Anthropology, and the Legacy of The Cheyenne Way}, 26 \textit{Law \& Soc. Inquiry} 741, 762-70 (2001). We could also quote from Professor Ragsdale's work in this area:

\begin{quote}
Personal values--beliefs, visions, world views, and cosmologies--are the building blocks of consensus which, in turn, underlies the politics, the customary restraints, and the codified law. The origins of law, even the supposedly non-political decisional law of judicial opinions, are rarely neutral, since they flow from multi-faceted feelings and passions. Moreover, in the long-term sense, there must generally be an ongoing union between the personal values and beliefs of an effective majority of the polity and the law for the precepts to survive.
\end{quote}

in any given spatial and temporal context is clearly linked to the dominant culture(s), beliefs and social mores. In the same way, intertwined within practical solutions, traditional knowledge often transmits the history, beliefs, aesthetics, ethics, and traditions of a particular people. For example, plants used for medicinal purposes also often have symbolic value for the community. Many sculptures, paintings, and crafts are created according to strict rituals and traditions because of their profound symbolic and/or religious meaning.

Law and legal ideologies are a facet of culture, especially if culture is defined as the “interactive aggregate of common characteristic that influence a human group’s response to its environment.” Intellectual property rights as means of rewarding individual effort are very much a child of the

25. See Richard A. Posner, Law and Legal Theory in England and America 2, 3, 20 (1996) (defending the thesis that law cannot be analyzed out of its broader context). This approach has led to the call for cosmopolitan jurisprudence and legal studies. See William L. Twining, Globalisation and Legal Theory 254 (2000) ([G]eneral jurisprudence is broader and more intellectually ambitious, . . . [i]t includes all the intermediate stages between two or more legal orders, traditions, or cultures, viewing law in the whole world and beyond. ‘General’ is relative in a way that ‘global’ is not.”). This view was also reflected in the American Anthropological Association’s 1947 Statement that a universal bill of rights would not be possible because of the particularities of each culture. American Anthropological Association, Statement on Human Rights, 49 AM. ANTHROPOLOGIST 539, 542 (1947). The U.S. Bill of Rights seems similarly (though maybe not inescapably) “individualistic.” See John Kincaid, Foreword: The New Federalism Context of the New Judicial Federalism, 26 Rutgers L.J. 913, 936 (1995) (“The nationalization of the U.S. Bill of Rights, which is necessarily individualistic rather than communitarian or majoritarian in orientation, transformed the federal government in the second half of this century into a vehicle for liberating persons from the coercion of state and local jurisdictions.”).

26. WIPO Fact-Finding Missions, supra note 12, at 212.
Enlightenment and 18th century European culture. Prior to the 18th century, apart from a few well-known cases, attribution (let alone economic rights) to a specific author (in the sense of the actual maker) or patent-type monopolies were exceptional. Works belonged (in every sense) to the Roman Catholic Church for most of the Middle Ages. Prior to that attribution to a well-known author e.g., certain biblical letters, was common, independent of who was the actual author. In recasting intellectual property with traditional knowledge in mind, one should not forget that certain constitutive elements of intellectual property may indeed be products of a specific place.


Until the middle of the Renaissance, the Catholic Church and wealthy patrons overarched artists’ creativity in Europe and England. As the Church’s influence decreased, artistic innovation and expression burgeoned. The expansion of artists’ creativity fostered the momentum for the assertion of artists’ personal rights. Michelangelo, capitalizing upon his outstanding reputation, first demanded the bundle of rights that now fall under the umbrella of Moral Rights. In a sculpture commissioned for a chapel in St. Peter’s Cathedral, Michelangelo, first asserting his right of attribution, secretly chiseled his name into the sculpture after hearing of the sculpture being falsely attributed to his patron.

Id. at 1206; see also Harold C. Streibich, The Moral Right of Ownership to Intellectual Property: (pt. 1) From the Beginning to the Age of Printing, 6 MEM. ST. U. L. REV. 1, 5 (1975).
and time, namely 18th century Europe, with subsequent evolution driven mostly by Western Europe, North America and, to a certain extent, the most industrialized nations in Asia and Oceania. Indeed, until now, countries that have tried to increase the level of international intellectual property protection have all been in the “West” or part of the so-called “First World.”

Might there be ways to achieve the same underlying policy objective, without losing the existing acquis, by modifying the perspective and the legal tools used to implement that objective? That is precisely the challenge: finding ways to provide flexibility to protect traditional knowledge without unfavorable consequences for existing intellectual property owners. I suggest that the encouragement of creativity and inventiveness is the actual broad policy objective, independent of the actual philosophical underpinning one chooses to justify the current regime. The U.S. Constitution actually

33. That is, until the mention of biodiversity and traditional knowledge in the Doha Declaration of November 2001. See Doha Declaration, supra note 11. A statement issued by the WIPO at the Inter-Regional Meeting on Intellectual Property and Traditional Knowledge, organized in Chiangray, Thailand in November 2000, makes the point quite clearly:

With the emergence of modern biotechnologies, genetic resources have assumed increasing economic, scientific and commercial value to a wide range of stakeholders; ... traditional knowledge, whether or not associated with those resources, has also attracted widespread attention from an enlarged audience; ... other tradition-based creations, such as expressions of folklore, have at the same time taken on new economic and cultural significance within a globalized information society.

WIPO Inter-Regional Meeting on Intellectual Property and Traditional Knowledge, Nov. 9-11, 2000, at 2 [hereinafter WIPO Inter-Regional Meeting]. See also GERVAIS, supra note 10, at 43-45 & 58-67.

34. See GERVAIS, supra note 10, at 10-26.

35. The owners would then use their significant lobbying strength to block any attempt to agree or enforce new international norms. See Susan K. Sell, Industry Strategies for Intellectual Property and Trade: The Quest for TRIPS, and Post-TRIPS Strategies, 10 CARDOZO J. INT'L & COMP. L. 79, 101-02 (2002).

36. This paper is not the adequate context to do a thorough comparative analysis of potentially applicable philosophical doctrines. See supra note 29 and accompanying text (discussing the Kantian/Hegelian personality rights on the continent). For a brief overview, see William W. Fisher III, Theories of Intellectual Property, in STEPHEN R. MUNZER, NEW ESSAYS IN THE LEGAL AND POLITICAL THEORY OF PROPERTY 169 (2001), stating:

The first and most popular of the four [theoretical approaches] employs the familiar utilitarian guideline that lawmakers’ beacon when shaping property rights should be the maximization of net social welfare. Pursuit of that end in the context of intellectual property, it is generally thought, requires lawmakers to strike an optimal balance between, on one hand, the power of exclusive rights to stimulate the creation of inventions and works of art and, on the other, the partially offsetting tendency of such rights to curtail widespread public enjoyment of those creations.

Id. See also Property Rights and Ideal Objects, 13 HARV. J.L. & PUB. POL’Y 817 (1990).
states the purpose: to promote the progress of science and useful arts. While this was interpreted from a very "individualistic" perspective by the Supreme Court, there are other ways of promoting progress. In fact, if, within a certain culture, financial gain is not highly valued, the Constitutional objective should not only be attained by making it possible to exploit an invention or work in a commercially optimal fashion. A sense of "ownership," shared responsibility and simple pride may work just as well, if not better. In some communities, finances are managed collectively or under a fiduciary model, as are other essential resources. Should not the intellectual property system respond by allowing national legislators the possibility of designing forms of protection that meet that objective?

There are a number of international instruments that tend to confirm the view that indigenous peoples should have some legal control over the exploitation of their traditional knowledge when such knowledge has special

37. U.S. CONST. art. I, § 8, cl. 8. This is probably the only document of its kind to define (a) the object ("Writings and Discoveries"); (b) the method of protection of intellectual property ("by securing for limited Times to Authors and Inventors the exclusive Right."); and (c) the purpose ("To promote the Progress of Science and useful Arts") of certain forms of intellectual property.) Id.

38. Particularly in Mazer v. Stein, 347 U.S. 201, 219 (1954) ("The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and useful Arts.'"), and more recently in Eldred v. Ashcroft, 537 U.S. 186, 212 n.18 (2003):

    Justice Stevens' characterization of reward to the author as "a secondary consideration" of copyright law, post, at 793, n. 4 (internal quotation marks omitted), understates the relationship between such rewards and the "Progress of Science." As we have explained, "[t]he economic philosophy behind the [Copyright] Clause . . . is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors." Accordingly, "copyright law celebrates the profit motive, recognizing that the incentive to profit from the exploitation of copyrights will redound to the public benefit by resulting in the proliferation of knowledge . . . . The profit motive is the engine that ensures the progress of science."

    Id. (citations omitted) (alterations in original).

39. Presumably non-"Western."


41. See infra note 51 and accompanying text.
Article 7(1) of the International Labor Organization's Revised Convention of 1989 recognizes the right of indigenous peoples to "decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control, to the extent possible, over their own economic, social and cultural development." The United Nations Draft Declaration on the Rights of Indigenous Peoples is perhaps the most relevant international document in this area. Still in draft form, its Article 29 currently reads as follows:

Indigenous peoples are entitled to the recognition of the full ownership, control and protection of their cultural and intellectual property. They have the right to special measures to control, develop and protect their sciences, technologies and cultural manifestations, including human and other genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs and visual and performing arts.

One could also mention in this context the United Nations Declaration of Human Rights, which provides that "everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author."


43. ILO Convention, supra note 15, at art. 7(1). It came into force on Sept. 5, 1991. This Convention revised Convention No. 107 of 1957 and was ratified by Convention No. 169, which has been ratified by 13 countries: Bolivia, Colombia, Costa Rica, Denmark, Ecuador, Fiji, Guatemala, Honduras, Mexico, Norway, Netherlands, Paraguay and Peru.


II. Compatibility Analysis

There are three aspects to examine when discussing traditional knowledge and, in particular, its relation to ecosystems, namely the nature of the ownership, the nature of the object and the type of right(s) granted. We will also have to consider term of protection, even though it is not a structural obstacle, as well as documentation-related issues.

A. Nature of the Owner

The first area under review is by far the easiest. Current forms of intellectual property protection are not inherently or structurally incommensurable. For example, collective ownership of marks is well-accepted. To recognize a community as owner of a patent is not a particularly difficult conceptual jump. The problem lies in the identification of the inventor and, if applicable, the “transfer” of rights from such inventors to the community. I suggest that letting a community own a patent or copyright does not threaten the foundations of intellectual property as it currently exists. It may require a reform of some attribution and assignment rules and formalities, but the TRIPS Agreement does not prohibit it.48 In fact, in light of the above policy analysis, TRIPS is pliant on this front, as it does not directly impose ownership rules.

Collective or communal ownership is recognized in several land-related treaties, such as the treaty between the Nisga’a people and the Canadian province of British Columbia, and the older James Bay Agreement concerning compensation for use of rivers in Northern Quebec for hydroelectric production, but which also dealt with self-government and land

47. See supra note 16.
49. See supra notes 39 & 41 and accompanying text.
use generally.\textsuperscript{51} In fact, when examining ownership of or responsibility for an ecosystem, communal ownership seems the only solution.\textsuperscript{52}

As a matter of principle, collective or communal ownership of copyright should not be hugely problematic. Many countries already have collective works in their national law.\textsuperscript{53} What is being suggested here is an extension of such a concept, in which the rightsholder is the community concerned, or perhaps, in appropriate cases, the State.\textsuperscript{54} WTO rules, or individual members, could mandate the formation of a proper body corporate to facilitate the recognition of ownership and the validity of consent given to use protected traditional knowledge.\textsuperscript{55} Other options include a modified concept of droit de suite\textsuperscript{56} to implement benefit-sharing obligations on the resale of artistic works that contain traditional knowledge material, and allowing WTO members who so wish to establish the equivalent domaine public payant\textsuperscript{57} to collect funds to compensate holders of traditional knowledge. The latter proposal may entail tailoring national treatment and Most-Favored Nation\textsuperscript{58} obligations.

\begin{itemize}
\item \textsuperscript{51} See James Bay and Northern Quebec Native Claims Settlement Act, ch. 32, 1976-77 (Can.); An Act Approving the Agreement Concerning James Bay and Northern Quebec, R.S.Q. ch. 46 (1976) (Can.).
\item \textsuperscript{52} But see Armen Alchian & Harold Demsetz, The Property Right Paradigm, 33 J. \textsc{Econ. Hist.} 16, 19-22 (1973). Interestingly, the Supreme Court of Canada recently heard an appeal from a decision by the British Columbia Court of Appeals that stated that provincial and federal governments had an obligation to consult with Aboriginal groups concerning the exploitation of ecosystems. British Columbia (Minister of Forests) v. Haida Nation, 5 B.C.L.R. (4th) 33 (2002), leave to appeal at [2002] B.C.C.A. 462 (Can.).
\item \textsuperscript{53} Including the United States, where a collective work is defined in 17 U.S.C. § 101 as a work "in which a number of contributions, constituting separate and independent works in themselves, are assembled into a collective whole." 17 U.S.C. § 101 (2004).
\item \textsuperscript{55} There are precedents in the area of land rights. See James ex rel. Martu People v. W. Austl., [2002] F.C.R. 1208 (Austl.).
\item \textsuperscript{56} For example, a right to a percentage of the resale price of works of line articles.
\item \textsuperscript{57} Literally, paid-for public domain. Dr. Silke von Lewinski, The Protection of Folklore, 11 \textsc{Cardozo J. Int'l & Comp. L.} 747, 767-68 (2003); Matthias Nordmann, \textsc{Rechtsschutz von Folkloreformen} 136 (2001).
\item \textsuperscript{58} A trade concept now codified in the intellectual property realm by Article 4 of TRIPS, the chapeau to which reads in part as follows: "any advantage, favour, privilege or immunity granted by a Member to the nationals of any other country shall be accorded immediately and unconditionally to the nationals of all other Members." TRIPS Agreement, supra note 48, at art. 4.
\end{itemize}
B. Nature of the Object

This part of the analysis is more complex. Even if we limit the analysis to copyright, trademark and patent law, the TRIPS Agreement poses certain limits. In the area of copyright, Article 9(2) provides that copyright "shall extend to expressions and not to ideas, procedures, methods of operation or mathematical concepts as such." This does not seem to prevent the protection of folklore or other forms of original literary and artistic expression. The only potential limit is the non-protection of "ideas," a concept imported into TRIPS through a U.S. government submission based on the U.S. Copyright Act. In addition, because Article 9(2) excludes certain types of subject matter from the ambit of copyright, it could be said that a country that decided to protect "ideas" under copyright law was simply providing a higher level of protection, which is allowed under TRIPS Article 1(1). Finally, the incorporation by reference of the substantive provisions

59. The same analysis could apply to geographical indications, under Articles 22-24 of TRIPS. Indications fulfill a role similar to trademarks in that they identify the origin of a product. However, they do not link to a manufacturer but rather to a geographical region or locality because "a given quality, reputation or other characteristic of the good is essentially attributable to [such] geographical origin." Id. at art. 22(1). Article 22(2) only states that rights must be granted to "interested parties." Id. at art. 22(2). See Jean Raymond Homere, Intellectual Property Rights Can Help Stimulate the Economic Development of Least Developed Countries, 27 COLUM.-VLA J. L. & ARTS 277, 296-97 (2004), noting Developing countries and LDCs can use geographical indications to preserve the traditional goodwill and reputation of members of an established group in lieu of focusing on rewarding innovation per se. Consequently, geographical indications and trademarks or sui generis analogies to them could serve as tools capable of curbing biopiracy, while protecting traditional knowledge for the economic benefit of local and indigenous communities in developing countries and LDCs. The resulting economic benefits from the use of geographical indications would then include an increase in revenues from domestic and export markets for distinctive goods originating from developing countries and LDCs.

60. TRIPS Agreement, supra note 48, at art. 9(2).

61. That said, there are many forms of tradition material that are unfit by their very nature for protection by extant intellectual property norms. Examples include spiritual beliefs, methods of governance, languages, human remains and biological and genetic resources in their natural state, i.e., without any knowledge concerning their medicinal use.


63. 17 U.S.C. § 102(b) (2000) ("In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.").

64. But it can also be said that the exclusion of ideas is essential, as part of the "hydraulic system" of copyright (a phrase coined, I believe, by Michigan State University
of the Berne Convention\textsuperscript{65} does not add much to this limitation. "Work" is not defined in the Convention; only a list of categories of literary and artistic "productions" is provided.\textsuperscript{66}

In the area of patents, no definition of the terms "patent" or "invention" is provided. Article 27 does, however, provide that patents "shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application."\textsuperscript{67} A footnote to Article 27 "translates" the European\textsuperscript{68} concepts of "inventive step" and "industrial applicability" as functional synonyms of "non-obviousness" and "useful."\textsuperscript{69} Clearly then, patent law may be unable to respond to the needs of traditional knowledge holders in certain areas. Industrial applicability is linked to a commercial or industrial application. Yet, this concept, and its "utility" cousin, had to be significantly re-examined in recent years to accommodate the perceived need to patent genes.\textsuperscript{70} In light of the need to meet this requirement, traditional knowledge

College of Law Professor Peter Yu) and thus that protecting ideas under copyright does contravene TRIPS. Article 1(1) allows more extensive protection "provided that such protection does not contravene the provisions of this Agreement." TRIPS Agreement, \textit{supra} note 48, at art. 1(1). \textit{See also} Gervais, \textit{supra} note 10, at 86-89; Daniel J. Gervais, \textit{The Compatibility of the Skill & "Labour" Originality Standard with the Berne Convention and the TRIPS Agreement}, 26:8 EUR. INTELL. PROP. REV. 75 (2004).

\textsuperscript{65} TRIPS Agreement, \textit{supra} note 48, at art. 9(1).

\textsuperscript{66} Berne Convention for the Protection of Literary and Artistic Works, July 24, 1871, art. 2(2) [hereinafter Berne Convention].

\textsuperscript{67} TRIPS Agreement, \textit{supra} note 48, at art. 27(1).

\textsuperscript{68} Though now widely accepted worldwide.

\textsuperscript{69} TRIPS Agreement, \textit{supra} note 48, at art. 27(1) n.5.


The trends encountered in genetic research cast a unique light on the utility requirement. The scope of utility for patentability of biotechnology subject matter must be narrowly construed to advance the rationales of the patent system. Effective balancing the production of knowledge with its capitalization, an approach suggested by the economic and philosophical guideposts, remains the
holders may require assistance and have to enter into partnerships to develop the scientific evidence that will convince patent offices of the presence of actual utility. In the current patent law environment, the scientific method itself may seem culturally discriminatory to some holders of traditional medicinal knowledge for example, but there is scant hope of avoiding the filter of accepted scientific canons to gauge the actual utility of an invention, lest patents be granted (and the resulting monopoly apply) in ways that would stifle, not promote innovation. There is thus a certain degree of potential conflict between various forms of traditional knowledge and patents in terms of subject matter.

There may be a case here for a *sui generis* right, though with great caution. If the policy objective is not to allow commercial exploitation (e.g., of a traditional medicinal preparation) but rather to prevent use of and potential damage to an ecosystem, then perhaps intellectual property is an altogether improper answer and environmental rules should govern instead. The concept of non-obviousness may also constitute an obstacle.

The non-obviousness doctrine, as actually applied, takes three analytic approaches: First, direct efforts to define the capabilities of a "person having ordinary skill in the art," and application of that definition to specific contexts; Second, consideration of "secondary" empirical factors, such as whether the invention satisfies a "long-felt need" or is successful in the marketplace; Third, precepts applied as rules of law only means to end this conflict.

Today's utility requirement continues to obfuscate traditional public and private sector norms, which successfully guide biotech research. The increased privatization of basic biotechnology research exponentially escalates the importance of accurately assessing whether a patent promotes or inhibits science. Id.

Would a new *sui generis* right be "intellectual property"? First, it could be argued that a *sui generis* system can be viewed as intellectual property if (a) it applies to the protection of intangible assets and (b) provides a certain right to exclude others. Indeed, intellectual property is not limited to existing rights but should apply to all forms of creativity and inventiveness. In the case of artistic and literary creations such as textile patterns, music, choreographic productions and the like, it may make sense to establish a system similar either to the collective and authentication marks, or to the moral right aspect of copyright. See Downes, supra note 40, at 257-62; see also supra note 6 and accompanying text.

Or "inventive step." "An invention shall be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art." Convention on the Grant of European Patents (European Patent Convention), Oct. 5, 1973, art. 56, available at http://www.european-patent-office.org/legal/epc/e/mal.html#CVN (last visited Sept. 28, 2004); The U.S. Patent Act is to the same effect: "Whoever invents or discovers any new and *useful* process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101 (2000) (emphasis added).

defining capabilities in specific contexts. . . . The level of inventive step needed to create a patented invention is less than that involved in solving many of the problems at the end of the chapters in scientific or engineering textbooks.74

Arguably, this criterion, as currently interpreted by U.S. courts and, in particular, the Court of Appeals for the Federal Circuit,75 is so low as not to constitute a major obstacle to patentability. Yet, there is an inherent difficulty stemming from the fact that a determination of who is "skilled" and what constitutes the relevant "art" may not be culturally neutral terms. Could the holder of trans-generational indigenous medicinal knowledge (e.g., a shaman) be considered "skilled in his art"? Conversely, is a patent examiner with no knowledge of the traditional practices in question fully able to ascertain the obviousness in that context? As mentioned in the introduction, there may be a need to build cross-cultural bridges in this area.76

Finally, with respect to trademarks, their use (in the form of collective or certification marks) by a number of indigenous and Aboriginal groups shows that there is no substantial subject matter incompatibility.77

---

74. John H. Barton, Non-Obviousness, 43 IDEA 475, 477-78 (2003). After discussing a number of "fairly obvious" examples of inventions for which patents were granted, Professor Barton concludes that such examples "suggest that the real standard, as applied by the CAFC [Court of Appeals for the Federal Circuit], is 'whether the invention would certainly have been made by a person of minimal skill in the art who is unable to integrate the different concepts present in the art.'" Id. at 496. He then proposes to modify the standard to bring it in line with the statute, i.e., "in a way to require the patent applicant to demonstrate that the proposed invention reflects a standard of inventiveness higher than that which is normal in the industry involved . . . ." Id. at 508. The traditional Canadian case on this point defines the "person skilled in the art" as analogous to one who is skilled in the art but has "no scintilla of inventiveness or imagination; a paragon of deduction and dexterity, wholly devoid of intuition; a triumph of the left hemisphere over the right." Beloit Can. Ltd. v. Valmet Oy, [1956] 8 C.P.R. 3d 289, 294 (Can.).

75. See Barton, supra note 74, at 496.

76. Patent examiners at the USPTO are receiving training in new areas. Recently, training concerning nanotechnology was offered. Experts in traditional medicine could offer similar training. See Barnaby J. Feder, Tiny Ideas Coming of Age, N.Y. TIMES, Oct. 24, 2004, at 4, 12.

C. Nature of the Right(s)

This is perhaps the most difficult area. Current intellectual property norms force creators and inventors to select one or more rights packages that may or may not fit their needs. We call these rights packages copyright,\textsuperscript{78} trademark\textsuperscript{79} and patent.\textsuperscript{80} In some cases, such as exploitation of medicinal knowledge, reforms to patent law and/or agreements on benefit-sharing with the communities that are not considered inventors for the purpose of (Western) patent law but are in fairness, the originators of the experience and data that allowed a patentable medicine to be developed, may be required.\textsuperscript{81} In other cases, such as commercial reuse of sacred material,\textsuperscript{82} a prohibition on

\textsuperscript{78} Copyright is the best example. National laws and international treaties contain lists of rights based on the nature of the use of a protected work (reproduction, performance, transmission, communication, adaptation, rental, etc.). See Daniel Gervais & Alana Maurushat, \textit{Fragmented Copyright, Fragmented Management: Proposals to Defrag Copyright Management}, 2 CAN. J. L. & TECH. 15 (2003).

\textsuperscript{79} See, for example, rights against confusion (in a myriad manifestations), dilution, depreciation etc.


\textsuperscript{81} \textit{See supra} Part II.A.

\textsuperscript{82} \textit{See} Gervais, \textit{supra} note 17.
use may work best, and can be provided under copyright or patent law, but may not be available due to the expiry of the term of protection. In other cases, environmental regulation or self-governance treaties, not intellectual property, may be a more appropriate policy response. One should also note that, as already mentioned, trademark law (or laws protecting geographical indications) are commonly used by many Aboriginal groups.

It is difficult to ascertain the precise scope of a *sui generis* right going beyond patent, copyright and trademark rights that would respond to the need of traditional knowledge holders. It would not be prohibited by TRIPS if considered as a form of “more extensive protection.” It could also emerge from a statutory tort against misappropriation of certain forms of traditional knowledge.

Finally, in certain cases, traditional knowledge holders “suffer” from the same shortcomings as other rightsholders. For example, although the Internet is progressively allowing creators of folklore or folklore-based copyrighted material to disseminate their material worldwide at very low cost, they face the same problems as other copyright holders.

---


84. See infra Part II.D.

85. See supra note 8 and accompanying text.

86. See supra note 50 and accompanying text.

87. See supra notes 3 & 77 and accompanying text.

88. See supra note 59.

89. Or other rights mentioned, supra note 80.

90. TRIPS Agreement, supra note 48; GERVAIS, supra note 10, at 86-92. The European Database Directive, supra note 80, would be such an example, although the Directive itself does not specifically refer to TRIPS.

91. Again, following the example set forth in s.3 of the Database and Collections of Information Misappropriation Bill, H.R. 3261, 108th Cong. § 4(b) (2003).

92. There are considerable archives of folklore on the Internet. The Smithsonian Institution’s Center for Folklife and Cultural Heritage put a list of its impressive collection available on the Internet. See http://www.folklife.si.edu/center/archives.html (last visited Sept. 30, 2004).

93. See Daniel J. Gervais, *Towards a New Core International Copyright Norm: The
D. Term of Protection Issues

Many expressions of folklore and several other forms of traditional knowledge do not qualify for protection because they are too old and are, therefore, in the public domain. Providing exclusive rights of any kind for an unlimited period of time would seem to go against the principle that intellectual property rights (except trademark and related rights) can be awarded only for a limited period of time, thus ensuring the return of intellectual property to the public domain for others to use. Textile patterns, musical rhythms and dances are good examples of this kind of material. Additionally, expressions of folklore are refined and evolve over time.

Sometimes, an author outside of the group that created the folklore will create a derivative work using folklore as a basis but with enough derivative originality to benefit from copyright protection. For example, commercial sound recordings using traditional music are common. Many creators of folklore find this situation doubly unacceptable: while they are unable to benefit financially and otherwise from their creative efforts, others are “using” the intellectual property system not only gainfully, but in fact, against the original folklore creators who may be prevented from using their own material if, as it evolves, it comes to resemble the derivative work. To traditional knowledge holders, this is a perverse, if an unintended, result.

Apart from trademark law, which will protect the link between a good or service and its source for as long as it can be maintained, and then only in relation to such goods or services, it is a fundamental principle of both

---


patent\textsuperscript{97} and copyright law\textsuperscript{98} that the protection not be perpetual. If for example, protection of biodiversity is the stated policy objective, intellectual property would not be the appropriate regulatory vector, but most likely it would not stand in the way.

The case for perpetual intellectual property protection beyond trademark or similar forms of protection, which would most likely take the form of a \textit{sui generis} right,\textsuperscript{99} is hard to justify on the basis of traditional utilitarian/instrumentalist foundations of intellectual property.\textsuperscript{100} Should

\vspace{1cm}

97. And that is precisely what courts have said when trademarks were used to try to extend patent protection. See, e.g., Keene Corp. v. Paraflex Indus., Inc., 653 F.2d 822, 824 (3rd Cir. 1981); see also MCCARTHY, supra note 96, § 7.23.


99. Although arguments have been made that other rights, such as copyright, could be perpetual under proper circumstances and subject to adequate formalities. See William M. Landes & Richard A. Posner, \textit{Indefinitely Renewable Copyright}, 70 U. CHI. L. REV. 471, 517-18 (2003), noting

The shorter the expected life of a copyright and the higher the registration and renewal fees, the less likely are both registration and renewal. This in turn suggests that a system of modestly higher registration and renewal fees than at present, a relatively short initial term (twenty years or so), and a right of indefinite renewal would cause a large number of copyrighted works to be returned to the public domain quite soon after they were created. Of course, those would tend to be works of low average commercial value; otherwise, the owner would have renewed. And requiring registration and renewal for copyright protection, rather than, as at present, making these steps optional, would increase the incentive to take them. Nevertheless, a system of indefinite renewals (or one that combines renewals with a maximum duration) may enable society to have its cake and eat it too. More works will be in the public domain, thus minimizing access, transaction, and administrative costs, while those few copyrights that retain their value will remain in copyright protection indefinitely, with the economic advantages, involving investments in maintenance and the avoidance of congestion externalities ...

\textit{Id.}

100. See Fisher III, supra note 36; Schwartz & Treanor, supra note 98.
Aboriginal creators and inventors be treated more favorably than non-Aboriginal ones?¹⁰¹

Professor Gupta argues that they should, with some limitations. He writes:

Any new system of protection will have to balance the long-term needs of a community to have a vested interest in the conservation of their knowledge systems, and yet provide incentives for those who may add value to share the benefits of using that knowledge for a limited period of time. In my view, any new system should discriminate between rights of communities in the knowledge systems per se, vis-à-vis the rights in a specific knowledge output. The rights in the systems should be perpetual. For instance, the classical health systems such as Ayurvedic, Unani or Siddha have recipes which are being granted patents in a rather indiscrete manner. This is improper. However, modifications in these recipes should be permissible for patenting, with the understanding that a share of the benefit will go into a global pool of funds for augmenting indigenous systems of medicines. This is similar to a system for plant varieties, in which improved varieties based on land races should contribute a share to a global and/or regional fund for in-situ conservation. Since every such benefit is shared ultimately at the consumer's costs, it is only natural that consumers should pay for the conservation of diversity.¹⁰²

Yet, given the strength of the principles that underpin the public domain, it may not be easy to agree to a perpetual right at the international level. However, if limited in scope, and presented either as a liability regime or a right outside of intellectual property (e.g., tort law¹⁰³), it may succeed. But I suggest that the TRIPS/WTO context is not the best forum for such a discussion. Many countries will likely argue that some aspects of traditional knowledge should not be considered trade-related, and thus try to keep the focus on ongoing work in other fora (CBD¹⁰⁴ and/or WIPO).¹⁰⁵


¹⁰² Gupta, supra note 1, at 161 (emphasis added).

¹⁰³ See supra note 91 and accompanying text.

¹⁰⁴ See WIPO Traditional Knowledge, supra note 6, at 16.

¹⁰⁵ The Uruguay Round example of moral rights (in the copyright area—see Article 9.1 of TRIPS) comes to mind in that connection. See TRIPS Agreement, supra note 48 at art. 9(1) (incorporating the substantive provisions of the Berne Convention, except Article 6bis and related provisions concerning the "moral right"); WIPO Inter-Regional Meeting, supra note 33 and accompanying text.
III. POSSIBLE WAYS FORWARD IN THE Doha CONTEXT

A. Towards a Declaration on Traditional Knowledge and Trade

A possible instrument to be adopted in the WTO/Doha Round framework might take the form of a "declaration." Such a declaration could start with an acknowledgement that certain intellectual property rules can and do apply without any modification to certain forms of traditional knowledge, especially knowledge (e.g., expressions of folklore, arts & crafts) that is exploited commercially. Moreover, the same could recognize that existing common law may also be used to prevent certain uses of traditional knowledge. On the former point, collective/certification marks, as well as geographical indications, may be used to certify the origin of "genuine" articles.

If WTO Members opt instead for a reopening of TRIPS, and a sui generis right is "worked in" together with a revision of Article 27.3(b), there will most likely be demands for changes in a number of areas, including for example the addition of the two WIPO treaties in the area of copyright, or other post-TRIPS/WIPO initiatives in the field of trademarks and patents.

106. As was done for access to medicines. See Doha Declaration, supra note 11. A declaration allows more flexibility because it does not become "black-letter" WTO law, only a guide to the interpretation of existing agreements. It may also include a political undertaking not to resort to dispute-settlement. There is no example of a clear conflict between a WTO text and a declaration being brought to the attention of a dispute-settlement panel.

107. See supra note 59.

108. Including a decision on the UPOV issue. See supra Part II.A; GERVAIS, supra note 10, at 227-34.


110. See Trademark Law Treaty, Oct. 27, 1994, 2037 U.N.T.S. 35; Patent Law Treaty, June 1, 2000, 39 I.L.M. 1047. Some Members have indicated a willingness to incorporate substantive obligations of the International Convention for the Protection of New Varieties of Plants (UPOV) of Dec. 2, 1961 as the appropriate way of implementing TRIPS Agreement art. 27.3(b) in respect to plants. A subsidiary question is whether this would be along the lines of the October 23, 1978 or March 19, 1991 version. As of January 15, 2004, 26 countries were party to the 1978 Act, 26 to the 1991 Act, and two to previous Acts. Given that there is a relationship between UPOV, biodiversity and traditional knowledge, either the issue of plant variety protection will be negotiated in a broader context, or the results of the negotiation will (in the eyes of at least some participants) be part of a broader package.
Yet, in light of the Ministers' words at Doha, one cannot easily envisage that there would be a major reworking of TRIPS that would not take account of traditional knowledge and biodiversity issues. At the same time, the fact that the interface between intellectual property (as defined in TRIPS) and traditional knowledge, including fundamental issues such as collective/communal ownership, mandatory benefit-sharing (and what happens if no agreement is found), term of protection/public domain concerns, possible acquired rights, etc., makes it hard to imagine that a legal text could be agreed upon anytime soon within the TRIPS/WTO context. Additionally, experiences related to modified intellectual property regimes to provide traditional knowledge at the national level are mostly inconclusive at this stage. While work on a possible sui generis right is progressing within WIPO, I suggest that further analysis is required before both the need for such a right is conclusively established and, perhaps more importantly, the exact scope and formulation of such a right at the multilateral level becomes possible. This may or may not happen before the end of the "Doha Round."

Reopening the TRIPS Agreement is unlikely to be successful for another reason: TRIPS is a compromise, a package deal that, once reopened, will prompt demands for lower or higher levels of protection in almost all areas of intellectual property. In addition, several WTO Members do not yet have to comply with the 1994 version of TRIPS (least-developed members have until 2005 for most of the Agreement and until 2016 for pharmaceutical patents). It seems that, at least at this juncture, the best solution within the WTO context would be to adopt a Declaration on Traditional Knowledge and Trade. It could begin with a preamble that would reflect the need felt by several WTO Members to protect traditional knowledge; the importance of such knowledge and perhaps even address some of the inadequacies of the current intellectual property regime, in which case it should also include a statement to the effect that the protection of traditional knowledge should not, as a matter of principle, prejudice the protection of intellectual property.

111. "We instruct the Council for TRIPS, in pursuing its work programme including under the review of Article 27.3(b), the review of the implementation of the TRIPS Agreement under Article 71.1 and the work foreseen pursuant to paragraph 12 of this Declaration, to examine, inter alia, the relationship between the TRIPS Agreement and the Convention on Biological Diversity, the protection of traditional knowledge and folklore . . . . " Doha Declaration, supra note 11, at 4, § 19.
112. See Landes & Posner, supra note 99 and accompanying text.
114. See supra note 6 and accompanying text.
115. See TRIPS Agreement, supra note 48, arts. 66, 66.1. WIPO Declaration on the TRIPS Agreement and Public Health, WT/MIN(01)/DEC/2, para. 7 (Nov. 20, 2001).
116. Perhaps along the lines of Article 1 of the 1961 Rome Convention, in the area of
fact, in order to secure the support of current groups of copyright and patent rightsholders, the importance of authors and inventors of subject matter protected as works or inventions under copyright and patent laws and treaties, and of the role played by such authors and inventors, should be reaffirmed.

On substance, the Declaration could then contain a number of specific undertakings, including some or all of the following outlined in the next section.

B. (Draft) Ministerial Declaration on Traditional Knowledge and Trade

1. Text of the Proposed Declaration

Having regard to the work accomplished in the Council for TRIPS on the basis of our instructions contained in paragraph 19 of the Declaration we adopted at Doha on 14 November 2001, and with a view to furthering the progress of work in this area;

Desiring to support technical cooperation efforts, as well as further research and development into the application of current intellectual property rights to traditional knowledge;

We recognize that WTO Members are, subject to existing rights and obligations, free to protect traditional knowledge above and beyond the protection for objects of intellectual property rights contained in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), subject to rights and obligations contained in that Agreement;

We encourage the adoption of private and public measures destined to take account of the needs of traditional knowledge holders in the exploitation of indigenous and genetic resources and to foster the adequate transfer of technologies developed on the basis of such resources;

While stressing anew the importance we attach to the implementation and interpretation of the TRIPS, to the protection of existing intellectual rights neighboring on copyright, Article 1 reads: “Protection granted under this Convention shall leave intact and shall in no way affect the protection of copyright in literary and artistic works. Consequently, no provision of this Convention may be interpreted as prejudicing such protection.” Rome Convention, supra note 80.

There would seem to be a strong incentive for traditional knowledge advocates to secure the support of author (in a traditional copyright sense) groups in a country with a strong moral rights tradition because it constitutes the ultimate example of a non-market based intellectual property right (loosely) based on the dignity of the person. See Downes, supra note 40, at 259-62. This of course may lead to a reexamination of the exclusion of Article 6bis of the Berne Convention from TRIPS obligations (Article 9.1) and begs the question whether non-market (and thus, trade) based issues are properly dealt with within the WTO framework.
property rights and the legitimate interests of intellectual property users, we instruct the Council for TRIPS to explore possible ways of protecting forms of traditional knowledge that may not be protected under the TRIPS Agreement but could nonetheless be encompassed in the last part of the definition of "intellectual property" contained in Article 2 of the Convention Establishing WIPO; namely "rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields;"

We undertake to support the development in the appropriate fora of databases of traditional knowledge, as well as standards for the development of such databases that ensure interconnectivity (interoperability) where appropriate and subject to the application of TRIPS Article 39.3. We instruct the Council for TRIPS to provide specific technical cooperation in this area;

To the extent possible using reasonably available databases and means, we undertake to encourage and provide adequate tools to the search of prior art originating from traditional knowledge sources in the examination of relevant patent applications;

We agree to consult in appropriate fora on the implementation of appropriate benefit-sharing obligations in light of the principles contained in the Convention on Biological Diversity.

2. Comment

Although the proposed text does not impose strict obligations in WTO Members, it would nevertheless accomplish a number of important goals. First, it would flesh out the Doha Declaration and reaffirm the importance of traditional knowledge, thus potentially marking the path for future work, whether in the WTO context or other fora. The text of a Ministerial Declaration may also be considered by a future dispute-settlement panel in interpreting TRIPS. That being said, the above proposal would not impose specific obligations to protect traditional knowledge (including a sui generis right) on WTO Members, and holders of traditional knowledge may thus not find it sufficient to protect their interests. But imposing a broad sui generis right under a WTO umbrella does not, at least at this point in time, seem realistic, for the reasons already mentioned.

118. For example, The Food and Agriculture Organization of the United Nations (FAO), WIPO or the CBD.

119. Created pursuant to TRIPS art. 64, arts. XXII & XXIII of GATT, and the Dispute-Settlement Understanding adopted as part of the Uruguay Round Agreements. See GERVAIS, supra note 10, at 337-45.

120. See supra notes 71, 99-101 and accompanying text.
The purpose of the proposal is to find a politically acceptable middleground, which I suggest is to give both legitimacy and recognition to the concerns of traditional knowledge holders, and to address in as much detail as may be possible in the current environment those aspects on which it may be possible to move forward.

C. Documentation Issues

One significant issue is the documentation and inventory of traditional knowledge, which some see as a double-edged sword. It is difficult to enforce a right in respect of an object (or element of knowledge) that has not been identified prior to an alleged appropriation. This, in fact, is what led many countries to require fixation in the area of copyright. For example, it was recently considered a fundamental element of copyright law by the Canadian Supreme Court: "Fixation" has a relatively well settled but rather different connotation in copyright law. It distinguishes works capable of being copyrighted from general ideas that are the common intellectual 'property' of everyone. But fixation is not required in every country. Nor is it required in international copyright and neighboring rights treaties, where it is generally seen as an exception to the rule of automatic protection. Conceptually at least, it is thus not a bar to protection at the international level, even though countries that do have the requirement in their national law are likely to want to maintain it.

Indeed, granting a new right in respect of undocumented knowledge may lead to legal uncertainty. Yet, documenting traditional knowledge is perceived by some as increasing the risk of unauthorized takings. Any

121. See infra note 123 and accompanying text.
database or inventory of traditional knowledge should thus be done with great care, notably so as not to facilitate misappropriation.\textsuperscript{126}

D. The Role of Dispute Resolution

Dispute-resolution mechanisms may play a significant role in any solution "package" in this area. It is predictable that various groups or countries may claim rights in the same traditional knowledge (e.g., where a community or ethnic group is present in more than one country). There may also be conflicts between ownership under different laws (and/or customs).\textsuperscript{127} This may require two-levels of dispute-resolution: first, between States (and the current DSU or a modified version thereof including expert assessors); and second, between private parties, including Aboriginal communities.\textsuperscript{128} Here, a system similar to the one put in place by WIPO for intellectual property disputes might serve as a possible model.

Another aspect, which is related to the above but may be considered separate for the purposes of the negotiations, would be to determine whether members are free to reject a patent application based on the basis of Article 126. WIPO Traditional Knowledge, \textit{supra} note 6, at 19-20. \textit{See also} PENNA \& VISser, \textit{supra} note 77, at 11; The World Bank Indigenous Knowledge Program \textit{at} http://www.worldbank.org/afr/ik/index.htm (last visited Sept. 30, 2004). One solution mentioned in this context is tagging. Prof. Conraad Visser explained it as follows:

The problem, of course, with the transfer of the technology approach is that you have to have an organized body of knowledge, so you need some sort of database or the like, and also an identifiable entity, like this organization in Costa Rica, to administer the transfer of the technology, to receive the royalties, and to distribute them to the appropriate beneficiaries.

This also raises, of course, related issues of protection of trade secret. For example, what should be the contents of a database compiled by countries to document traditional knowledge or botanical knowledge in this way?

A tension between the protection against IP and protection for IP exists here. In order to protect against IP, if you want to make something part of the searchable prior art, you have to disclose as much as possible. If you want to exploit the traditional knowledge by means of a compilation or a transfer technology agreement, then it is in your interest to disclose as little as possible in the agreement.

I am working on a project in Venezuela. The solution there seems to be to tag only. So you would list in the database only the items that are available for the transfer of technology.

Panel II, \textit{supra} note 125, at 768.

\textsuperscript{127} \textit{See} Panel II, \textit{supra} note 125, at 768.

\textsuperscript{128} A third level would be arbitration (or other forms of dispute-settlement) \textit{within} a community if material was used or disclosed in ways that contravene the "laws" (written or oral) of that community.
27.2 in light of other (e.g., the CBD) international obligations that are not part of the WTO framework.129

CONCLUSION

There is significant pressure to integrate traditional knowledge and the related issue of biodiversity protection in the WTO set of rules. Though this paper examined the possible contexts of such a right, I do not believe that integrating a full sui generis right (in TRIPS or otherwise) is possible or even desirable in the current context. Rather, the best option for holders of traditional knowledge protection in the Doha negotiations may be to seek to legitimize their concerns in the form of a Declaration on Traditional Knowledge and Trade, which may have the effect of making official certain interpretations of the TRIPS Agreement (e.g., in respect of certain exceptions) and pave the way for a second stage of negotiations, during which positive obligations could be discussed in the form of a legal text. In the meantime, work will no doubt continue at the WIPO and more countries will experiment possible legal mechanisms.130

130. See Panel II, supra note 125, at 788-90.