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Why Intellectual Property Rights in Traditional Knowledge Cannot Contribute to Sustainable Development

Dennis S Karjala, Arizona State University

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by

Dennis S. Karjala
Jack E. Brown Professor of Law
Sandra Day O=Connor College of Law
Arizona State University

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Abstract

This paper makes a simple point: If sustainability (however defined) is the goal, intellectual property rights in traditional knowledge do not move us toward the achievement of that goal. The reason is that the only social policy justification for recognizing intellectual property rights at all is that they supposedly serve as an incentive to create socially desirable works of authorship and inventions. They are not and should not serve as a reward for past achievements. In other words, outside of their usual incentive function of promoting new technology, intellectual property rights in traditional knowledge have no role to play in the sustainability analysis. This is not to say that traditional knowledge is irrelevant to sustainability; indeed, there is good reason to believe that much can be learned from study and implementation of traditional practices in a wide range of fields. Nor is it to say that intellectual property rights in general play no role in advancing the goal of sustainability. The incentives supplied by intellectual property rights to authors and inventors may help induce new technologies and methods for preserving what is left of the natural state of the planet and its ecosystems. The point is only that intellectual property rights in traditional knowledge can do no good (in promoting sustainability) and may do much harm, by tying up knowledge in exclusive rights that inhibit its application to sustainability (or anything else) without any compensating social gains.
Introduction

This paper makes a simple point: If sustainability (however defined) is the goal, intellectual property rights (IPRs) in traditional knowledge (TK) do not move us toward the achievement of that goal. The reason is that the only social policy justification for recognizing IPRs at all is that they supposedly serve as an incentive to create socially desirable works of authorship and inventions. They are not and should not serve as a reward for past achievements, however creative or socially valuable. In other words, outside of their usual incentive function of promoting new technology, IPRs in TK have no role to play in the sustainability analysis. This is not to say that TK is irrelevant to sustainability; indeed, there is good reason to believe that much can be learned from study and implementation of traditional practices in a wide range of fields. Nor is it to say that IPRs in general play no role in advancing the goal of sustainability. The incentives supplied by IPRs to authors and inventors may help induce new technologies and methods for preserving what is left of the natural state of the planet and its ecosystems. IPRs may also offer an incentive to attempt to improve upon what we already know or can learn from TK (although such attempts to improve should be carried out within the boundaries of fair practice, particularly in how the TK serving as the basis for improvement is acquired). The point is only that IPRs in TK itself can do no good (in promoting sustainability) and may do much harm, by tying up knowledge in exclusive rights that inhibit its application to sustainability (or anything else) without any compensating social gains.

Sustainability and Traditional Knowledge

Both A sustainability@ and A traditional knowledge@ have been defined in various ways B often to reflect different underlying policies. A Sustainable development@ has been defined as A development that meets the needs of the present without compromising the ability of future generations to meet their own needs.@¹ A Traditional knowledge@ has been variously defined as A the knowledge, innovations and practices of indigenous and local communities around the world,,@² A the long-standing information, wisdom, traditions and practices of certain indigenous peoples or local communities,A³ A knowledge, possessed by indigenous people, in one or more societies, and in one or more forms, including but not limited to, art, dance, and music, medicines and folk remedies, folk culture, biodiversity, knowledge and protection of plant varieties,


2. Secretariat of the Convention on Biological Diversity, Traditional Knowledge and the Convention on Biological Diversity (undated) [hereinafter referred to as ‘Traditional Knowledge and the CBD’].

handicrafts, design and literature, and understanding or skill, which is typically possessed by indigenous peoples and whose existence typically predates colonial contact (typically with the West), that relates to medical remedies, plant and animal products, technologies, and cultural expressions. For the purposes of this paper, however, differences in definitional detail are unimportant in light of the true justification for recognition of IPRs in the first place.

There is general agreement that TK has the potential to teach the developed world much about sustaining and even improving our increasingly degraded environment. With regard to climate change, for example, indigenous communities that have long been adjusting their behavior to environmental variations might supply suggestions for how others could do the same, even on a larger scale. At least one commentator has suggested that a sustainability-promoting land ethic can be derived from TK and indigenous ways of knowing. The 1992 Earth Summit in Rio recognized the historic relationship between indigenous peoples and their environment and called for promoting and strengthening their role in implementing sustainable development. This paper accepts the importance and value of TK for sustainability and further assumes that ways can be found to implement TK on the broad scale necessary to make a difference to the planet as a whole.


6. The World Intellectual Property Organization (WIPO) has been working for some years on developing an internationally accepted mode of protection for TK. As of July 2010, WIPO’s Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge, and Folklore (IGC) had come up with a draft definition of traditional cultural expressions/folklore (TCEs) that would be the object of the protection scheme but was still wrangling over the definitions of traditional knowledge and genetic resources. Moreover, there was not yet agreement even for TCEs on the specifics of such crucial elements as scope and term of protection, sanctions, or remedies. Daniel Pruzin, WIPO Members Make Progress on Global Legal Instrument for Protection of Traditional Knowledge/Folklore, BNA WORLD INTELL. PROP. REP., August 6, 2010.

7. Kothari, supra note 3, at 6; see also Traditional Knowledge and the CBD, supra note 2 (stating that skills and techniques used in natural resource management over long periods allows TK to make significant contributions to sustainable development).


10. Numerous commentators have asserted that TK is geographically and culturally specific. For example, Professor McGregor has stated, TEK [traditional environmental knowledge] and sustainable development are about relationships. Meaningful integration is difficult if not impossible to achieve in this larger
Deborah McGregor, *Traditional Ecological Knowledge and Sustainable Development: Towards Coexistence*, in *IN THE WAY OF DEVELOPMENT - Indigenous Peoples, Life Projects and Globalization*, Ch. 5 (International Development Research Centre publication), available at [http://www.idrc.ca/en/ev-64525-201-1-DO_TOPIC.html](http://www.idrc.ca/en/ev-64525-201-1-DO_TOPIC.html). See also Kothari, *supra* note 3, at 4 (stating that holders of TK often claim that their knowledge cannot be divorced from the natural and cultural context within which it has arisen, including their traditional lands and resources, and their kinship and community relations). The sustainability issue, however, is what *developed* countries can do to stop polluting the environment, extinguishing biodiversity, and unwittingly changing the climate adversely, as it is developed countries that are causing the problem. If TK is indeed uniquely relevant to a given people and their environment, it by definition has no relevance to this larger question. For developed countries seeking a sustainability strategy, either TK is useful or it is not. If it is not useful, the discussion for sustainability is over. If it is useful, it must be useful in the sense that developed countries can understand how to make use of it.
The question, then, is whether intellectual property rights in traditional knowledge can plausibly augment our efforts at finding a path toward sustainability. In order to address this question, we must take a brief review of why societies (anywhere) recognize IPRs at all. In other words, we must consider the goals of a system of intellectual property.

**Why Do We Recognize Intellectual Property Rights?**

Intellectual property rights give a degree of control over the use and dissemination of information. Patent and copyright, in particular (and with important exceptions), give the time-limited right to exclude others from using publicly available information. Information, however, has an important characteristic that distinguishes it from tangible property, namely, information is not consumed by use: If a scientist measures the speed of light, he or she still knows it no matter how many others also learn it from the scientist’s publication of the experimental result. Others can make use of the information in their own work, perhaps refining the measurement or using the knowledge to build other useful tools or advance scientific theories. We do not give the first scientist any exclusive right in the experimental result, no matter how expensive or time-consuming the achievement was or how creative the experimental apparatus.\(^\text{11}\) The reason, of course, is intuitively clear to everyone: Most scientists do what they do without the incentive of IPRs in the information they produce, and we feel confident that science would progress much more slowly if every scientist had to seek permission to use the information generated by earlier scientists. Reward to the creative scientist comes, if at all, from prizes and recognition, not from intellectual property rights.

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\(^{11}\) Of course, the scientist who is careful about IP may seek a patent on the apparatus if it qualifies, but that patent gives the scientist no exclusive rights in the results of measurements made with it.
This contrasts with the approach taken in most countries to tangible property, in which exclusive property rights are not only generally recognized but perpetual.\(^\text{12}\) Tangible property is a zero-sum game. What is used or consumed by one person cannot simultaneously be used or consumed by another. Exclusive property rights help avoid a tragedy of the commons and direct the use of property to those applications with the highest economic value.\(^\text{13}\) Indeed, it would make no economic sense to recognize IPRs at all if authors and inventors would create their works even without the incentive resulting from the promise of exclusive rights.\(^\text{14}\) IPRs create artificial monopolies that allow the rightsholders to charge a price higher than marginal cost, meaning that there will be some people who will not have access to the works even though they would be willing to pay the (marginal cost) price that would have been set in a competitive market. In other words, there is a deadweight loss.\(^\text{18}\)

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[T]here are striking similarities between seizing our territories and the taking of our knowledge by defining it as part of the public domain. Both are based on the notion that they constitute res nullius, the property of no one, and can be treated as such. Placing our knowledge into the public domain turns it into a freely available resource for commercial utilization.

The statement is correct in saying that treating land as a res nullius allowed the first foreign claimant a justification for the theft, but the problem is not in treating everything as lacking ownership but rather in treating physical land as such. The land in colonized countries was in the possession of other people, who should have been treated as its owners even under a wholly western view of property law. Knowledge, being reproducible without cost and nonrival in use, is fundamentally different from land, making the analogy for purposes of the IPR discussion inapt. See also Stephen R. Munzer & Kal Raustiala, supra note 5, at 62 (While some proponents of TK rights talk of the dispossession of indigenous peoples’ TK, that term is inapt). The starting point for knowledge in all countries should be that no one owns it. We then recognize limited IPRs in some knowledge as an incentive to its creation.

13. This is not the forum for an extended discussion of the economics underlying intellectual property and its distinction from tangible property. I have written on this at length. E.g., Dennis S. Karjala, Biotech Patents and Indigenous Peoples, MINN. J. L. SCI. & TECH. 483, 487-90 (2006)[hereinafter referred to as Biotech Patents and Indigenous Peoples]. The basic idea is that exclusive property rights and perpetual terms tend toward economic efficiency in the case of tangible property but are economically inefficient for informational property except to the extent necessary to supply a creation incentive. This same point has been forcefully made by Nobel Prize winning economist Joseph Stiglitz. Joseph E. Stiglitz, Economic Foundations of Intellectual Property Rights, 57 DUKE L.J. 1693, 1699, 1704 (2008).

On the other hand, it is now universally assumed in developed countries that we would have fewer socially desirable inventions and works of authorship if we were to eliminate the incentives provided by the exclusive rights of patent and copyright. And there must be at least something underlying this assumption. It is hard to imagine that we would have so many large-budget films if the films could be freely copied and distributed by anyone who comes into possession of a copy. It is even more difficult to imagine that a pharmaceutical firm would invest the $750 million it now takes to develop, test, and gain regulatory approval for marketing a new drug in the absence of any period of exclusive rights. Whether patent or copyright protection is too strong, or too long, is a fair and difficult question, but it does seem that without something like the exclusive rights supplied by these statutes we would have fewer of the works for which they are designed to provide a creation incentive.

15. James Boswell’s LIFE OF JOHNSON, Vol. 6, quotes Samuel Johnson famously as saying, “No one but a blockhead every wrote, except for money.” Boswell commented, however, that “Numerous instances to refute this will occur to all who are versed in the history of literature.” Professor Stiglitz, moreover, believes that patent alone is not the most efficient way to promote technological innovation and that in some cases patents can impede innovation. Joseph E. Stiglitz, supra note 13, at 1710-12.
In any event B and this is the fundamental point B the reason we recognize IPRs of patent and copyright is to supply an incentive for the creation of socially desirable inventions and works of authorship. If we are wrong about the need for incentives, or if the incentives we now supply are stronger than necessary, we should repeal or amend these statutory grants of exclusive rights. But however we come out on the incentives question, the one thing that is clear is that we do NOT recognize IPRs as a reward for creative social contributions. Rather, reward to the inventor or author is simply the instrumental means of achieving the desired result. Notwithstanding that courts, even legislatures at times, and numerous commentators sometimes forget this basic

16. The United States Supreme Court has articulated this notion on many occasions. For example, in Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975), the Court stated:

The limited scope of the copyright holder's statutory monopoly, like the limited copyright duration required by the Constitution, reflects a balance of competing claims upon the public interest: Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts. The immediate effect of our copyright law is to secure a fair return for an author's creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good.

See also, see also Fogerty v. Fantasy, Inc., 114 S.Ct. 1023, 1028 (1994) (The primary objective of the Copyright Act is to encourage the production of original literary, artistic, and musical expression for the good of the public.); Feist Publications, Inc. v. Rural Tel. Serv. Co., Inc., 499 U.S. 340, 349 (1991) (The primary objective of copyright is not to reward the labor of authors, but to promote the Progress of Science and useful Arts.); Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984) (The monopoly privileges that Congress may authorize are neither unlimited nor primarily designed to provide a special private benefit. Rather, the limited grant is a means by which an important public purpose may be achieved.); United States v. Paramount Pictures, Inc., 334 U.S. 131, 158 (1948) (The copyright law, like the patent statutes, makes reward to the owner a secondary consideration.); Fox Film Corp. v. Doyal, 286 U.S. 123, 127 (1932) (The sole interest of the United States and the primary object in conferring the [copyright] monopoly lie in the general benefits derived by the public from the labors of authors.).

17. For example, Dr. Mwananyanda Mbikusita Lewanika has called for legislation and international treaties that recognize, protect, and reward traditional knowledge and innovations based on traditional knowledge. Dr. Mwananyanda Mbikusita Lewanika, Traditional Knowledge: Recognition and Protection, presented at the Eastern and Southern Africa Multi-Stakeholders Dialogue on Trade, Intellectual Property Rights and Genetic Resources, held in Nairobi, Kenya, July 30-31, 2001 (organized by the International Centre for Trade and Sustainable Development (ICSTD) and the African Centre for Technology Studies (ACTS) in collaboration with the Quaker United Nations Office (QUNO)), at '9, available at http://www.mindfully.org/GE/African-Traditional-Knowledge30jul01.htm. Giving recognition to the first people who thought of a particular solution, assuming they can be identified, is unproblematic in principle; it is roughly analogous to the plagiarism culture so well known to western academics. Giving protection, too, is unproblematic, if by protection we mean insuring against loss or destruction of the information. See IPR Commission, Traditional Knowledge and Geographical Indications 75, available at http://www.iprccommission.org/papers/pdfs/final_report/Ch4final.pdf, which states, [Protection of TK] should certainly not be equated directly with the use of the word protection in its IP sense, and goes on to discuss preservation of and respect for TK. Giving a reward for TK, however, is problematic insofar as it implies exclusive property rights, or even liability type rights to share in any profits derived from TK, because to start basing IPRs on the quality of the contribution would essentially rob the world of its richest intellectual resource public domain knowledge and in the long run would work against the interests of
point,\textsuperscript{18} it is easy to see that its correctness is universal and not limited to the United States or any other country that strongly supports IPRs. The experimental scientist mentioned above who measures the speed of light\textsuperscript{19} has no IPRs in the experimental result achieved anywhere in the world, and while Einstein had a valid copyright in the journal articles in which he first presented his theories of relativity, no country in the world recognized IPRs in the underlying theories. These results would not obtain if IPRs were intended as a reward for socially useful contributions.\textsuperscript{20} And if IPRs were intended as rewards, would not society be making more effort to insure that the truly excellent contributions got the highest rewards?\textsuperscript{21}

Thus, the crucial question to ask whenever new or expanded IPRs are proposed is whether the change will increase creation incentives enough to outweigh the negative effect of tying up information in property rights. If the information exists or will be created without the incentive of new or expanded IPRs, creating or expanding the rights only serves to inhibit the creative efforts of later authors and inventors who seek to make cultural or technological advances on the existing base. That is not good for society as a whole, nor, in the long run, is it good for creative authors or inventors.

**IPRs and TK**

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everyone, including indigenous peoples everywhere.

18. The most egregious example of legislative confusion about the incentives basis for IPRs was the recent 20-year extension of the copyright term, not only for works created in the future but also for works already in existence. \textit{E.g.}, Sonny Bono Copyright Term Extension Act, P.L. 105-298, tit. I, 105th Cong., 2nd Sess. (1998), the constitutionality (if not the wisdom) of which was upheld in Eldred v. Ashcroft, 537 U.S. 186 (2003).

19. See \textit{supra} text accompanying note 11.

20. Nor, contrary to the apparent belief of numerous commentators, is admiration for the romantic individual author at the core of our intellectual property system, including copyright. So-called \texttt{natural right}s\texttt{ of authorship, no matter how superficially appealing, cannot explain many of the limitations on the scope of protection, such as the idea/expression dichotomy in copyright, or on the huge differences in the duration of protection between patent and copyright. See Robert K Paterson & Dennis S. Karjala, \textit{Looking Beyond Intellectual Property in Resolving Protection of the Intangible Cultural Heritage of Indigenous Peoples}, 11 \textit{Cardozo J. Int’l L. \\& Comp. L.} 633, 646-47 (2003).

21. For over 100 years the United States has been seeking to avoid making decisions on the quality of works protected by copyright. Bleistein v. Donaldson Lithographing Co., 188 U.S. 239 (1903)(holding that a \texttt{mere advertisement} for a circus was subject to copyright); \textit{but see} Feist Pubs., Inc. v. Rural Tel. Serv. Co., 499 U.S. 340 (1991)(denying copyright protection to telephone book white pages and saying that a work must show at least minimal \texttt{creativity} before copyright protection could attach). For the problems the \textit{Feist} approach has caused in the U.S., see Dennis S. Karjala, \textit{Copyright and Creativity}, 15 U.C.L.A. Ent. L. Rev. 169 (2008).
As discussed above, but for the perceived need for creation incentives, we should not recognize IPRs at all. At their core, IPRs are not about equity or reward.\textsuperscript{22} To recognize IPRs without growth in the desired quantity or quality of new inventions or works of authorship simply adds control over information that would otherwise be free for the development of yet newer works\textsuperscript{23} and excludes at least some potential users from the works, namely, those who would be willing to pay up to the marginal cost of production of copies of the work but not the higher price set by the rightsholder. The problem for TK is thus apparent: By definition, TK is old, that is to say, already in existence.\textsuperscript{24} Because TK already exists, no incentive to create it is necessary. Absent the need for a creation incentive, tying up such information in property rights is economically inefficient and also inhibits spreading those aspects of TK that are generally useful, for sustainability or more generally for building on the existing cultural and technological base.\textsuperscript{25}

\textsuperscript{22} Many commentators seem to assume that recognition of IPRs is simply a matter of equity or fairness, without considering the costs associated with the recognition of IPRs. For example, Professor Oguamanam has argued, \textit{For reasons of equity and sustainability, mechanisms for the protection of modern agro-biotech practices, including scientific plant breeding, must not undermine or otherwise work at cross-purposes with traditional farmers' desire for reward and protection of their knowledge of, and dealings with, PGRs.} Chidi Oguamanam, \textit{Intellectual Property Rights in Plant Genetic Resources: Farmers' Rights and Food Security of Indigenous and Local Communities}, 11 \textit{Drake J. Agric. L.} 273, 275 (2006). The claim is that modern agribusiness undermines the roles of traditional farmers and their methods. \textit{Id.} at 277. To the extent this claim is true, however, it cannot be the availability of IPRs for modern methods and the absence of IPRs for traditional methods that is the cause. Nothing in intellectual property law \textit{requires} anyone to use any protected invention or work. Farmers are free to continue to use their traditional methods, as no IPR can cover something that is already in the public domain. If the traditional methods are not competitive against the modern IPR-protected ones, there is no reason to think that farmers' rights or any other form of IPRs in traditional methods would rescue them. Indeed, tying up traditional methods in new IPRs would only inhibit their dissemination, increasing the likelihood that knowledge of such methods will die out completely. See \textit{Biotech Patents and Indigenous Peoples}, \textit{supra} note 13, at 492-95 (making a similar argument with respect to a patented improvement over a traditional pharmaceutical remedy). Another aspect of the problem that is generally ignored by promoters of IPRs in traditional knowledge is risk. Only a small percentage of substances on which research is begun actually end up as part of a widely available drug or other product. If a pharmaceutical company begins research on a drug based on a native plant but learns after the investment of several hundreds of millions of dollars that, say, side-effect difficulties prevent its bringing the new drug to market, should the indigenous group that supplied knowledge of the plant bear a part of those now unrecoverable costs? If not, what is the basis (in the absence of contract) for claiming a given share of the profits when a drug developed after much expensive research and development turns out to have market value?

\textsuperscript{23} See Stephen R. Munzer & Kal Raustiala, \textit{supra} note 5, at 77 (giving examples that \textit{highlight} the ways in which today's innovators build on the efforts of earlier innovators\textregistered).

\textsuperscript{24} It has been pointed out that, while TK is old in the sense of having been handed down over generations, it is also new in the sense that it is continually refined. IPR Commission, \textit{Traditional Knowledge and Geographical Indications} 75, available at http://www.iprcommission.org/papers/pdfs/final_report/Ch4final.pdf. New refinements, however, should be eligible for copyright or patent protection, depending on the subject matter, so there would seem to be little need for a new form of IPR to cover them.

\textsuperscript{25} See, for example, IPR Commission, \textit{supra} note 24, at 78: \textit{The type of measures required to prevent}
misappropriation may not be the same, indeed may not be compatible, with those needed to encourage the wider use of traditional knowledge. IPRs are also time limited for another important reason, namely, maintaining and advancing basic freedoms in a democratic society by promoting diversity and encouraging new creators to build on the past. See Robert K Paterson & Dennis S. Karjala, supra note 20, at 648-49.
Notwithstanding the economic inefficiencies and impediments to the flow of knowledge that IPRs in TK would bring, there is growing movement for the recognition of rights to control and protect indigenous knowledge in the indigenous groups out of which the knowledge has developed. The United Nations Declaration on the Rights of Indigenous Peoples recognizes a broad right to control, protect and develop the group’s cultural heritage.\(^{26}\) The Declaration does not specify that indigenous group control be in the form of IPRs nor does it necessarily rule out limitations on the degree of control and protection that must be proffered. Nevertheless, by speaking generally of rights to protect and control without specifying the costs that are associated with IPRs the mode of protection and control that springs most readily to mind the Declaration is incomplete, if not downright misleading.\(^{27}\)

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1. Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions.

2. In conjunction with indigenous peoples, States shall take effective measures to recognize and protect the exercise of these rights.

\(^{27}\) Another recent commentator has called for expansion of Australia’s Heritage Protection Act to cover indigenous cultural works and folklore that fall outside of traditional copyright because of age or lack of identifiable authorship on the ground that current levels of protection are inadequate, but he too does not consider the costs of tying up information in these new community-based rights. Jake Phillips, Australia’s Heritage Protection Act: An Alternative to Copyright in the Struggle to Protect Communal Interests in Authored Works of Folklore, 18 PAC. RIM L. & POL. J. 547 (2009).
This is not to say that equity plays no role in analyzing how to and who can use TK or how we might go about protecting at least some forms of TK in some circumstances. For example, while the term *biopiracy* generally adds little to the debate, it certainly acquiring knowledge of any kind, including TK, by fraudulent or deceptive means is something that can and should be controlled and sanctioned by law. The point here is only that there is no basis in fundamental intellectual property theory that supports protecting TK with IPRs and that, in fact, to do so would undermine other fundamental principles economic, social, and political. To give control over


29. Biotech Patents and Indigenous Peoples, supra note 13, at 495. Professor Conway has argued more generally that indigenous law should govern rights in indigenous knowledge, tangible and intangible cultural materials and artifacts, secret and sacred information and know-how, cultural expressions, and the biogenetic resources justly owned and possessed by Indigenous Peoples. Danielle M. Conway, *Indigenizing Intellectual Property Law: Customary Law, Legal Pluralism, and the Protection of Indigenous Peoples' Rights, Identity, and Resources*, 15 Tex. Wesleyan L. Rev. 207, 209 (2009). The reason, however, is that this is necessary to protect indigenous culture against the onslaught of colonialism, expressly in opposition to westernized intellectual property law. I am skeptical about the effectiveness of this approach in sustaining indigenous cultures that have any kind of interface with the modern world. Much more harm to indigenous culture is likely to come from the free adoption by indigenous peoples of outside cultural influences, like movies, music, clothing, and fast food. In any event, no group loses knowledge that is also available to outsiders. Therefore, except for secret or sacred information, it is difficult to see how the culture is harmed when the knowledge when it is put to outside use.

30. Meghan Ruesch, Note, *Creating Culture: Protection of Traditional Cultural Expressions and Folklore and the Impact on Creation and Innovation in the Marketplace of Ideas*, 235 Syracuse J. Internat. L. & Commerce 369, 398 (2008)(A freer public domain not only facilitates the creation of new works, but it also ensures the free exchange of culture and ideas); see also Center for International Environmental Law, *CIEL's Project on Intellectual Property (IP) and Sustainable Development* (2007)(advocating for alternative knowledge systems that do not enclose information and knowledge in private hands and encourage the broadest dissemination of information that empowers citizen participation and sustainable development), available at http://www.ciel.org/Tae/Trade_IntProperty.html. Robert Paterson and I have articulated the point as follows:

We must therefore be cautious in too rapidly seizing on the notion of intellectual property rights as a general mode of protection for intangible knowledge arising out of a given cultural heritage. It is important that our economically dominant Western culture not take by stealth or deception that which a particular indigenous group wishes and has sought to keep secret. However, it is also important that indigenous groups recognize the fundamental role of individual freedom (from government regulation) in modern democratic societies. Our culture greatly benefits when Picasso brings elements of African art into his own or Van Gogh does the same with Japanese art. Indigenous cultures also benefit from the broad and vibrant public domain that has resulted from the time-limited nature of our intellectual property rights. Many drugs, tools, and industrial processes that were once patented are now free all over the world for use or further adaptation by others, including indigenous peoples. A whole canon of cultural works from the Greek playwrights to early 20th century composers remains free for the taking by anybody. People all over the world, from nearly every culture, benefit from this rich public domain of intellectual property. We must at least pause before reducing the public domain solely on the ground that some of it belongs to a specifically identifiable cultural heritage.
TK to any given indigenous group just because its ancestors were the first to think of or discover it would inhibit the diffusion of the knowledge into the rest of the world where it could be put to general use. And if equity is injected into the discussion, what is the equity of allowing a given indigenous group to control, say, the medicinal applications of a given plant while allowing that same group (and everyone else) free use of such now-public-domain inventions like aspirin?

Robert K. Paterson & Dennis S. Karjala, supra note 20, at 648-49 (footnotes omitted).

31. One important recent commentary seeking to mediate between the extremes of full-fledged property rights in cultural groups on the one hand and a fully free-for-the-taking public domain offers the concept of stewardship of cultural property. Kristen A. Carpenter, Sonia K. Katyal & Angela R. Riley, In Defense of Property, 118 YALE L.J. 1022 (2009). They seek a more nuanced approach to ownership that reflects both broad values of fairness and equality and indigenous legal traditions of relatedness to the land. Id. at 1125. They recognize, as did Robert Paterson and I, that many of indigenous peoples' legitimate claims can be satisfied by the appropriate application of existing laws. Id. at 1101-02. See also Stephen R. Munzer & Kal Raustiala, supra note 5, at 40 (concluding that defensive provisions aimed at halting the (mis)use of TK by non-indigenous actors in patents or copyrighted materials merit the most support). Carpenter, Katyal, and Riley apply their approach in detail primarily to the problem of Native American imagery as sports mascots insofar as intangible cultural rights are concerned and not to more typical copyright subject matter like art and music, let alone technology. Id. at 1105-13. It is not clear, at least to me, how their stewardship principle would apply, for example, to the typical biopiracy problem of TK relating to the use of plant products to treat disease. If the plant in question is widely available, or if its active ingredient (once known) can be produced industrially, it is difficult to see the need for stewardship of the knowledge. The problem is simply one of transforming the knowledge into a commercial product and the only issue is whether and to what extent the people who are the source of the knowledge should share in any profits that are earned.

32. See Stephen R. Munzer & Kal Raustiala, supra note 5, at 66 (TK protection aimed solely at indigenous groups requires a compelling theory of discrimination between indigenous and non-indigenous claims); The Joint Statement from the Indigenous World Association and Indigenous Media Network, supra note 12 at p.3, states:

We therefore strongly reject the application of the public domain concept to any aspect related to our cultures and identities, including human and other genetic information originating from our lands and waters. . . .

Furthermore, we assert our right to control the dissemination and use of genetic information contained in our human cells or in biological material taken from our ancestral territories.

This view is perfectly legitimate insofar as it seeks to prevent outsiders, or anyone else, from acquiring information in fraudulent or deceitful ways. But if a given group is to control its biological materials (including, one assumes, knowledge of things like plant medicines), what is to stop other groups from doing the same thing? Given that many indigenous groups do not, in fact, have any knowledge that can be put to use by outsiders, with or without further development, the cause of improving the lives of people generally would be immeasurably set back by a rigid enforcement of claims like this.
Bringing sustainability into the discussion does nothing to strengthen the case for IPRs in TK. Of course, to the extent that traditional patent and copyright stimulate anyone (from an indigenous culture or not) to improve upon TK in helping us move toward a sustainable future, that improvement can be protected, as with any other creative invention or work of authorship. TK can indeed be useful in developing sustainable solutions, but its usefulness will depend not on the recognition of IPRs in TK but precisely the opposite: the refusal to grant exclusive rights in useful knowledge that has already been discovered. That allows the relevant TK to propagate and be improved most rapidly, where and as it is needed.

**Conclusion**

Traditional knowledge almost surely has an important role to play in the creation of sustainable systems of development, and IPRs, too, may play a role in supplying an incentive for the creation of new technologies and methods to achieve such systems. It would be a mistake, however, to recognize IPRs in existing TK, because this misunderstands the underlying role for intellectual property in the first place: It treats IPRs as a reward for valuable information contributions, as opposed to an incentive for the creation of such contributions.