

Duke University School of Law Center for the Study of the Public Domain

indigenous/ traditional knowledge/ intellectual property

Issues Paper

Dr. Jane Anderson

Indigenous/Traditional Knowledge & Intellectual Property

©2010 Center for the Study of the Public Domain Duke University School of Law Durham, North Carolina, U.S.A. www.law.duke.edu/cspd/

Released under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.



EXECUTIVE SUMMARY

The relationship between indigenous/traditional knowledge and intellectual property law is a complicated contemporary legal problem. Questions around indigenous knowledge protection present issues unlike any other that intellectual property law has had to consider. Indigenous peoples' concerns include legal questions involving copyright, patents, trademarks, designs and/ or confidential information. They also raise issues that are not always legal or commercial in nature and can include ethical, cultural, historical, political, religious/spiritual and moral dimensions.

Intellectual property law is largely European in derivation and promotes particular cultural interpretations of knowledge, ownership, authorship, private property and monopoly privilege. Indigenous peoples do not necessarily interpret or conceptualize their knowledge systems and knowledge practices in the same way or only through these concepts.

Indigenous peoples' interests in intellectual property law can affect over 370 million indigenous people and any researcher, cultural institution, corporation, industry affiliate or government department working in and/or with indigenous peoples and/or indigenous communities.

While the value of indigenous knowledge has changed dramatically in the last ten years, there is not yet an international consensus about how indigenous rights to the protection of their knowledge systems can be secured, either within an intellectual property regime or through some other overarching legislative or policy framework.

Indigenous people must be centrally involved in developing appropriate frameworks for access and use of their knowledge and knowledge practices. Future directions are foundationally dependent upon the development of frameworks that enhance and embolden indigenous perspectives about exist-

ing and emerging knowledge management approaches. Indigenous knowledge can no longer be considered a raw-resource from which others benefit. Indigenous people are asking for their cultural systems and ways of governing knowledge access and use to be recognized as legitimate, and to be respected as custodians/owners/nurturers of knowledge that is valuable within and beyond indigenous contexts.

Critical evaluation of categories and frameworks that have been taken for granted are crucial for developing new strategies in this area. Rethinking how we do research, how we conceptualize knowledge, how we share knowledge, how we recognize legitimate overlaps in knowledge use and circulation, and the extent of the role of law in influencing our social orders of knowledge exchange, are necessary starting points.

CONTENTS

Acknowledgements	<i>v</i>
I. Introduction	
1.1 What is the issue?	1
1.2 Politics and definitional problems	3
1.3 Who is involved?	
II. Examples of Use and Misuse of Indigenous Knowledge	
2.1 AVEDA and ownership of the word 'Indigenous'	9
2.2 Registration of batik designs in Indonesia	10
2.3 Traditional knowledge and Bikram Yoga	11
2.4 Genetic information, databases of DNA and the Genographic Project	12
2.5 San/Hoodia case and access and benefit-sharing	13
2.6 The Bugis creation story and the theater production I La Galigo	14
2.7 Lego and the use of Maori names	15
III. Current Proposals: Dangers, Problems and Opportunities	
3.1 Current proposals	17
3.2 Proposals that modify the current intellectual property	
framework	
3.2.1 Labeling and/or trademarks	
3.2.2 Moral rights	
3.2.4 Performers' rights	
3.2.5 Limitations and exceptions to existing legislation	
3.3 Proposals that utilize critical intellectual property discourse	25
3.3.2 Creative Commons	

3.4 Proposals that target private law solutions	28
3.4.1 Protocols	28
3.4.2 Knowledge registries and databases	29
3.4.3 Licenses and licensing	31
3.5 Combined Approach – Toolkits	32
3.6 Alternative regimes	33
3.6.1 Customary law	33
3.6.2 Sui generis legislation	34
3.6.3 Human rights, cultural rights, community rights?	35
3.6.4 An international treaty?	36
3.7 Other international treaties, conventions and instruments	37
3.7.1 Access and benefit-sharing scheme	37
3.7.2 The Agreement on the Trade-Related Aspects of	
Intellectual Property (TRIPS)	39
IV. Conclusion: Future Direction	
4.1 Future directions	41
4.2 Indigenous peoples' participation, collaboration	
and partnership	42
4.3 Next steps	42
V. Further Resources	45
Notes	61

ACKNOWLEDGEMENTS

My sincere thanks to Jamie Boyle, Jennifer Jenkins, Kathy Bowrey, Andrea Geyer, Andy Russell, Sophie Anderson and Sally Engle Merry. Thanks also to Jennifer Behrens and Jessica Rivera for their research assistance. This work was written while I was a Visiting Scholar in the Institute of Law and Society at the New York University School of Law.

CHAPTER 1

INTRODUCTION

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.

United Nations Declaration on the Rights of Indigenous Peoples, Article 31, 2007

What is the issue?

- 1.1.1 Indigenous/traditional knowledge and intellectual property law is a complicated contemporary legal problem. There are multiple perspectives and opinions circulating about what the problems are, where they manifest and what needs to happen to alleviate them.¹
- 1.1.2 Indigenous people argue that they have legitimate rights to control, access and utilize in any way, including restricting others' access to, knowledge or information that derives from unique cultural histories, expressions, practices and contexts. Indigenous people are looking to intellectual property law as a means to secure these ends.
- traditional knowledge and intellectual property law. The most significant being that intellectual property has a unique European derivation and this informs its modes of classification, identification and operation.² Intellectual property law promotes particular cultural interpretations of knowledge, ownership, authorship and property. These do not necessarily correspond to or complement indigenous peoples' understandings about the role and function of knowledge and knowledge practices.³

1.1.4

Indigenous peoples' interests in intellectual property law raise issues that involve both legal and non-legal components. Problems are not always commercial in nature and can involve ethical, cultural, historical, religious/spiritual and moral dimensions. For example, inappropriate use of sacred cultural artifacts, symbols or designs may not cause financial loss but can cause considerable offense to the relevant community responsible for the use and circulation of that artifact, symbol or design.⁴

1.1.5

The last thirty years has seen lively commentary and active negotiation about the extent that intellectual property law could (or even should) be utilized to protect indigenous peoples' knowledge.⁵ In national, regional and international contexts, attention to this issue from policy makers, legal scholars, other academics and activists has steadily increased.⁶ The World Intellectual Property Organization (WIPO) is the primary international body through which discussions and debates have been filtered.⁷ Since 2001 it has hosted a regular meeting, the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), to discuss these issues.⁸

1.1.6

Despite many national efforts to protect various manifestations of indigenous knowledge, international consensus has yet to be reached about how indigenous peoples' rights to the protection of cultural knowledge systems can be secured, either within an intellectual property regime or through some other over-arching legislative or policy framework. While this lack of consensus reflects diverse positions within nation states themselves, it is significant that in the October 2009 meeting of the WIPO General Assemblies, the IGC was given a revised mandate to undertake text-based negotiations that will eventually become an international legal instrument (or instruments) that will ensure the effective protection of 'Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions.'10

1.1.7

Questions around indigenous knowledge protection are unlike any other issues that intellectual property law has had to consider. This is because indigenous peoples' concerns are not limited to one area but can stretch across every part of the intellectual property spectrum. One particular issue, for example, the protection of traditional Inuit amauti (clothing), could include legal questions involving copyright, trademarks, designs and/or confi-

Introduction 3

dential information. How the problems manifest and are experienced are not always straightforward and often also overlap into other areas of law, policy and ethics (the most common overlaps often involving cultural property, real property or tangible cultural heritage).¹¹

- 1.1.8 These overlaps make for ongoing challenges in terms of developing adequate and appropriate protections. Further issues include:
 - developing definitions and descriptions of what needs to be protected;
 - identifying owners, custodians and/or other parties responsible for the management of indigenous knowledge;
 - what the nature of the protection should entail;
 - * what the scope of the rights should be;
 - what the duration of any protection should be;
 - what role, if any, would government agencies or other authorities have;
 - what the relationship with the conventional intellectual property system should be;
 - whether protection should be retro-active and what transitional measures would need to be developed;
 - the relationship between international and national protection; and,
 - how foreign rights holders and other beneficiaries are to be recognized.¹²

1.2 Politics and definitional problems

Almost all the terms in this area are contested, have problematic histories and/or defy simple definition. Indigenous, knowledge, local, community, tradition(al), cultural heritage, public, culture/cultural, property, are a sample of the most prominent of these. As Oguamanam perceptively explains:

It is the norm that the majority of writings on this complex subject devote substantial effort to the clarification of terms. Without doubt, clarification of key terms is congruous to analytical integrity and guards against misleading

1.2.4

1.2.5

assumptions. In some contexts, however it may portend some form of red herring or escapist expedition from the substantive questions, especially if every given phrase or term is a contested one.¹³

there are a range of political dimensions that inform the definitional disputes. For example, with the term 'indigenous,' political issues exist both because of the history of identifying and classifying who an 'indigenous' person is and, more contemporarily, because of the changing politics where new indigenous alliances have been formed and negotiated.¹⁴ The multiple terms – indigenous, local, and traditional – that are now used within this discourse illustrate a politics of representation that recognizes the multiple differences linguistically, historically, politically and culturally that need to be accommodated.

The definitional problems with 'indigenous,' 'traditional' and 'local' inevitably affect the classification and identification of the types of knowledge that are recognized and discussed. It is worth remembering that any knowledge, indigenous or otherwise, is notoriously difficult to clearly identify and define. Indeed this has been, and remains, a central problem for intellectual property law. As indigenous knowledge does not really offer itself as a special case to this ongoing internal problem for law, we need to be wary of defining certain knowledge as oppositional and exceptional, as this can reinforce cultural prejudices and biases that actually continue to work to exclude and devalue indigenous knowledge. There must be a strong resistance to the popular binary that sets indigenous knowledge against scientific knowledge, for this binary upholds very specific power relations. In the control of the popular binary upholds very specific power relations.

WIPO has offered a range of *characteristics* that seeks to encompass much of what indigenous people and other experts describe as indigenous/ traditional/local knowledge. It is worth being mindful that even the categories that have been developed and are now used in international meetings (for example, genetic resources (GR), traditional knowledge (TK) and traditional cultural expressions (TCE)/or folklore), while established to help describe 'types' of knowledge, are newly constructed and therefore can inadvertently erase the inevitable and integral moments of overlap between these kinds of knowledge in practice.

The classification of knowledge into these categories (GR, TK and TCEs) helps create an order which makes the issue more manageable for

Introduction 5

those that discuss it and need to develop remedies. But this order needs to be understood as a bureaucratic product that serves particular ends. These categories do not necessarily represent how indigenous peoples experience their knowledge systems or how such knowledge systems are talked about. They do not (and arguably cannot) adequately capture the complexity of indigenous peoples' epistemology and ontology.

1.2.6 It is important to remain mindful of the constructed nature of these typologies as they affect how we understand what the problems are, how needs are anticipated and what kinds of remedies can be imagined.

Who is involved?

1.3

1.3.1 Indigenous interests in intellectual property law can affect around 370 million indigenous people located in over 70 countries.¹⁷

1.3.2 In international policy making contexts, the participants in the indigenous knowledge and intellectual property discourse tend to primarily include bureaucrats from relevant international agencies, governmental representatives from recognized nation states, representatives from non-governmental organizations, and select indigenous representatives and spokespeople. In addition, there are various academics participating as experts or observers to the proceedings.

is slowly increasing. WIPO, in particular, runs a Voluntary Fund to facilitate indigenous peoples' participation. There remain ongoing issues about how indigenous peoples can actively participate in decision-making processes when they have very limited voting capabilities and representation within national and international contexts. 19

1.3.4 With the widespread use of indigenous knowledge within contemporary contexts of arts, sciences and/or technology, there are a range of non-indigenous people that are also inevitably involved within the indigenous knowledge and intellectual property matrix. For instance, researchers working with indigenous communities on a variety of subject-specific topics – language, health, housing, art, biopharma (or biofarma), land management, repatriation, sustainable development, governance – encounter issues around knowledge ownership, control and management.

1.3.5

1.3.8

Pharmaceutical companies working on the development of new drugs that derive from some kind of resource within an indigenous context engage with indigenous knowledge and intellectual property issues. Depending on where the company is located, the issues can be multi-jurisdictional.

1.3.6 Film makers who draw upon indigenous peoples' cultural stories or songs will also encounter intellectual property issues and ongoing questions about who can speak for whom and in what context.

Librarians, archivists, museum professionals and researchers who utilize any material about indigenous people contained in the vast ethnographic collections spread throughout the world's cultural institutions will also engage with indigenous peoples' interests in intellectual property law. Again this will probably involve intellectual property law in multiple jurisdictions. For example, a collection of 1950s' Aboriginal Australian artworks currently located in a US university will have to engage with Australian copyright law and, if the collection has been digitized, with United States copyright law, as well as other laws relating to the original acquisition of the collection and any loan agreements that might be made with other international institutions.²⁰

The range of non-indigenous people or agencies that currently do, or will in the future, engage with intellectual property and indigenous knowledge issues include:

- * any researcher in any discipline that works on indigenous issues or with indigenous peoples and within indigenous communities;
- ★ government agencies or government-funded research bodies;
- corporations and other commercial or industrial entities;
- museum, library and archive professionals;
- artists (indigenous and non-indigenous) utilizing or drawing on indigenous artwork, imagery, stories, or songs;

Introduction 7

publishers or designers who utilize indigenous motifs or symbols;

- non-governmental organizations representing indigenous peoples;
- aid agencies working with indigenous peoples as part of development or sustainability projects; and
- philanthropic organizations funding research involving indigenous peoples.

1.3.9 Indigenous peoples are increasingly involved in developing appropriate frameworks for the use of and access to their knowledge systems. The more that indigenous peoples are consulted about what the problems being experienced are, and what options are available to deal with the problems when they emerge, the more likely it is that appropriate policy and legal strategies will be developed that address the vast range of interests in accessing indigenous knowledge.

1.3.10 Given the diversity of indigenous peoples and the variety of existing and developing knowledge management strategies, it will be necessary to initially support and embolden these approaches and subsequently draw significant intersections from which international frameworks of protection could be based.

EXAMPLES OF USE AND MISUSE OF INDIGENOUS KNOWLEDGE

AVEDA and ownership of the word 'Indigenous'

In 2006, the cosmetics corporation AVEDA released a range of skin care products under the name 'Indigenous.' As part of the process of marketing the new 'indigenous' line of products, AVEDA trademarked the word 'Indigenous.' This provoked a strong negative reaction from indigenous groups around the world. People were offended that such a significant word, politically uniting historically marginalized and excluded groups of peoples throughout the world, could be isolated and utilized by a cosmetics company for the purpose of economic profit.

Following lobbying and discussions, AVEDA decided to drop the "Indigenous" product line and discontinue the trademark, even though they were under no legal obligation to do so.²¹ AVEDA was encouraged to appreciate that using the word 'Indigenous' on a commercial product in order to derive a market advantage was disrespectful to indigenous peoples who have struggled for recognition and rights.

Indigenous" Purifying Hair and Body Cleanse

Indigenous" Purifying Pure-Fume Composition

In an effort to demonstrate a newfound sensitivity to the ethical issues that indigenous people had raised with the corporation and extending this to recognize that indigenous people have rights to be involved and derive benefit (financial or otherwise) for any sharing of information/knowledge regarding processes, properties and use about plants that might be utilized in products, AVEDA has established a range of partnerships with indigenous groups in Australia and the Americas. In one instance it has formulated a benefit-sharing agreement between the Katkabubba community from Wiluna in Western Australia and Mount Romance, the exporter of sandalwood oil.²² The agreement operates under an accreditation protocol established by

2.1.2

2.1

2.1.3

E

2.2

2.2.2

2.2.3

the Songman Circle of Wisdom, an Australian not-for-profit organization established by Aboriginal elders, whereby the Katkabubba Aboriginal community is paid for using land and knowledge to source the sandalwood for AVEDA products.²³

AVEDA also established an NGO (Tribal Link Foundation) that funds participation by indigenous people at the UN Permanent Forum on Indigenous Issues and other contexts where indigenous people are negotiating intellectual property rights.²⁴

Registration of batik designs in Indonesia

2.2.1 Historically, the Indonesian batik artistic community has been based in Solo, Java. The Indonesian government considers batik to be a traditional art form and over the last five years has been working on developing new legislation to protect the 'Traditional Arts.'²⁵ Batik is considered a traditional practice because designs and knowledge have been passed down for centuries from generation to generation and the designs are infused with stories, histories and meaning not readily apparent or transferable to outsiders or those

that purchase the batik cloth. Families are responsible for specific designs and practices. Who may use these, and for what purpose(s), has traditionally been negotiated within the batik community.

The current efforts to develop new legislation to protect Indonesia's traditional arts are in response to the

increased reproduction of the batik styles in other regions within Indonesia and in other neighboring countries. The artists themselves are worried about the reproduction of their designs by outsiders who don't know the meanings or significance of certain designs.²⁶

In order to protect the traditional batik designs from misuse and misappropriation, the local government in Solo has developed a design patent program for the traditional designs. This means that thousands of batik motifs will be registered at the local government office. For the designs to be used by the batik makers as well as others, permission will need to be obtained from the government office.²⁷

This is a defensive intellectual property strategy. The design patent framework serves as a preventative mechanism for unauthorized use of batik designs. To register the traditional designs there is a fee charged. 'Ownership' of the traditional design upon registration is then assigned to the company or family of producers who have registered the motif. However, not all the batik designers can afford this fee, or the accompanying fee for using the registered design.

2.2.5 An unintended effect of this strategy is that many smaller producers are being marginalized from the industry that enables their livelihood.²⁸ The registration process privileges some producers over others and thus also establishes new hierarchies within the community. The registration process, as a very specific form of regulation, creates more forms of bureaucracy and imposes different kinds of social ordering within the community because of the new conditions of access that are required to maintain batik practice.

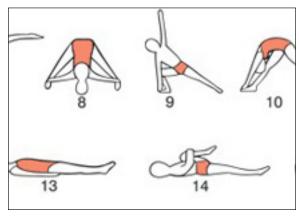
2.3 Traditional knowledge and Bikram Yoga

2.3.2

2.3.1 Bikram Choudhury is the founder of a yoga technique known as Bikram Yoga. Instructors across the United States must obtain a license from him in order to teach the yoga sequence found in Bikram Yoga and/or to call a yoga studio Bikram Yoga.

Bikram Choudhury has aggressively enforced claims of copyright and trademark protection – including the claim that the sequence of asanas in *Bikram's Beginning Yoga Class* constitutes his copyright. Many yoga practitioners object to the idea that Choudhury can have exclusive control over a series of postures derived from Indian traditional knowledge and practices.

2.3.3 Choudhury first registered the copyright for Bikram's Beginning Yoga Class in 1979 and subsequently filed copyrights for various books, audiotapes and videotapes. In 2002 Choudhury filed for copyright for the yoga sequence itself – claiming that the US Copyright Office acknowledges his exclusive right to the distinct series of postures and breathing exercises comprising the sequence.



While Choudhury recognizes that asanas generally are in the public domain, he claims that his sequence constitutes a copyrightable compilation of material. Choudhury's argument is that he has exerted specific skill and labor in the selection and assemblage of the asanas into a specific sequence.

California heard a case – *Open Source Yoga Unity v. Bikram Choudhury* – testing these claims.²⁹ Open Source Yoga Unity (OSYU) filed for a declaratory judgment seeking an order that Choudhury does not have enforceable rights or trademark rights because individual yoga asanas constitute functional information rather than expressive creative content. The Court denied motions from both sides for summary judgment thus leaving questions of trademark invalidity, whether the sequence is in the public domain, the copyrightability of the sequences and the proper publishing date, unresolved. The case was later settled by the parties with no disclosure regarding the details of the settlement. Choudhury is still free to take legal action against

to mount an effective legal challenge against Bikram Yoga arguing that the copyright in yoga asana sequences constitute a misappropriation of traditional knowledge unique to India. In India there is a large-scale effort to catalog the estimated 1500 asanas in order to prevent cases like this in the future.

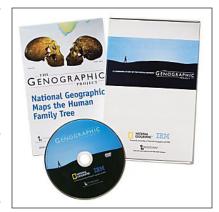
other yoga practitioners and trainers in the United States.

Genetic information, databases of DNA and the Genographic Project

- 2.4.1 The Genographic Project (the "Project") was launched in 2005. Funded by National Geographic, IBM and the Wiatt Family Foundation, it is a five-year project that seeks to resolve genetic issues concerning the origins of human diversity. As part of the Project, it is estimated that DNA from over 100,000 indigenous people around the world will be collected.
- 2.4.2 There are no uniform laws relating to genetic databases and bio-banks in a majority of countries including the United States, Canada, the United Kingdom, South Africa and Australia.³⁰ With no legal controls, the general

approach across different jurisdictions is that control of DNA samples rests with the person who controls the database.

2.4.3 The National Congress of American Indians established Resolution REN-08-030, which calls for the cessation of the Project. This includes a halt in the collection of samples from indigenous communities until clear guidelines and codes of conduct for research with indigenous people through the Project, and the long-term storage of



these samples, are established.³¹ Further concerns relate to the responsibility of researchers when working with indigenous peoples, indigenous communities' rights to control, develop and derive benefit from any research in which they are involved, the likely change over time in the value of the collected genetic information, and the ownership of and future access to the genetic databases.³²

2.4.4 The current dispute over the return of blood samples taken from the Yanomami people between the 1960s and the 1990s in Northern Brazil, which are currently held in three different universities in the United States, serve as an important reminder about the problems that can emerge over time from the collection of genetic information. In this case there are issues about prior-informed consent, the conflict between scientific collecting rationales and indigenous knowledge systems, and the danger of returning unstable blood samples – and the possibility that these samples have been swapped and/or contaminated through other forms of testing.³³

As the value of genetic material and the conditions of ownership and access to data and the management of databases change, this area can be expected to produce contestation in the future.

2.5 San/Hoodia case and access and benefit-sharing

2.4.5

2.5.1 The San are an indigenous group of about 100,000 people based mainly (but not exclusively) in Botswana. From the 1930s, anthropologists have documented the use of the Hoodia plant by the San people as a natural appetite suppressant.

2.5.2

In 2001 the Council for Scientific and Industrial Research in South Africa filed for several international patents on the Hoodia plant. The San were not involved as stakeholders, or acknowledged as the originators of the knowledge that led to the patents. The CSIR argued that it was difficult, if not impossible, to identify who the owners of the indigenous knowledge were when it was so widely shared.

2.5.3

Following pressure from key advocates working with the San, a benefit-sharing agreement was negotiated in 2003 between the San and the CSIR. The agreement included provisions that the San would receive a portion of royalties (6%) from any successful commercialization. The negotiation of the benefit-sharing agreement was difficult

and presented numerous problems, including the translation of complex conceptual as well as practical information regarding patent and scientific knowledge and ethical means for establishing new decision-making processes within the San communities that could address ownership and control of traditional knowledge.

2.5.4

In December 2008, the company Unilever, which had received a license to advance the Hoodia patent, suspended its development project. It is not clear if there will be any benefit for the San now that development has been suspended. The example illustrates the opportunity for indigenous people to enter into agreements where there is the possibility of generating economic benefits. It also highlights the practical and conceptual challenges for indigenous people to negotiate rights when the framework for negotiation is biased toward the dominant industry party, when there is limited legal advice available, and when this kind of negotiation challenges already existing authority and governance structures within the communities themselves.³⁴

The Bugis creation story and the theater production I La Galigo

2.6.1 I La Galigo is a music theater production developed in 2002 that draws upon the epic creation myth Sureq Galigo of the Bugis people in South Sulawesi, Indonesia. Between 2004 and 2008, I La Galigo toured internationally in

2.6.2

2.6.3

2.7

2.7.2

France, Spain, the United States, Indonesia, The Netherlands, Australia and Italy.³⁵

The production consists of a cast of fifty-three musicians and dancers mostly from Sulawesi and Bali, Indonesia. The music for the stage work draws from traditional Buginese styles, utilizing traditional instruments, but also



has other instruments and contemporary music forms added. The work is profoundly important to the Bugis people and has stimulated extensive cultural pride and re-invigorated cultural practices such as reading and writing Buginese.

With the adaptation and transposition of the oral Bugis story into a stage production, various new intellectual property rights (for example, copyright, performers' rights) have been established. These rights are not held by the Bugis people, but rather are held by Indonesian individuals and foreign nationals who adapted and produced the stage production and musical score.

2.6.4 Unfortunately *I La Galigo* has not been performed in South Sulawesi where the majority of the Bugis people live. The Bugis community suffers from extreme economic disadvantage and there is frustration that not only has no performance occurred within the community from where it originally derives and has significant cultural significance, but that there has been no direct economic return for the Bugis people. That intellectual property rights do not vest with the community is now also a fundamental concern for many Indonesian governmental representatives.³⁶

Lego and the use of Maori names

2.7.1 In 2001, Lego launched a new range of action figures called the Bionicle. Bionicle involves a group of imaginary inhabitants of the island of Mata Nui who are under the power of an evil beast called Makuta. In the storyline, Lego used a mix of Polynesian words – including several Maori words.

On behalf of three Maori groups, a New Zealand lawyer wrote to Lego objecting to the use of the Maori words. The lawyer argued that the use of the words constituted a serious trivialization of Maori culture, especially when names that have spiritual significance were being used.

Initially Lego rejected the complaint. However, following negative publicity, a representative went to New Zealand to meet with the Maori groups. Following the meeting, Lego agreed that it had acted improperly and dropped the use of the word Tohunga. It also agreed to not use Maori names in future versions of the toys.

2.7.4 Representatives of Lego and the Maori groups met to discuss the development of a self-regulating code of conduct for toy manufacturing companies. The possibility of Maori authorizing Lego to produce a line of Maori designs and symbols was also discussed. However, for multiple reasons, the code of conduct did not proceed and there remain no guidelines or codes of conduct for industry engagement with Indigenous communities.³⁷



CHAPTER 3

CURRENT PROPOSALS: DANGERS, PROBLEMS AND OPPORTUNITIES

3.1 Current proposals

- Indigenous people and communities are experiencing problems in multiple areas of knowledge control and knowledge governance, especially when dealing with non-indigenous people and other third party interests. It is unlikely that one specific legislative development would comprehensively solve all the issues currently being encountered especially because, as illustrated above, the issues can also cut across different bodies of law.³⁸ While there is profound political significance in the development of an international approach to indigenous intellectual property issues, there is also an urgent need to develop local strategies that are appropriate to both community and context and are, importantly, more immediately accessible.
- The extent of current proposals reflects the complexity of the issues for law, policy and local/national/regional/international governance. In the outline of these below, it is clear that they are neither uniformly coherent nor necessarily applicable for every instance or in every context. Loosely they can be grouped into five separate categories:
 - proposals that modify the current intellectual property framework;
 - proposals that utilize other areas of critical intellectual property discourse;
 - proposals that target private law solutions;
 - combined approaches;
 - alternative regimes; and
 - international treaties and conventions.

3.1.3 That the proposals range from international and overarching frameworks (treaties) to localized and targeted strategies (private law making) reflects the different opinions about what the nature of the problem is and what kinds of solutions might be developed that would provide immediate relief or remedy. The current proposals presented below necessarily respond to the diversity of the issues, the different kinds of people affected, and the ongoing questions about access to law and legal advice that remain central. Given the complicated dimensions informing this area, a single solution is perhaps inappropriate.

is important that significant attention is given to making them accessible as this will affect their utility and impact. Any successful intervention in this area is dependent on the capacity for indigenous peoples and communities to make informed decisions about what options are available and appropriate for each problem and each context.

3.2 Proposals that modify the current intellectual property framework

3.2.1 Labeling and/or trademarks

3.2.1.1 There are a range of circumstances where indigenous people have utilized labeling or other marks, including trademarks, to protect products within a market.³⁹ Certification marks, and marks of origination, can work well for indigenous people especially when the value of the product is tied to its derivation within a particular context or by a particular group.⁴⁰

Labeling is most useful for indigenous knowledge products that are already operating within the marketplace as (cultural) goods. The use of labels also works well when consumers are educated about specific labels and how labels function as an indication of the originality and/or authenticity of the products. Labeling systems that denote a product's indigenous origin, either in context or personhood, enable indigenous works to be more easily identified and differentiated from non-indigenous works and/or copies that may be available.

3.2.1.5

Labeling and marks require both infrastructure and administration to make them effective. There can be significant costs associated with developing and policing labels or marks. For many indigenous communities these can present practical barriers to their adoption. For example, prior to the granting of the trademark, specific administration is needed to make sure that the trademark meets certain requirements. The role and responsibilities of national governments in these processes may warrant further analysis.

In Australia, many indigenous communities use specific marks or labels on their goods to signal to consumers that the works originate from a particular community. The specificity of attribution and naming using a labeling system affirms the distinct identity that each community has from one another. In contexts where homogenous indigenous identities have been historically assumed (often as a by-product of colonialism) and perpetuated, group and community labeling is an effective tool to re-affirm distinct community and/or collective identity. Labeling thus brings benefits to both the indigenous communities and to consumers.

While labeling cannot stop the counterfeiting of indigenous products, it can provide an advantage in a marketplace since labels provide the consumer with the ability to differentiate the fakes from the genuine indigenous works. In New Zealand, for example, the "toi iho" is a specific Maori trademark that is designed to promote and sell authentic Maori arts and crafts.⁴³

3.2.1.6 One notable problem that has lead to failures with national labeling systems, (like the Labels of Authenticity in Australia) is that these labeling systems can, unintentionally, reinforce and promote an 'authentic' and homogenous indigenous identity. This becomes problematic when indigenous people either do not 'fit' into the required category, or do not want to identify in such a way, as it is too restrictive for identity and/or for artistic practice. ⁴⁴ Observing the moments of failure in this area can provide valuable lessons about what is important for indigenous peoples and communities to ensure ongoing participation in such strategies, as well as recognizing what kinds of realities indigenous peoples are working within. Importantly this includes accounting for collaborative work and respect-

ful and important working relationships between indigenous and non-indigenous people.

All proposals have the potential to change current practices. In every context it is important to make sure that the advantages and reasons for creating a label are adequately explained, and appropriate means for utilizing a label are discussed and agreed upon within the relevant community context. There have been circumstances in Indonesia, for example, where labeling has been promoted among rural women's weaving collectives, but not adequately explained. Following the workshop on labeling run by an NGO, many women in the collective started to weave large identifiable labels (which were the names of the family or community to which the designs 'belonged') into their works. Unfortunately, this significantly altered the aesthetic appeal of the works and directly affected their value in the market – as the works were unable to be sold. While this outcome was not necessarily predicted in the information workshop on labeling, it occurred as a direct result from the information provided and affected the women's direct means of livelihood.

3.2.2 Moral rights

3.2.2.1 Moral rights derive from the French *droits d'auteur* or rights of the author. ⁴⁵ These generally involve the right of attribution, the right to have a work published anonymously and the right to the integrity of the work (not to have the work altered, distorted or mutilated). They are inalienable and cannot be transferred except through an agreement between the creator and a third party. Moral rights are in addition to standard copyright rights and are generally recognized in civil law jurisdictions. ⁴⁶ They are not economic rights. For moral rights to exist there does need to be a copyrighted work and a creator/author.

3.2.2.2 Distinct from any kind of economic right, moral rights directly address the relationship between the creators/artists/authors and their work. Thus there have been suggestions that moral rights could offer an effective means for protecting indigenous peoples' rights in works that utilize or derive from indigenous knowledge. Certainly a primary concern for indigenous peoples has been the limited acknowledgement or attribution associated with works. While there are numerous examples of works being misused and maltreated,

for instance sacred images being simplified and transferred onto carpets, fabric and other mediums that distort and denigrate the significance of the imagery for indigenous people, there is yet to be a case that utilizes current moral rights legislation.⁴⁷ Therefore it is not yet clear how moral rights could alter, or provide some remedy for this kind of scenario.⁴⁸

Moral rights are premised upon the creators' and/or artists' relation to their work. Such concepts are dependent upon historical constructions of authorship and legal subject, and works that are capable of being identified according to the culturally specific modes of classification inherent to intellectual property law. Moral rights are ineffective, for example, if an indigenous work is not recognized as legitimate copyright subject matter. Also, moral rights only protect the rights of individuals not of communities or collectives. Generally, sound recordings are excluded from moral rights protection. This is a problem because with the ongoing patterns of oral cultural transmission and low literacy levels, significant amounts of indigenous knowledge have been recorded and exist as sound recordings.⁴⁹

Nevertheless, moral rights could answer many indigenous peoples' requests to be named and associated with works in whatever context they appear. This is not dissimilar to the effect that moral rights have for other artists/creators. Naming can also counteract the common perception of an undifferentiated "indigenous person" and bring recognition to the local contexts from which works derive, circulate and have multiple meanings. In many situations, moral rights could address specific issues about naming and having control over the integrity of a work, although this can only happen when the work meets the criteria for copyright protection.

3.2.3 Confidential information

- 3.2.3.1 The laws protecting confidential information or trade secrets are varied within each legislative context, but they do hold important possibilities for the protection of indigenous knowledge. This is especially the case for secret/sacred information.
- 3.2.3.2 There are at least two notable cases where indigenous people have employed laws of confidential information successfully.⁵⁰ Both occurred in Australia and predated the successful copyright and Aboriginal art litigation that

3.2.3.4

took place in the 1980s and 1990s. Both cases related to the publication of the book *Nomads of the Desert* by the anthropologist Charles Mountford. The publication released significant and secret ceremonial information of the Pitjantjatjara people. While Mountford was well aware of the sensitivity of the material, he was unwilling to withdraw the book from sale, which in the first case led to an injunction against the sale of the book within the Northern Territory, Australia. The court recognized the legitimacy of the claim, made by the Pitjantjatjara Council on behalf of the Pitjantjatjara, Yankuntjatjara and Ngaanyatjara peoples, that disclosure of the information had serious and potentially dangerous consequences for community social structures.

3.2.3.3 The second case also involved the Pitjantjatjara Council and related more specifically to the viewing and selling of Mountford's slides, some of which were used in his book and others that were from his collection. The Final Orders of the court granted property in, and ownership of, the slides. As Kathy Bowrey explains:

This second case is very significant in recognising that the remedy to the breach of confidence required orders affecting claims to both tangible and intangible property – slides as chattel property and to copyright in the photographs.⁵¹

In a recent review of a mining proposal in Canada, a federal panel of the Canadian Environment Assessment Agency granted the Tsilhqot'in National Government's request that certain current and traditional/cultural information be deemed confidential. As the panel's decision states:

After reviewing the Tsilhqot'in National Government's request and the comments received from interested parties, the Panel is satisfied that disclosure of the series of maps depicting current use and cultural heritage information derived from interviews with Tsilhqot'in members could potentially result in harm to either the environment or to the Tsilhqot'in people. As such, the Panel, is granting the request that the series of maps be kept confidential.⁵²

3.2.3.5 Given these instances and how this area of law speaks more directly to indigenous peoples' concerns about appropriate disclosure of information, it is surprising that it has not been used more often. While there may be difficulties in satisfying the key elements that constitute a breach of confidence claim (especially the conditions set out in the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement), it nevertheless offers itself as a

useful tool that could be further developed and used in conjunction with other strategies. For example, an obligation of confidence could be expressly conveyed in new cultural protocols or license agreements.

3.2.4 Performers' rights

3.2.4.1 Performers' rights are interpreted as neighboring rights – that is they are similar to the rights of an author (protected through copyright), but are not necessarily connected to the rights of an author of a work. Performers' rights are understood as generating a distinct kind of right and this has been recognized in international law since the 1961 Rome Convention.⁵³

3.2.4.2 While the Rome Convention and TRIPS agreement protect performances of literary or artistic works only, the 1996 WIPO Performances and Phonographs Treaty (WPPT) extends intellectual property rights to expressions of folklore.⁵⁴ As Antony Taubman explains, this is significant because:

In recognizing economic and moral rights over performances of folklore, the WPPT potentially gives traditional performers control over the songs, chants, and recitations that are the customary means of transmitting and preserving their cultural heritage and traditional knowledge. To some extent, the *sui generis* protection of traditional knowledge it that is represented by aural performances of expressions of folklore is already part of binding international law in the form of the WPPT, which partially anticipates political demands for such an international instrument.⁵⁵

3.2.4.3 The utility of performers' rights as articulated in the WPPT is dependent upon their translation into national jurisdictions. Workable national regimes that are in compliance with the treaty will provide scope for protecting performers' rights deriving from performances of expressions of folklore. The treaty also leaves the definition of a performer relatively flexible, and it is important that expressions of folklore do not have to be original or otherwise copyrighted. This also extends the scope of protection that could be offered under national legislation. Questions remain about retroactivity and the application of these rights to foreign nationals, or performances of expressions of folklore occurring outside the national context, and require further investigation.

3.2.5 Limitations and exceptions to existing legislation

3.2.5.1 Limitations and exceptions to existing legislation may provide an opportunity for indigenous people to access protected works and to address other specific needs. Copyright law, in particular, lends itself to this approach. One advantage is that an exception could be created that directly targets a key problem being experienced by indigenous people as a specific community of intellectual property users. Examples of exceptions for certain users exist, most notably, for libraries and archives, and for other (usually non-commercial) uses of works under copyright legislation.

3.2.5.2 One exception that could be developed within copyright, for example, might target indigenous people as very specific kinds of users of cultural material already existing as copyrighted works. Indigenous people often find themselves in the position of not being the legal 'owners' or 'authors' of works that draw on their knowledge and knowledge systems. This is one of the legacies of documentation and collecting projects involving indigenous peoples that were carried out by researchers, colonial administrations and non-indigenous governments. What this means contemporarily is that in order to use material from these collections - to make reproductions and copies, for example, of a ceremony, dance, song series, etc. - indigenous people often need to secure permission from the copyright owner first. An exception for indigenous users could be developed that would permit limited uses of copyrighted works for cultural education, display within the community, performance and other non-commercial and community-oriented purposes, without having to get permission from the copyright holder.

3.2.5.3 The development of exceptions or limitations in future intellectual property legislation could recognize that indigenous peoples constitute a different kind of user group. One potential disadvantage of this idea is that the development of a special class of user would require definition, regulation and monitoring – such processes ironically replicating those that were created and imposed on indigenous peoples throughout the colonial period and carried into the contemporary present. What is required is innovative thinking that is attuned to the effects of legal definitions upon indigenous peoples, while at the same time anticipating future needs and creating possibilities for new responses within law. Exceptions and limitations do offer some new

kinds of options however, especially as they recognize that not all users of copyright material are necessarily the same, or have the same needs.⁵⁶

3.3 Proposals that utilize critical intellectual property discourse

3.3.1 Public domain

3.3.1.1 The concept of the 'public domain' has become one of the most important concepts contributing to the formation of a critical intellectual property discourse. Advocates for the public domain provide a much-needed counterframework to understand the cultural and economic effects of the monopoly privileges upheld through conventional intellectual property rights.⁵⁷

There are a range of reasons why indigenous knowledge issues cannot always be accommodated within this critical intellectual property discourse. In short, this is because the history and politics informing indigenous knowledge issues and the history and politics informing arguments for the public domain are not the same. Indigenous peoples' historical exclusion from the broad category of 'public' feeds part of the differences in objectives. Indigenous peoples also present different perceptions of knowledge, the cultural and political contexts from which knowledge emerges, and the availability, or perceived benefits of the availability, of all kinds of cultural knowledge.

of the historical conditions that meant that indigenous people lost control over how and what knowledge was to be circulated.⁵⁸ When much of this material was made, there was no meaningful explanation about the extent of circulation, the potential uses and possible third party users.⁵⁹ While this is perhaps also the case for much information collected prior to the 1980s, the conditions that led to the study and collection of indigenous knowledge and cultural materials in the first place raise different moral and ethical problems.⁶⁰ Far from being reconciled, this historic problem is actually exacerbated by the potential for increased circulation of these materials.⁶¹ As a response to this, there have been circumstances where indigenous people have argued that some knowledge should be withdrawn from circulation and

that for specific kinds of knowledge, protection should be granted in perpetuity.

as a culturally specific framework that reinforces the invisibility of past and ongoing indigenous peoples' practices in regards to knowledge management – where certain kinds of knowledge have very specific rules governing access and circulation. To adequately deal with these differences, it may be best to understand indigenous peoples' issues *vis a vis* the public domain as ones primarily about control and renegotiating culturally appropriate conditions for access. Thus part of the dialogue for public domain advocates is in creating space for alternative cultural interpretations about the advantages and disadvantages of circulating knowledge to be included as legitimate.

Indigenous knowledge issues invite further discussions about history, politics, the role of cultural authorities and the power relationships inherent in conceptions of 'the public,' 'common heritage,' 'sharing' and 'freedom.' The innovative and progressive sites where issues pertaining to the public domain are most intrinsically engaged offer important opportunities for the differences experienced by indigenous people in relation to knowledge access and control to be meaningfully engaged. They also offer possibilities for alternative frameworks for protection, use and sharing to be thoughtfully developed.

3.3.2 Creative Commons

3.3.2.1 Creative Commons is another major venue for advocacy and functions as part of the critical alternative intellectual property discourse. While advocates for the public domain and Creative Commons have different ambitions and trajectories for action, there are similar precepts that link them together in important ways.

3.3.2.2 Creative Commons is a licensing framework that seeks to provide an alternative to the copyright regime, and the implied 'all rights reserved' model that copyright upholds. The development of Creative Commons licenses, and their success and transferability across multiple jurisdictions, speaks to the need for alternative frameworks for the uses of works. In creating conditions where specific needs (for example, attribution, acknowledgement, non-

commercial use) can be incorporated and prioritized, there is a fundamental reworking of the intellectual property paradigm. As indigenous peoples are also asking for reform that acknowledges their different needs in relation to knowledge control and circulation, there is the very real possibility of addressing specific indigenous peoples' needs through innovative and alternative licenses like Creative Commons.

3.3.2.3 With over fifty jurisdictional licenses to accommodate local copyright and private law, the philosophical underpinnings of the Creative Commons framework seems able to accommodate differences experienced at local levels. As one of the greatest needs in the area of indigenous knowledge protection is to embolden local knowledge management strategies, licensing offers a range of new possibilities where there is space for acknowledging that indigenous peoples are not a homogenous group and that the significance and value of knowledge and works that are developed from such knowledge are often directly tied to context and locality.

3.3.2.4 Creating the conditions for proper and ongoing advice in relation to the creation of a specific license (or licenses) for indigenous knowledge use remains a central issue. In addition, there are dangers in replicating some of the problems that have plagued the area of 'labeling' as discussed earlier. Most specifically in relation to creating homogenous licenses that might categorize all indigenous peoples' needs as the same, though different from any other group's needs. There are other more general questions of jurisdiction, but these affect all forms of licensing and are not necessarily limited to Creative Commons.

range of indigenous—knowledge-specific licenses. These should be developed in collaboration with specific communities and thus respond to local and particular needs. Indigenous peoples' issues must be incorporated into the critical intellectual property discourse as legitimate even if the expectations and needs are not necessarily the same. While these may initially be challenging (for instance in raising questions such as 'whose commons?'), a robust and critical intellectual property discourse will benefit from addressing all those who have been historically excluded from this body of law.⁶³

Proposals that target private law solutions

3.4.1 Protocols

3.4.1.1 Over the last ten years there has been a steady increase in the development of protocols to deal with issues of access, control and ownership of indigenous knowledge.⁶⁴ Protocols have played an important role in establishing new kinds of relationships between indigenous people, indigenous communities and other organizations and/or non-indigenous people.

In general, protocols can be understood as context-driven policy. They can be developed to address specific problems and provide guidance in relation to appropriate behavior when it is required. Protocols can incorporate community perspectives and be targeted to particular issues. For example, protocols have been developed for libraries and archives, for visual artists, and for collaboration between filmmakers. Frotocols have become an important tool for changing attitudes and behavior around indigenous knowledge access, use and management. Protocols make new kinds of negotiation possible.

Protocols are codes of conduct, guidelines or sets of manners that explain how people should behave in certain circumstances. They can be used to set community standards around knowledge circulation and use for outsiders as well as help change attitudes and set new standards. Generally, protocols are flexible and can change over time. It is important to see them as tools to help achieve certain goals that other areas of law have been unable to fulfill. As formal or informal guidelines for behavior, protocols can help build relationships and make new ones possible.

3.4.1.4 Importantly, protocols are not necessarily dependent upon bureaucracies or governments. Protocols respond to community or local needs and can be developed locally – they are not a 'top down' approach. As they are flexible and can change over time, they can incorporate community and/or more localized practices and expectations of behavior. This also means that as practices change so too can the protocols.

3.4.1.5 The structures that protocols take can vary depending on what they are needed for and who they are aimed at.⁶⁸ Protocols tend to be written but they

do not need to be. For example, they could be put on video, taped or put online. Written protocols are often helpful when dealing with people from outside the community, but this may not be the case when protocols are used within a community.

3.4.1.6 On their own, protocols may not be legally binding. This means, for example, if a research group promised to follow a protocol that prohibited them from taking plants from a community, there might not be legal recourse if plants were actually removed from the community. However, because protocols are articulated and negotiated with specific regard to practical detail within community contexts, they are a source and form of private law. This means that they can have legal standing.

options. This is especially true in situations where indigenous peoples a range of options. This is especially true in situations where indigenous people may not want to engage with formal legal mechanisms, but would rather find means for articulating customary law or local laws specific to the context. Protocols provide conditions for indigenous peoples' agency in the sense that they can embolden already existing practices rather than imposing new ones. This is one of the central reasons why they have been adopted and are increasingly found across all areas involving negotiations around indigenous knowledge use.

3.4.2 Knowledge registries and databases

3.4.2.1 Transmission of indigenous knowledge historically and in many contexts continues to occur orally. Unfortunately this has facilitated its use and appropriation by others, especially because the extensive documentary projects by non-indigenous people led to the archiving of these materials in centers far from the original communities. Owing more to hierarchies of knowledge production and perceptions that scientific knowledge is more 'true' or 'trustworthy' than indigenous knowledge (partly facilitated through ideas of 'accuracy' in documentation practices), many researchers have drawn upon indigenous knowledge for their own ends without acknowledgement. Particularly in the context of biodiversity a range of patents have been granted that directly utilize (but do not acknowledge) indigenous knowledge about plants, medicinal properties and methods of extraction. Turmeric and neem

are two of the most controversial (and popularly cited) cases where patents were granted to individuals when the knowledge that they were drawing upon was widely known within the relevant communities, but had not been recorded in tangible form.⁶⁹ These examples put the problem of trust between parties squarely on the table.

3.4.2.2

Knowledge registries and databases are developed for a variety of reasons. What the kind of registry or database holds depends on who created it and who might use it.⁷⁰ For example, indigenous knowledge databases have been initiated by libraries and archives in specific nations.⁷¹ Others have been created by anthropologists working on knowledge projects in specific communities.⁷² Some are created as documentary and archival sites for indigenous peoples themselves; while others record and document traditional indigenous knowledge so as to prevent it from being used by others without acknowledgment.⁷³ One rationale for this latter version is that by recording the knowledge it will exist as documentation, and thus can as a cross-check against contentious claims (most usually patent claims) proving the prior existence of the knowledge.

3.4.2.3

The most comprehensive database is India's Traditional Knowledge Digital Library (TKDL).⁷⁴ It holds 36,000 formulations utilized in Ayurvedic medicinal practice. The TKDL categorizes the knowledge in ways that allow it to be linked to international patent classification systems. The information is available in English, French, German, Spanish and Japanese for ease when searching.

3.4.2.4

Such databases, registries and libraries are being advocated nationally and regionally. This defensive intellectual property strategy has a number of merits but also several dangers. Collecting information in order to 'prove' the prior existence of knowledge being passed off in a commercial patent as unknown is extremely important. This is particularly useful in contexts like India where the state has direct investment and involvement in protecting knowledge.

3.4.2.5

Unfortunately this is not the case for every country where indigenous people reside. To the contrary, knowledge databases can provide even greater access to outside parties seeking indigenous knowledge. Databases, registries and libraries can facilitate access to traditional knowledge without users ever

having to deal or negotiate directly with an indigenous community. The uneven legal protection for databases exacerbates the problem. The question of ownership also arises — not only who owns the database (as a whole), but who is recorded as the legal 'owners' of the documented knowledge, how long this material will be protected for and what might happen if there are inter-community disputes over who the rightful owners or custodians are.

3.4.2.6 The creation of traditional knowledge databases does not escape the problem of determining intellectual property ownership. The same problems of ownership (especially in recognizing community or collective ownership and whether this is desirable or appropriate) persist. Indeed such databases operate squarely within the intellectual property paradigm – which also means that all this information will eventually come into the public domain for anyone to use.⁷⁵

3.4.2.7 For many indigenous people, there remains the further problem of decontextualizing knowledge and knowledge practices from the locales that actually make it meaningful. Through this process, salient dimensions of the knowledge may be lost. It is also worth being mindful of re-creating colonizing paradigms of knowledge control through these recording processes. For instance, where will the databases be located? Will indigenous peoples be able to access them easily? Who does the recording? What kind of literacy support (digital and other) is provided to the participating communities?

from general questions about the documentation of their knowledge (and whose priorities are being followed) to questions about who will own, manage and access the information in the future. These issues need to be negotiated with the particular community from the outset of the establishment of the database, registry or library. Given how contested these areas actually are, it is worth being mindful of how database projects could replicate exactly the same concerns and future problems.

3.4.3 Licenses and licensing

3.4.3.1 Indigenous people do not necessarily perceive their knowledge systems to be free and open for all to use. To the contrary, there can be very specific rules governing access to and use of knowledge within communities and between

3.5.2

3.5.3

families, clans and/or individuals. As noted above in relation to Creative Commons, licenses and licensing agreements offer an opportunity to develop culturally appropriate regulation where indigenous peoples' perspectives and needs can be legitimately addressed.

3.4.3.2 The development of indigenous—knowledge-specific licenses will take time and consultation. There will also need to be attention to linguistic differences and literacy needs. Most indigenous communities also have ongoing issues in relation to accessible legal advice — and how, for instance, to negotiate and use a license with an outside party if and when the need arises. If this strategy is linked to several others, it might provide new kinds of leverage for indigenous peoples' interests and increased capacity to negotiate culturally appropriate frameworks for the use of knowledge and knowledge products.

3.5 Combined Approach — Toolkits

3.5.1 The toolkit approach is an overarching framework explaining the multiple options available for protecting knowledge in any indigenous context. It aims to address the overlapping and immediate needs of communities when engaged in, and participating in, research projects, tourism projects, biopharma projects – generally any project where indigenous people are participating and indigenous knowledge might be utilized.

The toolkit seeks to make available a range of options that can be tailored by the community depending on what is happening and how the community would like to respond. In providing multiple options, final decision-making is localized – that is, indigenous people are able to participate in the decisions about which strategy is the most appropriate for the case at hand. This strategy recognizes the need for negotiation between different representative bodies within a community itself and the space for adaptation and dialog about what is happening within the location, under whose auspices and with what expectations for outcomes. It seeks to provide information and options for local governing representatives.

Any toolkit needs to be developed in accessible ways, mindful of the limited capacity for communities to hold equal negotiating positions with researchers and other parties who might come and do research within indig-

enous contexts. With toolkits containing guidelines, model contracts, agreements and frameworks for making informed decisions about what options are available and how to proceed, the biggest issues remain ones of ongoing advice, translation, funding, capacity for follow-up and sustainability.

3.6 Alternative regimes

3.6.1 Customary law

is to be respected and protected then attention needs to be given to the manifold indigenous laws and governing structures that historically and contemporarily exist for regulating knowledge use. That is, indigenous laws need to be treated as legitimate and given appropriate authority, rather than dismissed and/or supplanted with national or international laws.⁷⁶

law, are localized and contextual. They derive from specific locations and they are not necessarily transferable across communities. The particularity of indigenous laws presents intellectual property law, and the desire for 'harmonization' or standardization, with substantial challenges. This is not only in relation to recognizing legitimate sources of authority within communities, but also how rules that may be community-specific are respected outside the local context.

frameworks requires more thorough consultation and development. Initially, however, the most useful way to incorporate indigenous laws and forms of governance for access and control of indigenous knowledge is through agreements or protocols (see above). These should be articulated by the community itself, and thus a framework that helps establish the conditions for this to occur is necessary.

3.6.1.4 Building frameworks to enhance the authority and legitimacy of indigenous laws must be central to any developments in this area. Over time, it may be possible to identify and synthesize key dimensions of knowledge management across communities, but this is a long-term goal. The short-term strategy starts with recognizing the existence of local knowledge management strategies, and building frameworks that actively support and endorse these even when they may offer alternatives to the current intellectual property regime.

3.6.2 Sui generis legislation

3.6.2.1 Owing to the perceived difficulties of building new mechanisms that directly address indigenous peoples' needs and expectations about knowledge use and control within the current intellectual property law framework, suggestions for an altogether different approach have been made. *Sui generis* law means of its own kind, that is, it is a unique law complete unto itself and often created when current and existing laws are inadequate.⁷⁸

A significant issue in this area is that indigenous peoples must be constantly translating and transplanting their concepts into frameworks of rights that are not necessarily appropriate or that may not address their expressed needs. To the extent that indigenous knowledge can be protected through laws of intellectual property, this is only possible through concepts including property, ownership, works, monopoly privilege, exclusive rights, originality and individual authorship.

3.6.2.3 Proposals for *sui generis* legislation for the protection of indigenous knowledge and indigenous rights are slowly being crafted.⁷⁹ Countries like Peru and Panama have been at the forefront of developing national *sui generis* legislation.

There is often confusion about *sui generis* legislation, particularly in relation to how it does or does not fit into an intellectual property regime. The benefit of *sui generis* legislation is that it in no way has to resemble any current law, intellectual property or others. Thus it offers an opportunity for participation by indigenous people and flexibility in developing frameworks that deal with knowledge control, use and sharing. As Tobin and Swiderska comment:

The role of a *sui-generis* regime could therefore be to establish a bridge between indigenous/local community and national and international legal systems, in

order to secure the effective recognition and protection of rights which derive from customary law and practice.⁸⁰

3.6.2.5 There are ongoing debates about how *sui generis* legislation should be developed. For instance, is it appropriate for international agencies to assist in the development of *sui generis* legislation or should each nation state take responsibility for the development of a *sui generis* approach that is appropriate to the circumstances of each context? Other issues, such as the diversity of subject matter, the difficulty of identifying owners/custodians, and the applicability, enforceability and transferability of sui-generis legislation across diverse cultural contexts raise challenges, and responses to these will affect what approaches are taken.

3.6.3 Human rights, cultural rights, community rights?

3.6.3.1 Given the challenges to developing options for the protection of indigenous knowledge, there are efforts to move the debate beyond an intellectual property paradigm. A shift in the argument positions indigenous peoples' rights to control, use and derive benefit from indigenous knowledge as fundamental human rights, and therefore treated as part of a human rights discourse rather than as part of an intellectual property framework.⁸¹

3.6.3.2 Shifting the view and potential legal context changes the way the issues are conceptualized. This could be useful because protecting indigenous knowledge outside the very contexts that enable the production and transmission of indigenous knowledge, which is essentially what intellectual property law offers, seems to raise some fundamental problems.

3.6.3.3 Support for the very communities from which indigenous knowledge derives and is sustained is a necessary component of any knowledge protection strategy. Support and sustainability for indigenous cultures include issues of health, housing, land rights, and the capacity for cross-generational transfer and transmission of knowledge. These all affect the life of indigenous knowledge.⁸²

3.6.3.4 A human rights approach allows indigenous peoples' rights in knowledge control to be considered as one part of a larger rights framework in which indigenous peoples are already actively participating.⁸³

3.6.3.5 The subjectivity of indigenous people from which indigenous knowledge derives gets re-situated through the connection between indigenous interests in intellectual property and human rights. Arguing for rights through the human rights prism centralizes the people component and re-arranges how the assemblages between people, knowledge and property rights are to be made.

while the shift to a human rights discourse offers useful possibilities for re-interpreting the issue, the capacity for effecting fundamental changes within the intellectual property regime is perhaps minimal. In this sense, indigenous issues start to again be treated as 'exceptional' rather than showing the problems to lie within the genesis and operation of the (intellectual property) law itself. Another potential tension involves the relationship between individual rights and collective rights. There are the additional and pragmatic questions as to what extent nation states take human rights issues seriously, and where and how any abuses or violations are to be meaningfully overcome – for example how would a local law center in a remote community realistically be able to respond?

3.6.4 An international treaty?

- 3.6.4.1 The international debate on indigenous knowledge is very clearly segmented into specific divisions of traditional knowledge, traditional cultural expression and genetic resources. These divisions are contested and highly political; however, there is a wide range of overlap in the strategies that have been developed and proposed.⁸⁵
- 3.6.4.2 The proposals for an international treaty in this area provide an opportunity to streamline activity, ask fundamental questions about what is at stake and for whom, and develop an appropriate approach. An international treaty could offer an overarching authoritative framework for negotiating equitable relationships in the use of indigenous knowledge.
- 3.6.4.3 Yet questions of jurisdiction, enforceability and constructing fundamental concepts remain as significant challenges. The highly contested political nature of indigenous knowledge debates also slow the progress of an international treaty. Other questions, about consensus, indigenous peoples'

participation in the design, adoption, and ratification of a treaty, and who the parties to such a treaty would be, are also not easy to resolve.

The recent commitment to develop a binding international instrument or instruments raises hope that some kind of international instrument, perhaps in the form of a treaty, will be forthcoming. A productive way to advocate and think through this issue will be to look at what individual nation states are developing as well as what indigenous communities are developing. It is vital that successes and failures of proposals and alternatives are given proper analysis as there remain significant issues that need to be negotiated and mediated. Sensitivity to the range of complex interests, as well as the unequal negotiating positions that indigenous peoples occupy in practice will directly affect the success and the usefulness of any new instrument.

3.7 Other international treaties, conventions and instruments

3.7.1 Access and benefit-sharing scheme

3.7.1.1 Often when economic benefits are derived from the use of indigenous knowledge, very little makes it back to the original community or group of people who were instrumental in the sharing of the knowledge to the external parties to begin with. The most lucrative areas that often produce little return for indigenous peoples are in the context of use of knowledge about genetic resources and biodiversity. 86 Traditionally, knowledge that has been collected from indigenous peoples and/or samples collected from indigenous lands has been considered to be 'raw material' from which commercial products, involving a range of patents, could then derive. This approach, while having a very specific Enlightenment rationale, devalues indigenous knowledge and overlooks the significance of this knowledge as a foundation to any future commercial product.

3.7.1.2 Within the UN Convention on Biological Diversity (CBD), there has been a sustained effort to develop mechanisms that recognize the value and significance of indigenous knowledge within the life sciences and biotechnology industries. In particular, the Conference of the Parties of the CBD has been working to develop an international regime on access and benefit-sharing of biological resources. This scheme seeks to develop equitable means for

indigenous communities to derive benefits from any knowledge that they grant access to in the context of genetic resources. Such benefits for the indigenous community or group are not necessarily dependent upon the future financial benefits that may be developed. Rather, the scheme aims to create conditions where the knowledge of the source community is recognized and valued at the point of transfer/exchange.⁸⁷

3.7.1.3

An access and benefit-sharing scheme depends on the creation of agreements between parties that recognize the contribution that each makes as well as the value of those contributions. Material Transfer Agreements (MTAs) have been developed as a means for establishing equitable relationships involving knowledge sharing and transfer. MTAs are governed by contract law and draw on legal concepts from intellectual property law, technology transfer and anti-trust law. Generally the MTAs identify the provider and the recipient of the materials, define the materials, explain what the recipient can do with the materials and what the obligations of each party are.⁸⁸

3.7.1.4

The development of an access and benefit-sharing scheme recognizes the value of indigenous peoples' knowledge, especially in areas where such knowledge has become highly desired. Not only do indigenous peoples have the right to be involved in any decision making within research projects that involve themselves or their knowledge, but they also have the right to derive benefits from any products that are developed as a result of these participatory projects. ⁸⁹ However, the use of contract law, while offering a legal framework to secure indigenous peoples' rights, still requires translation and legal advice. The primary way in which access and benefit-sharing agreements are being articulated is through protocols. ⁹⁰ There remain significant concerns again about unequal negotiating positions — not only between a community and a researcher/researchers, but also between a national government and a community. This is particularly the case since what is also being negotiated in this context is the recurring issue of sovereignty over land and biological resources.

3.7.2 The Agreement on the Trade-Related Aspects of Intellectual Property (TRIPS)

3.7.2.1 One major critique of the 1994 TRIPS agreement is the profound silence around the protection of indigenous or traditional knowledge. This has been interpreted as problematic for developing countries, many of whom, like India and Brazil, consider themselves to be responsible for protecting traditional and indigenous knowledge. 92

The profound shift in international intellectual property governance that the TRIPS agreement has produced has re-established the value of certain 'types' of knowledge over others. The perceived incompatibility between the TRIPS agreement and the Convention on Biological Diversity specifically manifests around biological and genetic resources. While the CBD recognizes the collective rights of local communities, and their rights to derive benefits from biodiversity resources, TRIPS promotes monopoly rights through further intellectual property rights (via patents). As the tensions increase, states are increasingly asking which treaty takes precedence over the other.

3.7.2.3 The fundamental problems fueling these questions around the TRIPS agreement and its limited recognition for indigenous/traditional knowledge are not easily remedied. For indigenous peoples' participation to be secured, the position that they hold within the international system needs to be addressed. While indigenous peoples' visibility and political mobilization have increased, indigenous peoples are still subject to the decisions made by nation states.

3.7.2.4 Any possible augmentation within the TRIPS agreement for indigenous peoples' interests needs to come through this already existing framework. It is in this way that utilizing the existing provisions for geographical indication (GI) has offered the possibility for a different kind of protection, albeit in limited ways.

3.7.2.5 Geographical indications are a form of protection that utilize the name of a region or area where a product originates. Functioning in similar ways to trademarks and other forms of labeling, GIs help a consumer to identify products and ensure that they have a certain quality and reputation. Article

22 of the TRIPS agreement states that governments must provide legal opportunities in their own laws for the protection of GIs.⁹³

3.7.2.6 GIs offer certain protections for traditional and indigenous knowledge, but only to the extent that there is a product and it is circulating within a market. Moreover, there are various difficulties for the protection of indigenous knowledge that span communities, locations and even countries. In such circumstances GIs have the potential danger of granting monopoly rights over knowledge to one region when that knowledge is, in reality, spread over many regions.

3.7.2.7 When assessing the utility of GIs, it is vitally important to also address the potentiality of conflicts between communities, and productively find ways of mediating these from the outset. This approach is not appropriate for all communities and attention to different circumstances within each context is necessary.

CHAPTER 4

CONCLUSION: FUTURE DIRECTION

4.1 Future directions

- 4.1.1 Future directions are fundamentally dependent upon changes in political will by nation states and the commercial sector. The development of frameworks that enhance and embolden indigenous peoples' perspectives and participation is long overdue. Indigenous knowledge can no longer be considered a raw resource from which others benefit. Indigenous peoples' contribution to critical issues like environmental sustainability, climate change and resource management mean that it is in everyone's best interest to develop better equitable and ethical frameworks and partnerships.
- 4.1.2 Indigenous peoples are asking to have their cultural systems and ways of governing knowledge access and use recognized as legitimate. Indigenous peoples are asking to be respected as custodians/owners/nurturers of knowledge that is valuable to many. Indigenous peoples are asking that the dominant intellectual property framework, which has excluded their interests, be reconfigured so that it can protect their interests too. Indigenous peoples are insisting that they also have rights to receive benefits from knowledge that derives from their contexts and from their historical knowledge bases. 94 All of these requests are mainstream, reasonable and legitimate and require immediate action.
- 4.1.3 Interrogation of categories and frameworks that have been taken for granted also affect any future directions. Rethinking how we do research, how we conceptualize knowledge, how we share knowledge, how we recognize legitimate overlaps in knowledge use and circulation, and the extent of the role of law in influencing our social orders of knowledge exchange are starting points.

Indigenous peoples' participation, collaboration and partnership

4.2.1 Future directions must involve developing ways that genuinely prioritize indigenous peoples' participation, collaboration and partnership in any projects that will utilize, engage, document, and/or re-use indigenous/traditional knowledge. Taking the time to find out what local management practices are, and how they can be incorporated into research projects in appropriate ways, is necessary for developing trust and respect between all parties.

Engaging with indigenous people about the expectations of the planned research, being realistic about what benefits may occur, and recognizing that these benefits might not map onto the kind of benefits that indigenous people need are an important part of this process. Research practices need to be changed so that participation, collaboration and partnership between members of a community and researchers within a specific project become normalized parts of research practice—from initial engagement with communities about the nature of, and any potential benefits of, the research, to the closure of the project as well as the archiving and storage of the materials collected in the course of the research.

4.3 Next steps

- 4.3.1 Facilitating networks between indigenous peoples and/or local communities experiencing problems across the spectrum of intellectual property and indigenous knowledge issues is an important first step. By helping to put indigenous people in contact with each other, useful strategies and experiences can be shared and adapted. The purpose of networking is to show that these experiences are not isolated cases, and that remedies for certain problems or relationships may already have been found in another context and/or can be re-worked in productive ways.
- 4.3.2 There is currently no dedicated service providing practical advice, information, suggestions and contacts for indigenous peoples and communities across the range of intellectual property issues that are emerging. Priority should be given to establishing an international resource/education center on indigenous/traditional knowledge and should include regional offices that would provide easier access to its resources.

4.3.3 There is a need for sustained work by and with indigenous communities and peoples on local knowledge management systems, thereby creating means for emboldening local authority and governance processes. Developing contextually driven protocols and guidelines for engagement with communities that are appropriate for all parties, including those that are not literate will help produce accessible frameworks for indigenous peoples and communities to make informed decisions about the extent of knowledge use permissible, and the reality of benefits that will be returned.⁹⁵

Further critical interrogation of the theoretical frameworks underpinning modern intellectual property law is necessary. Through deeper understanding of the history, development and operation of intellectual property law, including its emergence, political investments, and increased powers of circulation, new ways of conceptualizing this body of law and the way it functions are possible. Re-interrogating the development of legal categories enables new strategies for combating bias and historical exclusions.

duct, and/or ethical guidelines for any type of current and future research/ work conducted in indigenous contexts and with indigenous peoples are necessary. This complements the development of practical guidelines for institutions, universities, independent researchers and artists in the collection, documentation and archiving of indigenous knowledge.

tion body for commercial and non-commercial disputes involving intellectual property and indigenous knowledge. Such a dispute resolution body must include indigenous peoples' involvement from the outset and develop the capacity to respectfully and appropriately engage with indigenous peoples and indigenous concerns, especially as these may involve ethical, political, and/or historical dimensions.

Advancing indigenous peoples' interests in intellectual property should not only be the responsibility of indigenous peoples since the issues are complex and the situation is complicated by history and politics. It is ironic that this is an area where innovation and imagination within intellectual property law must, most critically, emerge.

FURTHER RESOURCES

The following resources are not comprehensive but represent a sampling of the literature that has been produced between 2003–2009.

For a comprehensive list of political rights and advocacy organizations for indigenous peoples see http://www.aaanet.org/committees/cfhr/orgindig.htm.

Aching, R. "Intellectual property rights and the development of an herbal medicine industry," in Y. N. Clement and C. E. Seaforth (eds.). Advancing Caribbean Herbs in the 21st Century: Proceedings of the Sixth International Workshop on Herbal Medicine in the Caribbean. 2003. St. Augustine, Trinidad and Tobago: University of the West Indies.

Adelman, M. J., F. W. Grosheide and J. J. Brinkhof (eds.). *Intellectual Property Law 2004: Articles on Crossing Borders Between Traditional and Actual.* 2005. Antwerp: Intersentia.

Agrawal, Arun. "The Politics of Indigenous Knowledge." *Australian Academic & Research Libraries* (2005) 36(2): 71–82. [Read it online]

Anderson, Jane. Law, Knowledge, Culture: The Production of Indigenous Knowledge in Intellectual Property Law. 2009. Cheltenham, UK; Northampton, MA: Edward Elgar.

———. "The making of indigenous knowledge in intellectual property law in Australia." *International Journal of Cultural Property* (2005) 12(3): 347–73. [Read it online]

———. "The politics of indigenous knowledge: Australia's proposed Communal Moral Rights Bill." *University of New South Wales Law Journal* (2004) 27(3): 585–604. [Read it online]

Antons, Christoph. *Traditional Knowledge, Traditional Cultural Expressions and Intellectual Property in the Asia-Pacific Region*. 2009. Alphen Aan Den Rijn: Kluwer Law International; Frederick, MD: Aspen Publishers.

——... "Sui generis protection for plant varieties and traditional agricultural knowledge: The example of India." *European Intellectual Property Review* (2007) 29(12): 480–85.

Apte, T. A Simple Guide to Inellectual Property Rights, Biodiversity and Traditional Knowledge. 2006. Pune, India; New Delhi: Kalpavriksh.

Arezzo, E. "Struggling around the 'natural' divide: The protection of tangible and intangible indigenous property." *Cardozo Arts & Entertainment Law Journal* (2007) 25(1): 367–415. [Read it online]

Arewa, O.B. "TRIPS and traditional knowledge: Local communities, local knowledge, and global intellectual property frameworks." (Agreement on Trade-Related Aspects of Intellectual Property Rights) (Symposium: The First Ten Years of the TRIPS Agreement) *Marquette Intellectual Property Law Review* (2006) 10(2): 155–80. [Read it online]

Armour, K., and P. Harrison. "Poisons and politics – Indigenous rights and IP protection." *World Patent Information* (2007) 29(3): 255–61.

Austin, G. W. "Re-treating intellectual property? The WAI 262 Proceeding and the heuristics of intellectual property law" (Symposium: Traditional Knowledge, Intellectual Property, and Indigenous Culture, Treaty of Waitangi, New Zealand) Cardozo Journal of International & Comparative Law (2003) 11(2): 333–64.

Barron, N., and E. Couzens. "Intellectual property rights and plant variety protection in South Africa: An international perspective." *Journal of Environmental Law* (2004) 16(1): 19–47.

Barsh, R. L. "Pharmacogenomics and indigenous peoples: Real issues and actors." *Cardozo Journal of International & Comparative Law* (2003) 11(2): 365–92.

Bastida-Munoz, M. C., et. al. "Traditional knowledge and intellectual property rights: Beyond TRIPS agreements and intellectual property chapters of FTAs." *Michigan State Journal of International Law* (2006) 14(2/3): 259–89.

Bateman, Chris. "Stealing SA [South Africa] secrets." *CME: Your SA Journal of CPD* (2007) 25(3): 140–42.

Bates, Katie. "A penny for your thoughts: Private and collective contracting for traditional medicinal knowledge modeled on bioprospecting contracts in Costa Rica." *Georgia Law Review* (2007) 41(3): 961–1011.

Bellmann, Christopher, Graham Dutfield, and Ricardo Meléndez-Ortiz (eds.). *Trading in Knowledge: Development Perspectives on TRIPS, Trade, and Sustainability.* 2003. London; Sterling, VA: Earthscan Publications. *Specifically in Part II, the section titled* "IPRs and the protection of traditional knowledge."

Benneworth, Shirley. "Community resources: Intellectual property, international trade and protection of traditional knowledge." (Book Review) *Law Society Journal* (2005) 43(10): 90(2).

Biber-Klemm, Susette, and Thomas Cottier (eds.); Danuta Szymura Berglas (assoc. ed.). *Rights to Plant Genetic Resources and Traditional Knowledge: Basic Issues and Perspectives*. 2006. Oxfordshire, UK; Cambridge, MA: CABI Pub.

Bode, Maarten. "Taking traditional knowledge to the market: The commoditization of Indian medicine." *Anthropology & Medicine* (2006) 13(3): 225–36.

Bodeker, Gerard. "Traditional medical knowledge, intellectual property rights & benefit sharing." *Cardozo Journal of International & Comparative Law* (2003) 11(2): 785–814.

Boyle, James, and Lawrence Lessig (special eds.). "Cultural environmentalism @ 10." Law & Contemporary Problems (2007) 70(2): 1–232. [Read it online]

Bratspies, R. M. "The new discovery doctrine: Some thoughts on property rights and traditional knowledge." *American Indian Law Review* (2006/2007) 31(2): 315–40.

Brush, Stephen B. "Farmers' rights and protection of traditional agricultural knowledge." *World Development* (2007) 35(9): 1499–1514.

———. "Protecting traditional agricultural knowledge." Washington University Journal of Law and Policy (2005) 17: 59–109. [Read it online]

Buenz, Eric J., et al. "Techniques: Bioprospecting historical herbal texts by hunting for new leads in old tomes." *Trends in Pharmacological Sciences* (2004) 25(9): 494–98.

Carpenter, Megan M. "Intellectual property law and indigenous peoples: Adapting copyright law to the needs of a global community." *Yale Human Rights and Development Law Journal* (2004) 7: 51–78. [Read it online]

Cellini, Roberto, and Guido Cozzi (eds.). *Intellectual Property, Competition and Growth*. 2007. Basingstoke; New York: Palgrave Macmillan. Specifically the chapter: "Different approaches to the protection of individual and collective intellectual property rights. The case of traditional knowledge." Stefania Lionetti.

Chen, Jim. "Across the apocalypse on horseback: Imperfect legal responses to biodiversity loss." (Biodiversity, Biotechnology, and the Legal Protection of Traditional Knowledge) Washington University Journal of Law & Policy (2005) 17: 12–35. [Read it online]

Clark, Emily. "Intangibles, appropriation, and intellectual property law: The problem(s) with copyright for Native American oral traditions." *Studies in Law, Politics, and Society* (2005) 38: 173–90.

Cloatre, Emilie. "From international ethics to European Union policy: A case study on biopiracy in the EU's biotechnology directive." *Law & Policy* (2006) 28(3): 345–67. [Read it online]

Cohen, J. E. "Network stories." *Law & Contemporary Problems* (2007) 70(2): 91–95. [Read it online]

Conforto, David. "Traditional and modern-day biopiracy: Redefining the biopiracy debate." *Journal of Environmental Law and Litigation* (2004) 19(2): 357–396. [Read it online]

Coombe, R. J. "Protecting traditional environmental knowledge and new social movements in the Americas: Intellectual property, human right, or claims to an alternative form of sustainable development?" *Florida Journal of International Law* (2005) 17(1): 115–35.

Cooper, Alix. *Inventing the Indigenous: Local Knowledge and Natural History in Early Modern Europe*. 2007. Cambridge; New York: Cambridge University Press.

Cordonier Segger, Marie-Claire, and Maria Leichner Reynal (eds.). *Beyond the Barricades:The Americas Trade and Sustainable Development Agenda*. 2005. Aldershot, Hants, England; Burlington, VT: Ashgate. Specifically: "Biodiversity, indigenous knowledge and intellectual property rights." Mindahi Bastida Munoz and Alvaro Solo Holguin.

Correa, Carlos Maria. *Update on International Developments Relating to the Intellectual Property Protection of Traditional Knowledge Including Traditional Medicine*. (T.R.A.D.E. Working Papers #18.) 2004. Geneva, Switzerland: South Centre. [Read it online]

Cottier, Thomas, and Marion Panizzon. "Legal perspectives on traditional knowledge: The case for intellectual property protection." *Journal of International Economic Law* (2004) 7(2): 371–400.

Cullet, Philippe. "Human rights and intellectual property protection in the TRIPS era." *Human Rights Quarterly* (2007) 29(2): 403–430.

D'Altroy, Terence N. "Reinventing unchanged Andean traditions." *Cardozo Journal of International & Comparative Law* (2004) 12(1): 83–90.

Davis, Michael H. "Some realism about indigenism." Cardozo Journal of International & Comparative Law (2003) 11(2): 815–30.

Daya, Y., and N. Vink. "Protecting traditional ethno-botanical knowledge in South Africa through the intellectual property regime." *Agrekon* (2006) 45(3): 319–38.

de Carvalho, N. P. "From the shaman's hut to the patent office: In search of a TRIPS-consistent requirement to disclose the origin of genetic resources and prior informed consent." *Washington University Journal of Law and Policy* (2005) 17: 111–86. [Read it online]

Desai, Pranav N. "Challenges of agro-biotechnologies, intellectual property rights and globalisation: Role of academic institutions in achieving the millennium development goals." (Author abstract) *World Review of Science, Technology and Sustainable Development* (2005) 2(1): 60–71.

Dolder, Fritz. "Traditional knowledge and patenting: The experience of the neemfungicide and the hoodia cases." (Analysis of European Patent Law) *Biotechnology Law Report* (2007) 26(6): 583–90.

Drahos, Peter. "Intellectual property and pharmaceutical markets: A nodal governance approach." (Symposium: SARS, Public Health, and Global Governance) *Temple Law Review* (2004) 77(2): 401–24.

Dumoulin, David. "Local knowledge in the hands of transnational NGO networks: A Mexican viewpoint." (NGOs in the Governance of Biodiversity) *International Social Science Journal* (2003) 178: 593–606. [Read it online]

Dutfield, Graham. *Intellectual Property, Biogenetic Resources, and Traditional Knowledge*. 2004. London; Sterling, VA: Earthscan.

Feris, Loretta. "Protecting traditional knowledge in Africa: Considering African approaches." *African Human Rights Law Journal* (2004) 4(2): 242–55. [Read it online]

Finger, J. Michael, and Philip Schuler. *Poor People's Knowledge: Promoting Intellectual Property in Developing Countries*. 2004. Washington, DC: World Bank and Oxford University Press.

Fischer, Edward F., and Avery Dickens. "Development and hegemony: Cultural property and cultural propriety in the Maya region." (Symposium: The New American Hegemony?) *Connecticut Journal of International Law* (2004) 19(2): 315–27.

Fletcher, M. L. M. "Theoretical restrictions on the sharing of indigenous biological knowledge: Implications for freedom of speech in tribal law." *Kansas Journal of Law & Public Policy* (2005) 14(3): 525–60. [Read it online]

Folkins, Pollyanna E. "Has the lab coat become the modern day eye patch? Thwarting biopiracy of indigenous resources by modifying international patenting system." *Transnational Law & Contemporary Problems* (2003) 13(1): 339–67.

Francioni, Francesco, and Martin Scheinin. *Cultural Human Rights*. 2008. Leiden; Boston: Martinus Nijhoff Publishers. *Specifically the chapter*: "Indigenous peoples' cultural rights and the controversy over commercial use of their traditional knowledge." Federico Lenzerini.

Francioni, Francesco, and Tullio Scovazzi (eds.). *Biotechnology and International Law.* 2006. Oxford; Portland, OR: Hart Pub. *Specifically the chapter*: "Indigenous peoples' rights, biogenetic resources and traditional knowledge: The case of the Satér Mawé people." M. Fraboni and F. Lenzerini.

Gamboa, J. "Current developments-South America." *Intellectual Property Forum* (2005) 62: 92–93.

Gehring, Markus W., and Marie-Claire Cordonier Segger (eds.). *Sustainable Development in World Trade Law.* 2005. The Hague; Frederick, MD: Kluwer Law International.

Geismar, Haidy. "Copyright in context: Carvings, carvers, and commodities in Vanuatu." *American Ethnologist* (2005) 32(3): 437–59.

Gervais, Daniel J. (ed.). *Intellectual Property, Trade and Development: Strategies to Optimize Economic Development in a TRIPS-plus Era*. 2007. Oxford; New York: Oxford University Press. *Specifically the chapter*: "A networked responsive regulatory approach to protecting traditional knowledge." Peter Drahos.

Gervais, Daniel J. "Spiritual but not intellectual? The protection of sacred intangible traditional knowledge." *Cardozo Journal of International & Comparative Law* (2003) 11(2): 467–95.

———. "Traditional knowledge & intellectual property: A TRIPS-compatible approach." *Michigan State Law Review* 2005(1): 137–66. [Read it online]

Ghosh, Shubha. "The fable of the commons: Exclusivity and the construction of intellectual property markets." (Symposium: Intellectual Property and Social Justice) *U.C. Davis Law Review* (2007) 40(3): 855–90. [Read it online]

———. "Reflections on the traditional knowledge debate." *Cardozo Journal of International & Comparative Law* (2003) 11(2): 497–510.

———. "The traditional terms of the traditional knowledge debate." *Northwestern Journal of International Law & Business* (2003) 23(3): 589–631.

Gibson, Johanna. "Audiences in tradition: Traditional knowledge and the public domain," in Waelde, Charlotte, and Hector MacQueen (eds.). Intellectual Property: The Many Faces of the Public Domain. 2007. Cheltenham, UK; Northampton, MA: Edward Elgar Publishing.

———. Community Resources: Intellectual Property, International Trade and Protection of Traditional Knowledge. 2005. Aldershot, UK; Burlington, VT: Ashgate.

———. "Intellectual property systems, traditional knowledge and the legal authority of community." *European Intellectual Property Review* (2004) E18.4 26: 280–90.

Girsberger, M. "Transparency measures under patent law regarding genetic resources and traditional knowledge: Disclosure of source and evidence of prior informed consent and benefit sharing." *Journal of World Intellectual Property* (2004) 7(4): 451–89.

Gollin, Michael A. "Answering the call: Public interest intellectual property advisors." (Biodiversity, Biotechnology, and the Legal Protection of Traditional Knowledge) *Washington University Journal of Law & Policy* (2005) 17: 187–223. [Read it online]

Gopalakrishnan, N. S. "TRIPs and protection of traditional knowledge of genetic resources: New challenges to the patent system." *European Intellectual Property Review* (2005) 27(1): 11–18.

Graham, Lorie, and Stephen McJohn. "Indigenous peoples and intellectual property." (Contemporary and Comparative Perspectives on the Rights of Indigenous Peoples) Washington University Journal of Law & Policy (2005) 19: 313–37. [Read it online]

Greene, Shane. "Indigenous people incorporated? Culture as politics, culture as property in pharmaceutical bioprospecting." *Current Anthropology* (2004) 45(2): 211–38.

Gupta, Anil K. WIPO-UNEP Study on the Role of Intellectual Property Rights in the Sharing of Benefits Arising from the Use of Biological Resources and Associated Traditional Knowledge. 2004. Geneva, Switzerland: World Intellectual Property Organization.

Halbert, Debora Jean. *Resisting Intellectual Property*. 2005. London; New York: Routledge. *Specifically the chapter*: "Traditional knowledge and intellectual property: Seeking alternatives."

Hamilton, Neil D. "Forced feeding: New legal issues in the biotechnology policy debate." (Biodiversity, Biotechnology, and the Legal Protection of Traditional Knowledge) *Washington University Journal of Law & Policy* (2005) 17: 37–57. [Read it online]

Hansen, Stephen A., and Justin W VanFleet. *Traditional Knowledge and Intellectual Property: A Handbook on Issues and Options for Traditional Knowledge Holders in Protecting Their Intellectual Property and Maintaining Biological Diversity.* 2003. Washington, D.C.: American Association for the Advancement of Science.

Harding, Sarah. "Defining traditional knowledge – Lessons from cultural property." *Cardozo Journal of International & Comparative Law* (2003) 11(2): 511–18.

Haugen, H. M. "Traditional knowledge and human rights." *Journal of World Intellectual Property* (2005) 8(5): 663–77.

Hawthorne, Susan. "Land, bodies, and knowledge: Biocolonialism of plants, indigenous peoples, women, and people with disabilities." *Signs* (2007) 32(2): 314–322.

Hayden, Cori. "Bioprospecting: The "promise" and threat of the market." *NACLA Report on the Americas* (2006) 39(5): 26(7).

Heald, Paul J. "The rhetoric of biopiracy." *Cardozo Journal of International & Comparative Law* (2003) 11(2): 519–46.

Heath, Christopher, and Anselm Kamperman Sanders (eds.). *New Frontiers of Intellectual Property Law: IP and Cultural Heritage, Geographical Indicators, Enforcement, Overprotection.* 2005. Oxford; Portland, OR: Hart Publishing.

Helfer, Laurence R. "Toward a human rights framework for intellectual property." (Symposium: Intellectual Property and Social Justice) *U.C. Davis Law Review* (2007) 40(3): 971–1020. [Read it online]

Ho, Cynthia M. "Biopiracy and beyond: A consideration of socio-cultural conflicts with global patent policies." *University of Michigan Journal of Law Reform* (2006) 39(3): 433–542.

Hodges, T. J., and Anne Daniel. "Promises and pitfalls: First steps on the road to the international ABS regime." *Review of European Community and International Environmental Law* (2005) 14(2): 148–60.

Hoffman, Barbara. Art and Cultural Heritage: Law, Policy, and Practice. 2006. Cambridge; New York: Cambridge University Press.

"Current developments–WIPO." *Intellectual Property Forum* (2006) 65: 75–6.

Janke, Terri. "Managing indigenous knowledge and indigenous cultural and intellectual property." *Australian Academic & Research Libraries* (2005) 36(2): 95–107.

Jayaraman, K.S. "Break with tradition." *Nature* (July 27, 2006) 442: 342–43.

Kansa, E.C. "Protecting traditional knowledge and expanding access to scientific data: Juxtaposing intellectual property agendas via a 'some rights reserved' model." *International Journal of Cultural Property* (2005) 12(3): 285–314.

Kapp, Clare. "UN steps up action on traditional knowledge." (Medicine And Health Policy) *The Lancet* (October 11, 2003) 362(9391): 1206.

53

Kariyawasam, Kanchana. "Access to biological resources and benefit-sharing: Exploring a regional mechanism to implement the Convention on Biological Diversity (CBD) in SAARC countries." (South Asian Association for Regional Cooperation) *European Intellectual Property Review* (2007) 29(8): 325–35.

Kihwelo, P.F. "Indigenous knowledge: What is it? How and why do we protect it?" *Journal of World Intellectual Property* (2005) 8(3): 345–59.

Krackhardt, O. "Beyond the neem tree conflict: Questions of corporate behaviour in a globalised world." *New Zealand Universities Law Review* (2005) 21(3): 347–84.

Kremers, Nancy. "Speaking with a forked tongue in the global debate on traditional knowledge and genetic resources: Are U.S. intellectual property law and policy really aimed at meaningful protection for native American cultures." Fordham Intellectual Property, Media & Entertainment Law Journal (2004) 15(1): 1–146.

Kuruk, P. "Bridging the gap between traditional knowledge and intellectual property rights: Is reciprocity an answer?" *Journal of World Intellectual Property* (2004) 7(3): 429–46.

———. "The role of customary law under sui generis frameworks of intellectual property rights in traditional and indigenous knowledge." *Indiana International & Comparative Law Review* (2007) 17(1): 67–118.

———. "Goading a reluctant dinosaur: Mutual recognition agreements as a policy response to the misappropriation of foreign traditional knowledge in the United States." *Pepperdine Law Review* (2007) 34(3): 629–713.

Lanye, Zhu. "Protection of traditional knowledge: Protecting poor countries' intellectual property?" in Torremans, Paul, Shan Hailing and Johan Erauw (eds.). Intellectual Property and TRIPS Compliance in China: Chinese and European Perspectives. 2007. Cheltenham, UK; Northampton, MA: Edward Elgar Publishing.

Liedwein, A. "Protection of traditional knowledge associated with biological and genetic resources: General legal issues and measure already taken by the European Union and its member states in the field of agriculture and food production." *Journal of World Intellectual Property* (2006) 9(3): 251–75.

Lindsay, R. H. "Responsibility with accountability: The birth of a strategy to protect Kanaka Maoli traditional knowledge." *Howard Law Journal* (2005) 48(2): 763–85.

Li, Xuan. "Novelty and inventive step: Obstacles to traditional knowledge protection under patent regimes; a case study in China." *European Intellectual Property Review* (2007) 29(4): 134–39.

Liu, Y. "Justification of subject-matter for legal protection of traditional knowledge." *European Intellectual Property Review* (2007) 29(11): 456–60.

Mander, Jerry, and Victoria Tauli-Corpuz (eds.). *Paradigm Wars: Indigenous Peoples' Resistance to Globalization*. 2006. San Francisco; Los Angeles, CA: Sierra Club Books.

Maragia, Bosire. "The indigenous sustainability paradox and the quest for sustainability in post-colonial societies: Is indigenous knowledge all that is needed?" *Georgetown International Environmental Law Review* (2006) 18(2): 197–247.

Marinova, Dora, and Margaret Raven. "Indigenous knowledge and intellectual property: A sustainability agenda." *Journal of Economic Surveys* (2006) 20(4): 587–605.

Maskus, Keith E., and J. H. Reichman (eds.). *International Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime*. 2005. New York: Cambridge University Press.

Mazonde, Isaac N., and Pradip Thomas (eds.). *Indigenous Knowledge Systems and Intellectual Property Rights in the Twenty-first Century: Perspectives from Southern Africa*. 2007. Dakar, Senegal: Council for the Development of Social Science Research in Africa; Gaborone, Botswana: University of Botswana; London: World Association for Christian Communication.

Macmillan, Fiona (ed.). *New Directions in Copyright Law*. Volume 4. 2007. Cheltenham, UK; Northampton, MA: Edward Elgar. *Specifically these chapters*: "Protection of traditional knowledge and culture – Copying right: cultural property and the limits of (Occidental) law." Peter Fitzpatrick and Richard Joyce. "Copyright, corporate power and human rights – A contribution to a political economy of open source and free culture." David M. Berry.

McAleer, Michael, and Les Oxley (eds.). *Economic and Legal Issues in Intellectual Property*. 2007. Malden, MA: Blackwell Pub. *Specifically the chapter*: "Indigenous knowledge and intellectual property: A sustainability agenda." Dora Marinova and Margaret Raven.

McManis, Charles R. (ed.). *Biodiversity and the Law: Intellectual Property, Biotechnology and Traditional Knowledge*. 2007. London; Sterling, VA: Earthscan.

McManis, Charles R. "Introduction." (Biodiversity, Biotechnology, and the Legal Protection of Traditional Knowledge) *Washington University Journal of Law & Policy* (2005) 17: 1–10. [Read it online]

———. "Conclusion: Answering the call; the Intellectual Property & Business Formation Legal Clinic at Washington University." (Biodiversity, Biotechnology, and the Legal Protection of Traditional Knowledge) *Washington University Journal of Law & Policy* (2005) 17: 225–32. [Read it online]

———. "Intellectual property, genetic resources and traditional knowledge protection: Thinking globaly, acting locally." *Cardozo Journal of International & Comparative Law* (2003) 11(2): 547–48.

Mgbeoji, Ikechi. *Global Biopiracy: Patents, Plants and Indigenous Knowledge*. 2006. Vancouver: UBC Press.

Misra, Kamal K. (ed.), and Kishor K. Basa (general ed.). *Traditional Knowledge in Contemporary Societies: Challenges and Opportunities*. 2007. Bhopal: Indira Gandhi Rashtriya Manav Sangrahalaya; Delhi: Pratibha Prabashan.

Mutter, K. "Traditional knowledge related to genetic resources and its intellectual property protection in Colombia." *European Intellectual Property Review* (2005) 27(9): 327–33.

Nakata, Martin, et al. "Indigenous knowledge, the library and information service sector, and protocols." *Australian Academic & Research Libraries* (2005) 36(2): 7–21.

Nijar, Gurdial Singh, and Azmi Sharom (eds.). *Indigenous Peoples' Knowledge Systems and Protecting Biodiversity*. 2004. Kuala Lumpur: Advanced Professional Courses.

Noble, Brian. "Justice, transaction, translation: Blackfoot tipi transfers and WIPO's search for the facts of traditional knowledge and exchange." *American Anthropologist* (2007) 109(2): 338–49.

Nwabueze, Remigius N. "Ethnopharmacology, patents and the politics of plants' genetic resources." *Cardozo Journal of International & Comparative Law* (2003) 11(2): 585–632.

Oguamanam, Chidi. *International Law and Indigenous Knowledge: Intellectual Property, Plant Biodiversity, and Traditional Medicine.* 2006. Toronto: University of Toronto Press.

———. "Localizing intellectual property in the globalization epoch: The integration of indigenous knowledge." *Indiana Journal of Global Legal Studies* (2004) 11(2): 135–69.

Ong, Burton (ed.). *Intellectual Property and Biological Resources*. 2004. Singapore; New York: Marshall Cavendish Academic. *Specifically the chapter*: "A brief review of legislation on access to genetic resources and the protection of traditional knowledge in selected megadiverse countries." Michael I. Jeffery.

Overwalle, G, Van. "Protecting and sharing biodiversity and traditional knowledge: Holder and user tools." *Ecological Economics* (2005) 53(4): 585–607.

Panizzon, Marion, and Thomas Cottier. "Developing countries interests and negotiation positions on protection of geographical indications and traditional knowledge," in Baetens, Freya, and Ernst-Ulrich Petersmann (eds.). Reforming the World Trading System: Legitimacy, Efficiency, and Democratic Governance. 2005. Oxford: Oxford University Press.

Paterson, Robert K. "Looking beyond intellectual property in resolving protection of the intangible cultural heritage of indigenous peoples." *Cardozo Journal of International & Comparative Law* (2003) 11(2): 633–70.

Pearce, Fred. "Hero or zero?" (Talking point) (Biopiracy of knowledge of the medicinal properties of native people, Conrad Gorinsky's research) (Interview) *New Scientist* (July 22, 2006) 191.2561: 50(2).

Perry, Richard Warren, and Bill Maurer (eds.). *Globalization Under Construction: Governmentality, Law, and Identity.* 2003. Minneapolis: University of Minnesota Press. *Specifically the chapter*: "Works in progress: traditional knowledge, biological diversity, and intellectual property in a neoliberal era." Rosemary J. Coombe.

Phillips, V. J. "Half-human creatures, plants & indigenous peoples: Musings on ramifications of Western notions of intellectual property and the Newman-Rifkin attempt to patent a theoretical half-human creature." *Santa Clara Computer & High Technology Law Journal* (2005) 21(2): 383–450.

Pinton, Florence. "Traditional knowledge and areas of biodiversity in Brazilian Amazonia." (NGOs in the Governance of Biodiversity) (nongovernmental organizations) *International Social Science Journal* (2003) 178: 607–18.

Plahe, Jagjit Kaur, and Chris Nyland. "The WTO and patenting of life forms: Policy options for developing countries." *Third World Quarterly* (2003) 24(1): 29–46.

Posey, Darrell Addison, and Plenderleith, Kristina (eds.). *Indigenous Knowledge and Ethics: A Darrell Posey Reader.* 2003. London: Routledge.

Prabhuji, S. K., G. P. Rao and S. K. Patil (eds.). *Recent Advances in Medicinal Plants Research*. 2005. New Delhi: Satish Serial Publishing House.

Rai, A. K. "The ends of intellectual property: Health as a case study." *Law & Contemporary Problems* (2007) 70(2): 125–30. [Read it online]

Raju, C. B. (ed.). *Intellectual Property Rights*. 2007. New Delhi: Serials Publications. *Specifically the chapter*: "Protection of traditional knowledge: A cause for concern." Savitha S.

Ramillano, Lore. "Providing protection for plant genetic resources: Patents, sui generis systems and biopartnerships." (Book Review) *Journal of International Wildlife Law & Policy* (2005) 8(2/3): 295–300.

Rao, Siriginidi Subba. "Indigenous knowledge organization: An Indian scenario." *International Journal of Information Management* (2006) 26(3): 224–33.

Razzaque, J., et al. "Protection of traditional knowledge and human rights obligations: The status of discussion in international organisations." *Netherlands Quarterly of Human Rights* (2007) 25(3): 401–35.

Reddy, S. "Making heritage legible: Who owns traditional medical knowledge?" *International Journal of Cultural Property* (2006) 13(2): 161–88.

Richland, Justin B. "What are you going to do with the village's knowledge?": Talking tradition, talking law in Hopi tribal court." *Law & Society Review* (2005) 39(2): 235–72.

Riley, Angela R. "Indigenous peoples and the promise of globalization: An essay on rights and responsibilities." (2003 Tribal Law and Governance Conference) *Kansas Journal of Law & Public Policy* (2004) 14(1): 155–67.

Riley, Mary (ed.). *Indigenous Intellectual Property Rights: Legal Obstacles and Innovative Solutions*. 2004. Walnut Creek, CA: Altamira Press.

Rohrmann, Carlos Alberto, and Lyssandro Norton Siqueira. "Patent protection and traditional knowledge associated with biodiversity." *International Journal of Intellectual Property Management* (July 13, 2007) 1(4): 351.

Roue, Marie. "NGOs, indigenous peoples and local knowledge: Issues of power in the arena of biodiversity." (Nongovernmental organizations) *International Social Science Journal* (2003) 178: 533–38.

Roussin, Lucille A. "Cultural heritage and identity." *Cardozo Journal of International & Comparative Law* (2003) 11(2): 707–10.

Ruiz, Manuel, Isabel Lapena and Susanna E. Clark. "The protection of traditional knowledge in Peru: A comparative perspective." *Washington University Global Studies Law Review* (2004) 3(3): 755–97. [Read it online]

Sackville, Ronald. "Legal protection of indigenous culture in Australia." *Cardozo Journal of International & Comparative Law* (2003) 11(2): 711–45.

Sagar, R. "Intellectual property, benefit-sharing and traditional knowledge." *Journal of World Intellectual Property* (2005) 8(3): 383–400.

Sand, Sabine. "Sui generis laws for the protection of indigenous expressions of culture and traditional knowledge." *University of Queensland Law Journal* (2003) 22(2): 188–98.

Santamauro, J. "Reducing the rhetoric: Reconsidering the relationship of the TRIPS Agreement, CBD and proposed new patent disclosure requirements relating to genetic resources and traditional knowledge." *European Intellectual Property Review* (2007) 29(3).

Sapp, H. A. "Monopolizing medicinal methods: The debate over patent rights for indigenous peoples." *Temple Journal of Science, Technology & Environmental Law* (2006) 25(2): 191–212.

Schlais, Gregory K. "The patenting of sacred biological resources, the taro patent controversy in Hawai'i: A soft law proposal." *The University of Hawaii Law Review* (2007) 29(2): 581–618.

Schuklenk, Udo, and Anita Kleinsmidt. "North-South benefit sharing arrangements in bioprospecting and genetic research: A critical ethical and legal analysis." *Developing World Bioethics* (2006) 6(3): 122–134.

Secretariat of the Pacific Community and UNESCO. 2nd SPC/PIFS/Unesco Working Group for Legal Experts on the Protection of Traditional Knowledge and Expressions of Culture (Noumea, New Caledonia, 29 September–1 October 2003). 2003. Noumea, New Caledonia: Secretariat of the Pacific Community.

Serje, Margarita. "Malocas and barracones. Tradition, biodiversity, and participation in the Colombian Amazon." (NGOs in the Governance of Biodiversity) *International Social Science Journal* (2003) 178: 561–72.

Sheridan, Cormac. "EPO neem patent revocation revives biopiracy debate." *Nature Biotechnology* (2005) 23(5): 511–512.

Shoilev, K. "Intellectual property, biogenetic resources and traditional knowledge." *European Intellectual Property Review* (2006) 28(4): 258–9.

Sillitoe, Paul (ed.). Local Science vs. Global Science: Approaches to Indigenous Knowledge in International Development. 2007. New York: Berghahn Books. Specifically the chapter: "Is Intellectual Property a Good Idea?" Charles Clift.

Simon, B. S. "Intellectual property and traditional knowledge: A psychological approach to conflicting claims of creativity in international law." *Berkeley Technology Law Journal* (2005) 20(4): 1613–84.

Sinjela, Mpazi (ed.). *Human Rights and Intellectual Property Rights: Tensions and Convergences*. 2007. Leiden; Boston: Martinus Nijhoff Publishers.

Smith, Herchel, and Guido Westkamp (eds.). *Emerging Issues in Intellectual Property: Trade, Technology and Market Freedom: Essays in Honour of Herchel Smith.* 2007. Cheltenham, UK; Northampton, MA: Edward Elgar.

Song, I. "Old knowledge into new patent law: The impact of United States patent law on less-developed countries." *Indiana International & Comparative Law Review* (2005) 16(1): 261–93.

Ssenyonjo, M. "Community resources: Intellectual property, international trade and protection of traditional knowledge." (Book review) *Journal of Environmental Law* (2007) 19(2): 283–5.

Stehr, N., and Bernd Weiler (eds.). Who Owns Knowledge?: Knowledge and the Law. 2008. New Brunswick, NJ: Transaction Publishers. Specifically the chapter: "Does the category of justice apply to drug research based on traditional knowledge? The case of the hoodia cactus and the politics of biopiracy." Wolfgang van den Daele.

Subbiah, S. "Reaping what they sow: The basmati rice controversy and strategies for protecting traditional knowledge." *Boston College International & Comparative Law Review* (2004) 27(2): 529–59.

Sunder, M. "The invention of traditional knowledge." *Law & Contemporary Problems* (2007) 70(2): 97–124. [Read it online]

Swiderska, Krystyna. *Banishing the Biopirates: A New Approach to Protecting Traditional Knowledge*. 2006. London: International Institute for Environment and Development. [Read it online]

Torsen, Molly. "Anonymous, untitled, mixed media': Mixing intellectual property law with other legal philosophies to protect traditional cultural expressions." *Journal of the Copyright Society of the U.S.A.* (2005) 53(1/2): 287–312.

Tsosie, Rebecca, and Joan McGregor (guest eds.). "Genome justice: Genetics and group rights." (Symposium) *Journal of Law, Medicine & Ethics* (2007) 35(3): 352–456.

Tustin, J. "Traditional knowledge and intellectual property in Brazilian biodiversity law." *Texas Intellectual Property Law Journal* (2006) 14(2): 131–65.

United Nations. *Report of the Working Group on Indigenous Populations*. (There is a report for each year 1982–2006.) [Read some of them online]

United Nations. *Commission on Human Rights. 61st Session.* 2005. Geneva: United Nations. Specifically the Working Group on Indigenous Populations of the Sub-Commission on the Promotion and Protection of Human Rights. [Read it online]

Useb, Joram, and Roger Chennells. "Indigenous knowledge systems and protection of San intellectual property: Media and research contracts." *Before Farming* (2004) 2.

von Lewinski, S. (ed.). *Indigenous Heritage and Intellectual Property: Genetic Resources, Traditional Knowledge, and Folklore*. 2004. The Hague; New York: Kluwer Law International.

Watters, Lawrence (ed.). *Indigenous Peoples, the Environment and Law: An Anthology.* 2004. Durham, NC: Carolina Academic Press.

Waetford, A. "Traditional knowledge." *The New Zealand Law Journal* (2007) 263-4.

Waikato, T. "He Kaitiaki Matauranga: Building a protection regime for Maori traditional knowledge." *Yearbook of New Zealand Jurisprudence* (2005) 8(2): 344–410.

Weeraworawit, Weerawit. "Formulating an international legal protection for genetic resources, traditional knowledge and folklore: Challenges for the intellectual property system." *Cardozo Journal of International & Comparative Law* (2003) 11(2): 769–83.

Westkamp, G. "The recognition and status of traditional knowledge in the conflict of laws." *Journal of the Patent and Trademark Office Society* (2006) 88(8): 699–725.

Wise, Jaqui. "Hunter-gatherers win profit-sharing deal for obesity drug." (News) *Bulletin of the World Health Organization* (2003) 81(5): 382.

World Intellectual Property Organization. *Technical Study on Patent Disclosure Requirements Related to Genetic Resources and Traditional Knowledge*. 2004. Geneva, Switzerland: W.I.P.O.

Zenobia, Ismail, and Tashil Fakir. "Trademarks or trade barriers? Indigenous knowledge and the flaws in the global IPR system." *International Journal of Social Economics* (2004) 31(1/2): 173–94.

Zerbe, N. "Biodiversity, ownership, and indigenous knowledge: Exploring legal frameworks for community, farmers, and intellectual property rights in Africa." *Ecological Economics* (2005) 53(4): 493–506.

NOTES

¹ There are a variety of discursive positions, some of which overlap and borrow terminology and political positions, and some that are unique to each national context, evolving from specific 'moments' (legislative or otherwise) in the evolution of this issue. Comparative histories in the emergence of indigenous peoples' interests in intellectual property are rare, and if they occur they tend to locate the comparison within the success or otherwise of a specific case, but not necessarily with the events that led to, or follow from, that legal precedent. Moreover, there is a larger meta-narrative that many of these contextually driven discussions are easily patched into (provided for instance by the authority of the World Intellectual Property Organization), but the diverse and 'deep' politics informing the emergence of indigenous peoples' interests in intellectual property and its subsequent representation in academic literature is often not addressed. Consider the recent article, Kristen A. Carpenter, Sonia K. Katyal & Angela R. Riley, In Defense of Property, 118 YALE L.J. 1022 (2009), which presents a detailed examination of cultural property arguments related to indigenous peoples within a specific US context. The defense of property that has been identified as necessary and fundamental to this article should not be assumed to follow the same trajectory outside the US. In Australia and New Zealand, for example, the discourse is more heavily drawn into an intellectual property framework; and at least in the case of Australia, this is because copyright was an original area of contest. What this means is that the historical work (and discourse of indigenous peoples' rights in intellectual property generally) in Australia is much more focused on tracing the exclusions and moments of inclusion with intellectual property law more generally rather than from the dominance of the real property paradigm. There are important and significant differences in what constitutes the locus of the problem from a real property and from an intellectual property standpoint.

² Brad Sherman & Lionel Bently, The Making of Modern Intellectual Property Law: The British Eexperience, 1760–1911 (1999); Mark Rose, Authors and Owners: The Invention of Copyright (1993); Ronan Deazley, On the Origin of the Right to Copy: Charting the Movement of Copyright Law in Eighteenth-century Britain (1695–1775) (2004); Peter Drahos, A Philosophy of Intellectual Property (1996).

³ See those expressed in First Nations Cultural Heritage and Law: Case Studies, Voices, and Perspectives (Catherine E. Bell & Val Napolean eds., 2008); Terri Janke, Our Culture: Our Future: Report on Australian Indigenous Cultural and Intellectual Property Rights (1998).

⁴ Several copyright cases in Australia illustrate this. In the US, questions around the use of Native American names and symbols for team names and logos by sports organizations raise similar issues about inappropriate use. *For example, see Harjo v. Pro-Football, Inc.*, 30 U.S.P.Q.2d (BNA) 1828 (TTAB 1994) and *Pro-Football, Inc. v. Harjo*, 565 F.3d 880 (D.C.

Cir 2009). Also, the use of names and images in other contexts. See Joseph William Singer, Publicity Rights and the Conflicts of Laws: Tribal Court Jurisdiction in the Crazy Horse Case, 41 S.D. L. Rev. 1 (1996). Also see Naomi Mezey, The Paradoxes of Cultural Property, 107 COLUM. L. Rev. 2004 (2007).

- ⁵ See history of emergence in Jane E. Anderson, Law, Knowledge, Culture: The Production of Indigenous Knowledge in Intellectual Property Law (2009).
- ⁶ One example of the increasing focus is the range of regional declarations on indigenous knowledge and intellectual property rights. *See*: Declaration of Belem, Brazil, July 1988; Kari-Oca Declaration and Indigenous Peoples Earth Charter, Brazil, May 1992 (reaffirmed in Indonesia, June 2002); Mataatua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples, New Zealand, June 1993; Julayinbul Statement on Indigenous Intellectual Property Rights, Australia, November 1993; Santa Cruz de la Sierra Statement on Intellectual Property, Bolivia, September 1994; Tambunan Statement on the Protection and Conservation of Indigenous Knowledge, Malaysia, February 1995; Suva Statement on Indigenous Peoples Knowledge and Intellectual Property Rights, Fiji, April 1995; Kimberley Declaration, South Africa, August 2002.
- ⁷ This raises a range of questions about the authority and legitimacy of WIPO in directing and managing (interest and participation in) this issue. See Brian Noble, Justice, Transaction, Translation: Blackfoot Tipi Transfers and WIPO's Search for the Facts of Traditional Knowledge and Exchange, 109 Am. Anthropologist 338 (2007). The authoritative power of WIPO is also examined as a form of regulatory governance. See Christopher May, The World Intellectual Property Organization: Resurgence and the Development Agenda (2007).
- ⁸ The proceedings arising from the World Intellectual Property Organization's Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore illustrate the extent of opinions and perspectives on this issue, and also the lack of consensus about direction and remedy. *See* http://www.wipo.int/meetings/en/topic.jsp?group_id=110 [last accessed 13 January 2010].
- ⁹ For national initiatives, *see, for example*: New Zealand, Trade Marks Act 2002; Panama, Law on the Special Intellectual Property Regime Governing the Collective Rights of Indigenous Peoples for the Protection and Defense of their Cultural Identity and their Traditional Knowledge 2000; Philippines, Act to Recognize, Protect and Promote the Rights of Indigenous Cultural Communities/Indigenous Peoples 1997; Republic of Azerbaijan, On Legal Protection of Azerbaijani Expressions of Folklore 2006; United States of America Database of Native American Insignia, Trademark Law Treaty Implementation Act 1998.
- ¹⁰ Kaitlin Mara, "Turning Point" at WIPO Pulls Traditional Knowledge Debate Out at Eleventh Hour, Intellectual Property Watch, Oct. 3, 2009, http://www.ip-watch.org/weblog/2009/10/03/"turning-point"-at-wipo-pulls-traditional-knowledge-debate-out-at-eleventh-hour/ [last accessed 13 January 2010].
- ¹¹ See Protection of First Nations Cultural Heritage: Laws, Policy, and Reform (Catherine Bell & Robert K. Paterson eds., 2009).
- ¹² These issues have been repeatedly raised in the IGC. See ICG Secretariat, The Protection of Traditional Cultural Expressions/Expressions of Folklore: Revised Objectives and Principles (WIPO/GRTKF/IC/9/4) (prepared for the Ninth Session of the ICG, 24–28 April 2006); available at http://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic.../wipo_grtkf_ic_9_4.pdf [last accessed 13 January 2010].

- ¹³ Chidi Oguamanam, Local Knowledge as Trapped Knowledge: Intellectual Property, Culture, Power and Politics, 11 J. World Intell. Prop. 29, 35 (2008). Also Chidi Oguamanam, International Law and Indigenous Knowledge: Intellectual Property, Plant Diversity, and Traditional Medicine (2006).
- ¹⁴ Indigenous peoples insist on the right to determine how "indigenous peoples" should be defined. *See also*, Robert A. Williams, Jr., *Encounters on the Frontiers of International Human Rights Law: Redefining the Terms of Indigenous Peoples' Survival in the World*, 1990 Duke L.J. 660 (1990).
- ¹⁵ Other areas of intellectual property law have this same problem.
- ¹⁶ Arun Agrawal, *Indigenous Knowledge and the Politics of Classification*, 54 Int'l Soc. Sci. J. 287 (2002); Anderson, *supra* note 5.
- ¹⁷ The Permanent Forum in Indigenous Issues is the central international co-ordinating body on indigenous peoples' issues. *See* http://www.un.org/esa/socdev/unpfii/ [last accessed 13 January 2010].
- ¹⁸ In 2009, WIPO initiated an IP Law Indigenous Fellowship within the agency which was to respond to "reciprocal needs for stronger capacity in the rapidly growing domain of Indigenous IP law and for strengthened capacity on IP law and policy for Indigenous lawyers and policy advisors." The Fellowship is currently held by Mr. Eliamani Isaya Laltaika from the Maasai community in Tanzania. *See* http://www.wipo.int/export/sites/www/tk/en/fellowship/pdf/laltaika_bio.pdf [last accessed 13 January 2010].
- ¹⁹ Fundamental problems in the constitution of nation states, namely through the denial and non-recognition of differently articulated sovereignties, is already present within the UN system. This is despite the reluctance to recognize this as a core problem feeding issues around indigenous peoples' representation and voting capacity on issues that directly affect them. Arguably, the United Nations and the nation states that are recognized therein, have a relationship of dependency wherein each requires the other in order to maintain a certain governing and representational legitimacy.
- ²⁰ The problems for museums, libraries and other cultural collections are extensive and, depending on your perspective, fundamental. They involve questions about the origination (and legitimacy therein) of the collections as well as their treatment, and the effects of their archival treatment. See Henrietta Fourmile, Who Owns the Past? Aborigines as Captives of the Archives, 13 Aboriginal Hist. 1 (1989); Henrietta Fourmile, Aborigines and Captives of the Archives: A Prison Revisited, in Archives in the Tropics: Proceedings of the Australian Society of Archivists Conference 1994 (1994); and Rebecca Tsosie, Contaminated Collections: An Overview of the Legal, Ethical and Regulatory Issues, 17 Collection Forum (2001) 14.
- ²¹ See the statement on discontinuation of 'Indigenous' product line and trademark. Press Release, Aveda, Aveda Announces Discontinuation of Indigenous Product Collection (04 November 2003), *available at* http://aveda.aveda.com/about/press/indigenous.asp [last accessed 13 January 2010].
- ²² Dora Marinova & Margaret Raven, *Indigenous Knowledge and Intellectual Property: A Sustainability Agenda*, 20 J. Econ. Surv. 587 (2006).
- ²³ Songman Circle of Wisdom Indigenous Plant Certification Protocol, *available at* http://www.atns.net.au/agreement.asp?EntityID=2882 [last accessed 13 January 2010].

- ²⁴ Tribal Link Foundation, http://www.tribal-link.org/ [last accessed 13 January 2010].
- 25 Traditional Culture: A Step Forward for Protection in Indonesia (Peter Jaszi ed., 2009).
- ²⁶ Ibid.
- ²⁷ Charles Knobloch & Dewi Savitri Reni, *Using Batikmark as a First Step to Extend Protection of Indonesian Javanese-batik Patterned Textile in Foreign Countries*, Arnold & Knobloch, L.L.P., Feb. 5, 2009, http://www.usptclaw.com/pdfs/Batikmark_Article.pdf [last accessed 13 January 2010].
- ²⁸ This was raised frequently in a series of interviews with batik practitioners. *See* Traditional Culture, *supra* note 25.
- ²⁹ Open Source Yoga Unity v. Choudhury, 2005 U.S. Dist. LEXIS 10440, 2005 WL 756558, 74 U.S.P.Q.2d (BNA) 1434 (N.D. Cal. 2005).
- ³⁰ Only Iceland and Estonia currently have laws relating to the ownership and governance of genetic databases.
- ³¹ National Council for American Indians, Calling Upon the National Geographic Society to Cease the Genographic Project In Its Entirety In All Regions, Res. 08-030 (2008). See also Debra Harry & Le'a Malia Kanehe, Asserting Tribal Sovereignty over Cultural Property: Moving Towards Protection of Genetic Material and Indigenous Knowledge, 5 Seattle J. Soc. Jus. 27, 27–28 (2006–2007).
- ³² Julie Hollowell & George Nicholas (eds.), Special Section, *Decoding Implications of the Genographic Project for Cultural Heritage Studies*, 16 INT'L J. CULTURAL PROP. 131 (2009).
- 33 Patrick Tierney, Darkness in El Dorado: How Scientists and Journalists Devastated the Amazon (2000).
- ³⁴ Kabir Bavikatte, Harry Jonas & Johanna von Braun, *Shifting Sands of ABS Best Practice: Hoodia from the Community Perspective* (2009), http://www.unutki.org/default.php?doc_id=137 [last accessed 13 January 2010].
- ³⁵ Matthew Isaac Cohen, Performance Reviews, *I La Galigo*, 22 ASIAN THEATRE J. 138 (2005).
- ³⁶ This was expressed by many of the government officials interviewed in Indonesia. *See* Traditional Culture, *supra* note 25.
- ³⁷ Kim Griggs, *Maori Take On Hi-tech Lego Toys*, BBC News, Sept. 26, 2001, available at http://news.bbc.co.uk/2/hi/asia-pacific/1619406.stm [last accessed 13 January 2010].
- ³⁸ The recent mandate from the WIPO General Assembly, where an agreement within the IGC to undertake text-based negotiations to develop an instrument or instruments to protect genetic resources, traditional knowledge and traditional cultural expressions, also recognizes that more than one instrument is perhaps most appropriate.
- ³⁹ In Australia, for example, Aboriginal communities developed the Labels of Authenticity and in New Zealand the 'toi iho' is a registered trademark for products of Maori origin. Unfortunately both of these initiatives are no longer in operation, with the 'toi iho' mark most recently ceasing operation due to high administrative costs. *See* "Toi Iho To Be Scrapped," *TangataWhenua* (Māori News & Indigenous Views), Oct. 23, 2009, http://

news.tangatawhenua.com/archives/1456 [last accessed 13 January 2010]. For a further discussion about the reasons leading to the demise of the Labels of Authenticity in Australia, *see* Anderson, *supra* note 5.

- ⁴⁰ A recent example involves a negotiated agreement with the Cowichan Tribe in Canada and the retailer Hudson Bay to provide Cowichan sweaters for the Vancouver Olympic Games. As part of the agreement, Cowichan sweaters that will be sold through the retailer will be identified specifically as Cowichan and will include information about the Cowichan Tribe and the history of the knitters in the community. See Daphne Bramham, Cowichan Knitters Win Olympic Showcase to the World, Vancouver Sun, Oct. 29, 2009, available at http://www.vancouversun.com/life/Cowichan+knitters+Olympic+showcase+world/2157672/story.html [last accessed 13 January 2010]. Another example involves the Amauti Project, which worked with the Pauktuutit Women's Collective in Canada to develop a means for incorporating knowledge about intellectual property law to protect the traditional designs, knowledge and heritage in traditional clothing. See Phillip Bird, Intellectual Property Rights and the Inuit Amauti: A Case Study (2002), available at http://www.kipo.ke.wipo.net/export/sites/www/tk/en/igc/ngo/wssd_amauti.pdf [last accessed 13 January 2010].
- ⁴¹ This is particularly the case for trademarks.
- ⁴² As a complementary strategy, trademark regimes have made amendments that aim to prevent the registration of trademarks that derive from indigenous contexts. New Zealand is one country that has made the relevant amendments, appointing representatives to form the Maori Advisory Council to advise the Trademarks Commissioner as to the likely offensiveness of trademarks containing Maori text and imagery.
- ⁴³ For more information on the 'toi iho', *see* http://www.toiiho.com/Aboutus/tabid/249/Default.aspx [last accessed 13 January 2010].
- ⁴⁴ Regarding the Labels of Authenticity in Australia, one comment made in a legislative report suggests further limitations: "It became apparent that the 'one size fits all' approach did not factor in the individual needs and differing situations of Indigenous communities, and that the test for Aboriginality was too complex with over 75 per cent of applicants failing the requirements." *Indigenous Art Securing the Future: Australia's Indigenous Visual Arts and Craft Sector*, Senate Standing Committee on Environment, Communications, Information Technology and the Arts, Para 10.16 (Commonwealth of Australia, 2007), *quoted in* Kathy Bowrey, *Economic Rights, Culture Claims and a Culture of Piracy in the Indigenous Art Market: What Should We Expect from the Western Legal System?*, Australian Indigenous L. Rev. (forthcoming 2010). (The Standing Committee's entire report is available on line at http://www.aph.gov.au/SEnate/committee/ecita_ctte/completed_inquiries/2004-07/indigenous_arts/report/index.htm.)
- ⁴⁵ Elizabeth Adeney, The Moral Rights of Authors and Performers: An International and Comparative Analysis (2006).
- ⁴⁶ Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, *revised at Paris July 24, 1971*, art. 6, 25 U.S.T. 1341, 828 U.N.T.S. 221, *available at* http://www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html#P119_19081.

⁴⁷ Not every national jurisdiction has moral rights legislation.

- ⁴⁸ The most cited cases are Australian and include: *Bulun Bulun v. R&T Textiles (Pty) Ltd* (1998) 41 I.P.R. 513 (sacred images reproduced on fabric); and *Milpurrurru & Ors v. Indofurn Pty Ltd and Ors* (1994) 30 I.P.R. 209 (culturally significant images reproduced on carpets).
- ⁴⁹ In an innovative move, Australia has proposed legislation that seeks to take account of the communal dimensions of indigenous knowledge. While the draft legislation for a communal moral rights amendment to the country's copyright act has been discussed for several years, there has been no further development. One issue impeding movement is the definition of an indigenous community for the purposes of legislation. Other problems include how to manage disputes when they arise and how to help indigenous peoples develop their capacity to make informed decisions and access legal advice at any stage. The practical concerns compromise any rebalancing or re-organization of power relationships around controlling indigenous knowledge, because indigenous peoples remain in difficult positions both in regards to knowing what their rights are and how these can be translated, understood and negotiated. *See also* Jane Anderson, *The Politics of Indigenous Knowledge: Australia's Proposed Communal Moral Rights*, 27 U.N.S.W.L.J. 585 (2004).
- ⁵⁰ The two cases are: Foster v. Mountford & Rigby Ltd (1976) 14 A.L.R. 71, and Pitjantjatjara Council Inc and Peter Nganingu v. John Lowe and Lyn Bender (unreported) Supreme Court of Victoria (Crockett J), 25 and 26 March 1982, [1982] Aboriginal L. Bull. 30. For the most comprehensive outline of these cases see: Kathy Bowrey, Indigenous Culture, Knowledge and Intellectual Property: The Need for a New Category of Rights, in Australian Intellectual Property: Commentary, Law and Practice (Kathy Bowrey, Michael Handler, & Dianne Nichol eds., 2010).

- ⁵² As quoted in Erin Hitchcock, *Panel Grants TNG Request for Confidentiality*, WILLIAMS LAKE TRIBUNE, Nov. 24, 2009, http://www.bclocalnews.com/bc_cariboo/williamslaketribune/news/72273352.html [last accessed 15 January 2010]. *See also* http://www.ceaa-acee.gc.ca/050/documents/39767/39767E.pdf [last accessed 15 January 2010].
- ⁵³ International Convention for the Protection of Performers, Producers of Phonograms, and Broadcasting Organizations art. 7, Oct. 26, 1961, 12 U.S.T. 2377, 496 U.N.T.S. 43; *available at* http://www.wipo.int/treaties/en/ip/rome/trtdocs_wo024.html#P97_7400 [last accessed 15 January 2010].
- ⁵⁴ See WIPO Performances and Phonograms Treaty, art. 2(a), Dec. 20, 1996, S. Treaty Doc. 105-17 (1997), 36 I.L.M. 76 (1997), available at http://www.wipo.int/treaties/en/ip/wppt/trtdocs_wo034.html#P69_4021 [last accessed 15 January 2010].
- ⁵⁵ A. Taubman, Nobility of Interpretation: Equity, Retrospectivity, and Collectivity in Implementing New Norms for Performers' Rights, 12 J. Intell. Prop. L. 351 (2004–2005).
- ⁵⁶ While exceptions and limitations could be useful in accounting for different kinds of needs that are presented by indigenous people, changes to existing legislation require considerable political will. Unfortunately, given the multiple areas where urgent indigenous peoples' issues of health, housing, mortality and access to resources remain marginal concerns, it is hard to imagine that the political will to make changes to existing legislation in meaningful ways for indigenous peoples' interests is likely to occur.
- ⁵⁷ See the extensive work conducted through the Center for the Study of the Public Domain at Duke Law School. http://www.law.duke.edu/cspd/ [last accessed 15 January 2010].

⁵¹ *Ibid*.

- ⁵⁸ Kathy Bowrey & Jane Anderson, *The Politics of Global Information Sharing*, 18 Soc. & Legal Stud. 479 (2009).
- ⁵⁹ Jane Anderson, *(Colonial) Archives and (Copyright) Law*, NOMOREPOTLUCKS, July–Aug. 2009, http://www.nomorepotlucks.org/article/copie-no4/colonial-archives-and-copyright-law [last accessed 17 August 2010].
- ⁶⁰ Russel Lawrence Barsh, *Who Steals Indigenous Knowledge?*, 95 Am. Soc'y Int'l L. Proc. 153 (2001).
- ⁶¹ For discussion in the context of early 1970s Aboriginal art and its contemporary display and circulation in exhibitions, *see*: Fred Myers, *Seeing Too Much, Seeing Too Little: The Predicament of Aboriginal Painting in Central Australia*, Manuscript from Performing Indigeneity Conference, University of Iowa (May 2009), and Distinguished Lecture in Association with the Art Exhibition "Icons of the Desert," New York University (Sept. 17, 2009). *See also* Lorie Graham & Stephen McJohn, *Indigenous Peoples and Intellectual Property*, 19 Wash. U. J.L. & Pol'y 313 (2005).
- ⁶² As noted by the Saami Council: "Indigenous peoples had rarely placed anything in the so-called 'public domain,' a term without meaning to [us,] . . . the public domain is a construct of the IP system and does not take into account domains established by customary indigenous laws." *Quoted in* Taubman, *supra* note 55, at 347.
- ⁶³ Anderson, *supra* note 59.
- ⁶⁴ Australia has led the way in the creation of cultural protocols, especially in the context of the arts and media. *In general, see* the work of Teri Janke and the Australia Council. *See also* http://www.abc.net.au/indigenous/education/cultural_protocol/resources.htm [last accessed 15 January 2010]. The Hopi Tribe has an established set of protocols for researchers, *see* http://www.nau.edu/-hcpo-p/hcpo/index.html [last accessed 15 January 2010]. *See also* the Protocols for Native American Archival Materials, http://www2.nau.edu/libnap-p/protocols.html [last accessed 15 January 2010].
- ⁶⁵ See, for example, Australian Library and Information Association, Aboriginal and Torres Strait Islander Protocols for Libraries, Archives and Information Services (endorsed at the Aboriginal and Torres Strait Islander Library and Information Resources Network (ATSILIRN) conferences, December 1994 and September 1995), available at http://wwwl.aiatsis.gov.au/atsilirn/protocols.atsilirn.asn.au/index0c51.html?option=com_frontpage& Itemid=1 [last accessed 15 January 2010].
- ⁶⁶ The word protocol derives from the Greek *protokollen* meaning 'table of contents' or 'first sheet.' It is also understood to refer to the first sheet glued into a book to help direct or provide guidance to a reader in interpreting the document. The use of the word protocol in the contexts of indigenous peoples follows these very early understandings of the term especially as the point of cultural protocols are to provide preliminary directions for conduct and/or behavior for those who might not know or have access to the appropriate rules. A protocol sits somewhere between formal law, regulation and policy. It is mainly informal but can be made formal. It is a very useful device for mediating behavior in and across culturally different contexts.
- ⁶⁷ The success of the Internet Protocol, in creating a form of governance for the Internet, raises interesting points of similarity and convergence. Useful parallels can be drawn here.

A helpful initial text focusing on protocols in the Internet context is Alexander R. Galloway, Protocol: How Control Exists after Decentralization (2004).

- 68 "The Optional Protocol [the latest international mechanism of the International Covenant on Economic, Social and Cultural Rights] aims to enable those whose economic, social and cultural rights are violated—and who are denied a remedy in their countries—to seek justice at the international level. It also stands to influence decisions by judicial bodies at the national and regional levels and create more opportunities for people to advocate for the enforcement of economic, social and cultural rights within their own countries." Shira Stanton, *Event: Enforcing Economic, Social and Cultural Rights The Hope and Challenge of the Optional Protocol*, Center for Economic and Social Rights, Sept. 21, 2009, http://www.cesr.org/article.php?id=390 [last accessed 15 January 2010]. *See also* the UN Office of the High Commissioner for Human Rights, for a full copy of the Optional Protocol, *available at* http://www2.ohchr.org/english/bodies/cescr/docs/A-RES-63-117.pdf [last accessed 15 January 2010].
- ⁶⁹ There is extensive literature on the neem and turmeric patent, *see* Further Resources.
- ⁷⁰ For a good discussion and comparative analysis, *see* Merle Alexander, K. Chamundeeswari, Alphonse Kambu, Manuel Ruiz & Brendan Tobin, The Role of Registers and Databases in the Protection of Traditional Knowledge (2003), *available at* http://www.ias.unu.edu/binaries/UNUIAS_TKRegistersReport.pdf [last accessed 15 January 2010].
- ⁷¹ See, for example, the Northern Territory of Australia, Library Knowledge Centres at http://www.ntl.nt.gov.au/about_us/knowledgecentres [last accessed 15 January 2010]. Also see the Maarifa Knowledge Centres in Kenya, Tanzania and Uganda at http://www.comminit.com/en/node/297001/306 [last accessed 15 January 2010].
- ⁷² See, for example, http://www.mukurtuarchive.org/ [accessed 15 January 2010].
- ⁷³ See, for example, the Alaska Traditional Knowledge and Native Foods Database, http://www.nativeknowledge.org/login.asp [last accessed 15 January 2010]; the Honey Bee Database, http://www.sristi.org/wsa/ [last accessed 15 January 2010]; the Traditional Ecological Knowledge Prior Art Database, http://ip.aaas.org/tekindex.nsf [last accessed 15 January 2010]; the Database of Indigenous Knowledge and Practice, http://www.worldbank.org/afr/ik/datab.htm [last accessed 15 January 2010]; the Traditional Knowledge Revival Pathways, http://tkrp.com.au/index.php?option=%20com_content&task=view&%20id=28& Itemid=39 [last accessed 15 January 2010]; and the Korean Traditional Knowledge Portal, http://www.koreantk.com/en/m_about/about_01.jsp?about=1 [last accessed 15 January 2010].
- ⁷⁴ See the Traditional Knowledge Digital Library, http://www.tkdl.res.in/ [last accessed 15 January 2010].
- ⁷⁵ The TKDL is owned jointly by India's autonomous Council of Scientific and Industrial Research and the Indian government's Ministry of Health and Family Welfare, Department of Ayurveda, Yoga, Unani, Sidh and Homeopathy (AYUSH).
- ⁷⁶ This also raises ongoing questions of indigenous peoples' sovereignty and self-determination. *See* Wallace Coffey & Rebecca Tsosie, *Rethinking the Tribal Sovereignty Doctrine:*

- Cultural Sovereignty and the Collective Future of Indian Nations, 12 Stan. L. & Pol'y Rev. 191 (2001).
- ⁷⁷ See Brendan Tobin, Redefining Perspectives in the Search for Protection of Traditional Knowledge: A Case Study from Peru, 10 Rev. Eur. Community & Int'l Env. L. 47 (2001).
- ⁷⁸ Examples of *sui generis* legislation in relation to traditional/indigenous knowledge include the USA Indian Arts and Crafts Act 1990; Panama Law No. 20 (June 26, 2000) and Executive Decree No. 12 (March 20, 2001). Another example of *sui generis* legislation relating to indigenous peoples' rights is the Australian Native Title Act 1993.
- ⁷⁹ Janke, *supra* note 3.
- 80 Brendan Tobin & Krysyna Swiderska, Speaking in Tongues: Indigenous Participation in the Development of a Sui-Generis Regime to Protect Traditional Knowledge in Peru (2001) at 47.
- ⁸¹ Philippe Cullet, *Human Rights and Intellectual Property Protection in the TRIPS Era*, 29 Hum. Rts. Q. 403 (2007); *and*, Laurence R. Helfer, *Toward a Human Rights Framework for Intellectual Property*, 40 U.C. Davis L. Rev. 971 (2007).
- ⁸² Jane Anderson, *Developments in Intellectual Property and Traditional Knowledge Protection, in* Traditional Knowledge and Indigenous Peoples (2009).
- ⁸³ See S. James Anaya, International Human Rights and Indigenous Peoples (2009). The 2007 UN Declaration on the Rights of Indigenous Peoples insists on the importance of issues of cultural rights and community rights in the debate.
- ⁸⁴ Angela R. Riley, (*Tribal*) Sovereignty and Illiberalism, 95 Cal. L. Rev. 799 (2007). Riley is an excellent commentator on the complexities that this raises for human rights. See also, Indigenous Peoples and the Promise of Globalization: An Essay on Rights and Responsibilities, 14 Kan. J.L. & Pub. Pol'y 155 (2004), and, Indian Remains, Human Rights: Reconsidering Entitlement Under the Native American Graves Protection and Repatriation Act, 34 Colum. Hum. Rts. L. Rev. 49 (2002).
- ⁸⁵ For example, because debates over genetic resources tend to specifically engage with patent law, other developments in areas such as cultural expressions and copyright are not necessarily incorporated into these discussions.
- ⁸⁶ The bio-prospecting/biopharma industry is complex and involves a range of participants, not all of whom are equally represented or in positions to negotiate at the various stages of knowledge transfer or development.
- ⁸⁷ Secretariat of the Convention on Biological Diversity, Access and Benefit-Sharing in Practice: Trends in Partnerships Across Sectors (2008), *available at* http://www.cbd.int/doc/publications/cbd-ts-38-en.pdf [last accessed 19 January 2010].
- ⁸⁸ The Material Transfer Agreement is also dependent on the concept of prior informed consent. This is where approval has been sought from the indigenous/local community, and the rights of the community have been recognized. The researcher or bio-prospector has the obligation to make sure that prior informed consent has been obtained *before* the collection of samples or the use of any knowledge gained *in situ*.
- ⁸⁹ In a similar vein, Peter Drahos has proposed the establishment of a Global Bio-Collecting Agency. Drahos argues that part of the way to overcome the regulatory difficulties of devel-

- oping mutually satisfactory and beneficial contractual arrangements between parties that have extremely challenging power and trust relationships will be in the establishment of a global collecting agency. Peter Drahos, *Indigenous Knowledge, Intellectual Property and Biopiracy: Is a Global Bio-Collecting Agency the Answer?* 22 Eur. INTELL. PROP. Rev. 245 (2000).
- ⁹⁰ Margaret Raven, *Protocols and ABS: Recognising Indigenous Rights to Knowledge in Australian Bureaucratic Organizations*, INDIGENOUS L. BULL. July 2006, at 13, *available at* http://austlii.law.uts.edu.au/au/journals/ILB/2006/39.html#Heading47 [last accessed 19 January 2010].
- ⁹¹ C. Oguamanam, Local Knowledge as Trapped Knowledge: Intellectual Property, Culture, Power and Politics, 11 J. World Intell. Prop. 29 (2008); O. B. Arewa, TRIPS, Traditional Knowledge: Local Communities, Local Knowledge in Global Intellectual Property Frameworks, 10 Marq.Intell. Prop. Rev. 155 (2006).
- ⁹² Peter Drahos has written extensively on the TRIPS agreement and its complexities. *See* Peter Drahos & J. Braithwaite, Information Feudalism: Who Owns the Knowledge Economy? (2002). *Also* S. Sell, Power and Ideas: North-South Politics of Intellectual Property and Anti-Trust (1998). *See also* M. Davis, *International Trade, the World Trade Organisation and the Human Rights of Indigenous Peoples*, Balayi: Culture, Law & Colonialism (2006) Vol 8.
- ⁹³ India, for example, has sought to register traditional remedies and Ayurvedic preparations as protected through GIs. See how the Indian government explains geographical indications at http://www.patentoffice.nic.in/ipr/gi/geo_ind.htm [last accessed 19 January 2010].
- ⁹⁴ A recent report from the International Institute for Environment and Development identifies the following components that international policy on traditional knowledge and genetic resources should include:
 - recognition of collective rights and decision-making;
 - means of sharing benefits equitably among communities;
 - recognition of customary rights over genetic resources such as crop varieties that communities have developed;
 - enabling reciprocal access to genetic resources between users and communities; and,
 - managing external access to traditional knowledge with community protocols.

See Krystyna Swiderska, et al., I.I.E.D. Briefing, Protecting Traditional Knowledge from the Grassroots Up (2009), available at http://www.iied.org/pubs/pdfs/17067IIED.pdf [last accessed 19 January 2010].

⁹⁵ Also see the Canadian Social Science and Humanities Research Council collaborative research project Intellectual Property Issues in Cultural Heritage at http://www.sfu.ca/ip-inch/front [last accessed 19 January 2010].

Duke University School of Law Center for the Study of the Public Domain

> 210 Science Drive Durham, NC, U.S.A. 27708-0360