Intellectual Property Rights, Traditional Knowledge and Access and Benefit-Sharing: Towards a New International Cultural-Legal Relativity Narrative

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Abstract

This thesis examines international Intellectual Property (IP) law in relation to indigenous Traditional Knowledge (TK) and the process of the sharing of benefits arising from the use of TK and associated genetic resources. This is accomplished using the theory of Cultural-Legal Relativity, which demonstrates an important mutually-constitutive relationship between culture and law. Illuminated by Cultural-Legal Relativity, IP law and Access and Benefit-Sharing (ABS) is analyzed towards concrete and productive policy implications and a skeletal Model Treaty that attempts to synthesize the analysis within the current international IP legal framework. The aim of the policy recommendations and the Model Treaty is to stimulate discourse and research towards a natural evolution of international IP law that addresses many of the social, political, economic and legal concerns that surround TK and ABS towards a more fair, equal and inclusive legal regime.
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Introduction

A confused and limiting notion of priority allows that only the original proponents of an idea can understand and use it. But the history of all cultures is the history of cultural borrowings. Cultures are not impermeable; just as Western science borrowed from Arabs, they had borrowed from India and Greece. Culture is never just a matter of ownership, of borrowing or lending with absolute debtors and creditors, but rather of appropriations, common experiences, and interdependencies of all kinds among different cultures, this is a universal norm (Said, 1993: 217).

Understanding the interaction between culture and law has become a popular subject for cultural and legal scholars. Based on anthropology and rooted in post-realist perspectives, the theory on culture and law is beginning to expand its field of vision. There is greater inquiry, and increasing understanding, of how legal frameworks shape the social meanings of signifying properties within and between public spheres (Coombe, 1998b). These meanings are produced in spheres “characterized by inequalities of discursive and material resources, symbolic capital, and access to channels of communication” (Coombe, 1998b: 26). This also applies to the spectrum of actors and spaces framed by international law, where each state must create or alter domestic legislation to correspond with international legal agreements and policies (Trebilcock and Howse, 2005). Indeed, “to consider the styles of legal reasoning or the structure of cultural assumptions built into many legal precepts is to offer both a window into the larger culture and, no less importantly, to gain an often undervalued window into legal processes themselves” (Rosen, 2006: 12).
As such, this thesis explores international Intellectual Property Rights (IPR),\(^1\) the theory of Cultural-Legal Relativity, and how they intersect in the practice of Access and Benefit-Sharing (ABS) agreements for the commercialization and patenting of Traditional Knowledge (TK). ABS agreements are used to facilitate access to the biological and intellectual resources of indigenous people or traditional communities for researchers and consumers while simultaneously protecting the rights of knowledge holders and maintaining resources. Although ABS agreements are mentioned in a variety of international legal texts, they have their international legal basis in the United Nations Convention on Biological Diversity (CBD).\(^2\) The CBD, which was adopted in 1992, mandates benefit-sharing and compensation for local or traditional knowledge that is expropriated by outside entities for research and/or for profitable purposes. ABS agreements are aimed at curbing biopiracy\(^3\) and promoting sustainable and equitable knowledge and resource sharing between providers and researchers (Convention on Biological Diversity, 1992). While there are volumes of research on the CBD and other international intellectual property agreements and their ethical considerations, it resides primarily within the scientific community and non-profit organizations. There is a dearth of

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\(^1\) Please see Annex One: Acronyms for a list of acronyms employed in this thesis.


research that addresses ABS agreements from a critical perspective grounded in legal theory. This is most likely due to the complex nature of intellectual property rights and the difficulties of making assumptions and categorizations about culture and the nature of law.

International IP law and IPRs provide a unique opportunity to understand the intersection of law and culture, and the inevitable disconnect that will occur in a globalized world, where frictions among cultural worldviews are rapidly increasing as states, organizations, civil societies and activists scramble to frame, reframe and manipulate issues, discourses and power balances. The controversial perspectives surrounding patents and patenting are as diverse as the number and types of peoples and cultures in the world. Understanding IPRs and the international culture-legal dynamic will simultaneously help to understand the discourse on international IP law while providing cultural legal studies with greater depth and a fresh outlook on a burgeoning problem that transcends national boundaries. An ongoing, dynamic inquiry into these domains is imperative because “[n]one of us believe that law is an objective or neutral set of propositions, yet we share an interest in the way in which claims of objectivity and neutrality operate within the law. We also agree that the culture of law needs to be understood in its relationship to other cultural products, and that there is no law in the abstract. There is only a field of social relationships organized, in part, through assertions of law” (Kahn, 2003: 151).

This thesis is divided into three Chapters. The first Chapter focuses on the theory of Cultural-Legal Relativity and outlines the methods and framework
through which these multifaceted issues are to be examined. Chapter One expands Cultural-Legal Relativity to the international realm and attempts to create a meaningful narrative that reframes the role that international law plays in the cultures of people around the world. Chapter Two provides a concise outline of the most relevant international intellectual property and access and benefit-sharing of TK legal texts, with a particular focus on the CBD and the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The Chapter Three applies Cultural-Legal Relativity analysis to the legal and social implications of international IPRs in an attempt to analyze and re-conceptualize the ongoing discourse surrounding these issues. Chapter Three provides some policy prescriptions that arise from the analysis and then outlines an innovative skeletal Model Treaty. This Model Treaty incorporates Cultural-Legal Relativity into its structure and attempts to highlight the evolving nature of international law and legal understanding. This is an innovative strategy that lends a productive and proactive perspective to the highly politicized consequences of international IP frameworks. The vision of this thesis is one that looks beyond the present stratification towards the future where law and culture are harmonized in international law, and where the actors are the people who are most affected by the legislation and not just states.

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Chapter One: Cultural-Legal Relativity

If one sees religion as solely about 'ultimate values', rather than concrete designs for understanding and directing everyday life; if one sees economics as only about 'the rational calculation of means to ends,' rather than the relations among people as they circulate things to which they attribute meaning; or if one sees law as exclusively concerned with the rules that regulate disputes, rather than as a realm in which a society and its members envision themselves and their connections to one another – if, in short, one pulls life and its articulations apart without ever rejoining them through a unified view of the nature of culture, then the reification of our momentary view of how the world is composed will triumph over our need to understand it from afar (Rosen, 2006: xii).

1. Introduction

This Chapter outlines the research questions and methods utilized in this thesis. The Chapter explores the theory of Cultural-Legal Relativity and how it relates to intellectual property and international law. Cultural-Legal Relativity has yet to be used meaningfully to examine the international legal system, therefore this Chapter seeks to expand the theory from its domestic cultural-legal roots. The objective is to provide a theoretical framework through which to understand international intellectual property law and the role of culture in allocating value to knowledge and the historical legal disenfranchisement of indigenous peoples specifically, and non-Western peoples generally, in the international system.

The first section of this Chapter outlines the research questions and methodology deployed to explore the questions. The second section outlines the theory of Cultural-Legal Relativity through subsections that separately examine law and culture, and the interface between them. The theory is then explored in the international legal system as well as its relevance and application in the thesis. The third section applies Cultural-Legal Relativity to IPRs and TK, thus
setting the stage for the remainder of the thesis and providing a lens through which to understand – and segway into - the legal concepts outlined in Chapter Two.

2. Research Questions and Methodology

2.1 Research Questions

This thesis examines the role that Cultural-Legal Relativity plays in the negotiation, production, realization, and success of benefit-sharing agreements for TK and associated biological resources. In addition, the role of power, via political and economic relativity rooted in historical considerations, affects the efficiency, efficacy and legitimacy of international IP law. From this analysis, a number of considerations and recommendations will be offered to assist in the practical evolution of ABS agreements, and a model for a new international agreement informed by Cultural-Legal Relativity theory is presented to inform and encourage innovative discourse. The focus of this thesis is on the international aspects of IPRs and ABS, while seeking to inform and expand the literature related to Cultural-Legal Relativity theory.

This thesis operates within a potentially controversial assumption that ABS is, theoretically, a positive thing, and can provide real benefits to the people who wish to engage in ABS activities and their environment. Literature on this topic highlight a number of pitfalls to ABS as it is currently used, but with diligence, research, informed choice, international and domestic pressure, and a heavy
measure of enforceability, ABS agreements could become the hallmark of good relationships in the interaction of states, cultures and peoples.

In addition, it is important to consider whether the international legal regime that currently structures ABS agreements effectively and fairly addresses the disparities of power between large international corporations (or academic institutions) and often-isolated indigenous communities and local healers, and truly achieve positive social, scientific, and environmental advancements. This is a broad, subjective question, but nonetheless key to the central arguments to be canvassed in this study. It is arguable that if the legal regime is incapable of being flexible enough to accommodate vast differences in perspectives yet rigid enough to ensure fairness and justice, then perhaps a new legal regime must be negotiated rather than simply recommendations on upgrading and fine-tuning the current legal architecture. A more practical perspective, and indeed the one adopted in this study, sees the fine-tuning of the current system with an ongoing renegotiation of legal platforms towards optimal benefits for all parties involved.

2.2 Research Methodology

This study uses Discourse Analysis as its primary method for challenging the complex issues related to international IP law, IPRs, ABS and TK and associated biological resources. “Discourse Analysis focuses on talk and texts as social practices, and on the resources that are drawn on to enable those practices” (Potter, 1996). As a result, it offers a unique frame that enables a critical examination of the foundations and structure of IP law and ABS
agreements. It is important that the subtlety of power at play be understood so
that mutually beneficial relationships between bioprospectors and traditional
knowledge holders effectively addresses key global concerns, such as:
environmental sustainability and biodiversity; the maintenance of cultural
practices and traditional medicinal knowledge; and, medical and other
advancements designed to address human health and wellness issues in all
parts of the world (rather than simply the North). Questions of whether social
justice, and cultural and environmental sustainability, are substantially realizable
in relationships that are often culturally relative and economically unequal
challenge the assertion of this thesis that a Cultural-Legal Relativity perspective
could illuminate this particular relationship, and add real value to the negotiation
of fair ABS agreements and IPRs.

Discourse Analysis is the ideal method for identifying and thinking about
the gaps in the legal and regulatory frameworks currently being used to address
issues of intellectual property on a global scale. In part, this is due to the
overwhelming volume of critical legal research on these issues, but a dearth of
theoretical perspectives that informs the debate and illuminates key barriers such

5 ‘North’ refers here to a political and cultural division that is roughly articulated geographically. Different perspectives on international political and historical issues, including intellectual property, have organized into two general camps, generally dichotomized into Western values and non-Western values. In reality it is too simplistic to separate these groups geographically into “North” and “South”, as there are non-western viewpoints and indigenous peoples within many Northern states and there are Southern states which have embraced the Western Patent system and Indigenous communities that have benefitted tremendously from the patenting of TK. The terms ‘North’, ‘First World’, ‘developed’ and ‘Western’ are used freely throughout this thesis and refer to the same ‘side’ of the issue, while ‘South’, ‘non-Western’, ‘Developing’ and ‘Third World’ refer to the opposite ‘side’. For an excellent account of the North-South dichotomy, please see Head, Ivan L. (1991) On a Hinge of History: The Mutual Vulnerability of North and South. Canada: University of Toronto Press. For a similar account of the North-South academic dichotomy within the realm of international law scholarship, please see Mickelson, Karin (1998) “Rhetoric and Rage: Third World Voices in International Legal Discourse”, Wisconsin International Law Journal, 16: 353.
as the subtle role of power inequalities and cultural relativity that undergird stakeholder motivations. Furthermore, deconstructing the legal and regulatory frameworks towards a social and human understanding of the assumptions and motivations of actors will provide key insights into the role and legitimacy of the international legal structures themselves.

3. The Theory of Cultural-Legal Relativity

3.1 Introduction to Cultural-Legal Relativity

The theory of Cultural-Legal Relativity\(^6\) is a lesser-known perspective that has only relatively recently begun to inform legal studies in the North. Cultural-Legal Relativity acts as a window into the nature of the relationship between law and culture, the strands that bind their mutual development together, and the role that power plays in relationships between members of a culture, as well as between cultures. This research focuses on the legal aspects of intellectual property rights in relation to the multifaceted social justice and environmental sustainability issues arising from the commercial use of TK and associated biological resources. The intersection of these issues may be located at the conception and development of ABS Agreements.

\(^6\) This should not be confused with Comparative Legal Studies, which is a different theory. Cultural-legal relativity does not aim to compare legal systems, but rather to highlight the intersections between law and culture and how they feed into, and interact with, one another. From an international perspective, it aims to locate law within a cultural milieu and the difficulties that this presents for cultures that do not ascribe to the same legal understandings. Comparative analysis loses legitimacy and functionality when confronted with difficulties associated with the dual requirements for ethnographic accuracy and the need for generalization in anthropological research in that legal systems vary in nature and function across cultures and communities (Nader, 1965).
This study deploys the theory of Cultural-Legal Relativity, as espoused in various forms by scholars but not well articulated through the vast subjects related to law and culture. This is a deconstructionist perspective that appears to be well-suited to scrutinize the character and perceived outcomes of ABS agreements, and to help illuminate the nature of this prevailing legal and political relationship. Specifically, it is ideal for examining the construction of legal norms and locates the disconnect and dissonance between different legal and cultural regimes. The shared legal meaning of what is classified as old or novel knowledge within the North is structured by TRIPS and the CBD, and incorporated by signatories and ratification into domestic legal systems. There is a disconnect between cultural and cultural-legal recognition and meanings of knowledge and values associated with that knowledge in different countries. This disconnect opens avenues for profit to be made by those who recognize and operate within the one dominant legal regime (that allocates the meanings and value of knowledge) at the expense of those who do not. The politics of power, especially along developed and developing (but not necessarily geographical) boundaries, are brought to the fore when this perspective is employed.

Ekpere (2003) provides a voice for non-Western perspectives when he argues that IP law has illuminated a legal distinction between “the creativity of local communities and indigenous peoples and the creativity of corporate interests” (277). Shiva, among others, articulates the idea that IP law has become central to what is perceived in the South as a hegemonic, neo-imperialistic advancement by the North onto the South, with one mode, one
worldview, and one idea shaping the reality of the international economic legal regime. This is seen as a bold reflection of historical colonialism, whereby the coldly calculated misappropriation of land and natural resources have been replaced with the coldly calculated misappropriation of knowledge and biological resources (Shiva, 2000). This perspective is contested with the assertion that patenting spurs creativity and innovation (Ganguli, 2000), and importantly there are numerous initiatives around the world aimed at redefining the role of IP law towards more equitable sharing of resources and benefits. There are so many different perspectives and values, and potentially life-saving/culture-saving knowledge at stake that lend a sense of urgency to this issue. It is at these intersections of Cultural-Legal Relativism, informed by the historical, political and economic experiences of each stakeholder, that ABS may be found.

3.2 Culture

Although I will attempt to provide a broad outline of how culture is to be envisioned and understood in this thesis, it should be noted that within the academic literature culture is a concept that is widely contested, debated, denounced, rejuvenated and ultimately intensely personal. A vision of culture must be broad - and flexible - to be inclusive. Naomi Mezey understands culture as “the almost unconscious meaning-systems that people inhabit and enact without choice” (1998: 42). Mezey articulates that “the term ‘culture’ [is] to mean a more porous array of intersecting practices and processes that emerge from within and beyond its borders” (1998: 43). It is at the level of shared meaning of
interacting practices and processes that culture may begin to be identified and understood as encompassing a group of people as well as identifying an "other" - those that do not share the cultural meaning - and thus providing (blurry) boundaries to a cultural category (Mezey, 1998). However, this assertion is also problematic itself, in that "cultures" are not homogenous or standardizable (Mezey, 1998). Indeed, "[d]ifferences, conflicts, confusion among people who otherwise share many signifying practices help explain why cultures are never neat, bounded or complete. It is also in the very construction of difference that we see the cultural integration of law..." (Mezey, 1998: 43). Rosemary Coombe describes culture as "both the medium and the consequence of social differences, dominations, and exploitations, the form of their inscription and the means of their collective and individual imbrications" (1998a: 33). Coombe argues that unity within a culture is bound "by the exclusion, marginalization, and silencing of alternative visions and oppositional understandings" (1998a: 33).

Defining what is a culture is no easy task, as it is something that is humanly universal, yet often formatively contested. Pierre Legrand's definition provides enough description, and enough space, to give culture a structure, coherence and nuance. He understands "the notion of 'culture' to mean the framework of intangibles within which an interpretive community operates, which has normative force for this community (even though not completely and coherently instantiated), and which, over the longue durée, determines the identity of a community as community" (Legrand, 1999: 27; emphasis in original). Because culture is connected to community (which perpetuates and reinforces
cultural norms and creates rules and laws accordingly), this is the basic definition that this research paper employs.

The importance of using a cultural lens is well-understood, and has become a key component of academic and political debates at a number of levels and within a number of fields. Cultural studies are intimately linked with questions of power, social stratification and social conflict (Sarat and Kearns, 1998), and it is becoming widely understood, at least within academia, that “[m]ost social relations are permeated with law” (Sarat and Simon, 2001: 20). Understanding the role of culture leads to a greater understanding of the boundaries (legal and social) that cultural identity creates and cultural ideas embody (Sarat and Simon, 2001: 10). As the national and international understandings and conceptualizations of culture become more prominent and ingrained in the international legal body, “it is important to recognize that the ascendance of the cultural comes paradoxically at a time when scholars have increasingly begun to contest the concept of culture and recognize its troubling vagueness. Talking about culture at the start of the twenty-first century means venturing into a field where there are almost as many definitions of the term as there are discussions of it, and where arguments rage inside as well as outside the academy” (Sarat and Simon, 2001: 15).

Cultural politics has become synonymous or intertwined with identity politics in many cases, “so that to have an identity one must now also have a culture. Those who fail to establish their culture risk having their ‘truth’ missed by the myriad of authorities – courts, admissions committees, draft boards – whose
judgments help determine life fates... Yet despite the growing sense that culture must be recognized, there is little consensus on what the boundaries of the cultural are, let alone how to ‘read’ it in any particular instance” (Sarat and Simon, 2001: 3). This insight becomes very important when opening up the cultural and legal categories to understand how they interact. Furthermore, culture becomes a beacon of allocation of rights (Sarat and Simon, 2001), and this is deeply enshrined in international law. This identity-culture connection, combined with the legal and political structures of indigenous categorization raises deeply contentious issues related to rights, sovereignty, and the role of geo-political and legal-political identity within the current international legal IPR framework. While not the primary subject of this thesis, discussing the rights of indigenous peoples to resources and the commercialization of resources cannot occur without mentioning the role of the state and legal and social categories of sovereignty over resources.

Culture may be contested, it may play a prominent role in academic and political-social debate in the public sphere, and it may or may not be well understood. This may or may not be true and has led to some discrediting of the ‘concept’ of culture as a poor explanatory tool for human and social phenomena (Legrand, 1999). This thesis does not support that argument, but rather sees the myriad of cultural perspectives and their related purposive considerations lend theory and research on culture all the more validity because the cultural factor simply cannot be escaped whenever human action, human judgment, or human agency are involved. Indeed,
to reject the validity of cultural explanation because it does not make
behavioural events predictable is mistaken. In fact, if you will, ‘culture’
does offer a causal explanation, but it is not ‘causal’ in the sense of a
necessary relation amongst events...the argument can be propounded,
therefore, that ‘culture’ plays a causal role...in the way the influence of
tradition and so forth on human behavior – the cosmology of beliefs that
defines individuals’ lives as members of a community over time – is
related by physical realities such as brain mechanisms. It is through the
brain that culture manifests itself in the actions of organic individuals. In
this sense, these actions can not unreasonably be said to be causally
related to ‘culture’ (Legrand, 1999: 32-33; emphasis in original).

If culture cannot be avoided, if there is indeed a causal relationship
between action, agency and culture, then questions arise of what constitutes and
what bounds cultural meaning and understanding. Rosen argues that culture
provides a sense of orderliness “at both a conceptual and a relational level,
organizing our view of daily life as commonsensical and our ways of orienting our
actions to others as systematic and workable...In short, we create our
experience, knit together disparate ideas and actions, and in the process
fabricate a world of meaning that appears to us as real” (Rosen, 2006: 4).
Orderliness binds numerous domains of our lives, including the economic,
kinship, political and legal as a form of categorizing imperative (Rosen, 2006).
Indeed, by “successfully stitching together these seemingly unconnected realms,
collective experience appears to the members of a given culture to be not only
logical and obvious but immanent and natural” (Rosen, 2006: 4).

Important to the subject of this thesis, culture can also be a kind of
collective consciousness among a group of people. “If psychologists can
conceive of a self ‘distributed’ among a wider group of persons with whom an
individual interacts and influenced by the culture of which the group is a part,
then we should experience no dissonance in discussing the consciousness of the self while also recognizing that consciousness may be first and foremost a phenomenon of a collectivity” (Engel, 1998: 112). The formative bindings of culture and consciousness are two concepts that work together to help visualize the interactive roles that law and culture play, and the often invisible relationship they share. Indeed, “‘consciousness’ does not refer only to the conscious thought processes of the self. Consciousness includes the unconscious and the subconscious; there is no requirement that the self be aware of the ideas and assumptions that constitute consciousness” (Engel, 1998: 116). These ideas help to shape and contextualize the role that law plays within and among cultures.

### 3.3 Law

Before outlining the various facets of Cultural-Legal Relativity that form the foundations of this thesis, it is important to explore the role of law in society to elucidate the concepts deployed in the next section. Law, from a cultural perspective, is understood by some writers as “a way of organizing the world into categories and concepts which, while providing spaces and opportunities, also constrains behavior and serves to legitimate authority” (Garth and Sarat, 1998:2). What is apparent in legal studies is that “[t]he integrity of law depends on the ability to maintain its boundaries; to resist the influence of other ways of conceiving, for instance, the creator and creation relation [i.e. in relation to patents]...The law can only appear credible by limiting what it authorizes in this
regard. The work of sustaining credibility, then, is simultaneously the work of sustaining boundaries” (Hirsch, 2004: 177).

Cultural studies views law as a location to enact, and seek resources for conflict (Kahn, 2003). These appear to situate culture as a larger framework within which law is constituted and enacted, so it is important to note that “[s]ites and resources...do not exist independently of...claims and conflicts. Individuals do not first have interests which they then take to the law. Individuals literally find themselves in these sites deploying these resources; we are always already there” (Kahn, 2003: 149). The framework of culture and the framework of law do not simply operate separately or together, rather they function and intertwine in a mutually-constitutive, and historically-rooted manner, and serve to structure the nature of relationships and social interaction. Law does not trump culture, nor is culture fully guided by law. According to Kahn:

Scholars of law and culture focus on the materiality of law, the way in which law simultaneously embodies the interests of particular groups and shapes those interests – and even shapes the identities of those who understand themselves as members of such groups. Law must, on this view, be studied in ways that are historically specific and deeply contextualized. The turn to historical context reveals a dynamic process in which power is contested for the sake of ideas, values, and interests. The contest is often fought within, and over, the terms of legal claims for recognition of identity as well as of particular interests (2003: 150).

To bring back Engel’s framing of cultural consciousness, there are three considerations that Engel makes regarding law which are worth mentioning. First Engel argues that “[d]ifferent substantive areas of law are associated with different perceptions, understandings, and behaviors and must therefore be distinguished in research on legal consciousness” (1998: 140-141). This
multilayered understanding of law is simultaneously reflective and parallel to the multilayered nature of culture. Engel then asserts that “[l]aw in society is multicentered and assumes many different shapes. It is not necessarily an instrument of state power, and its connection with the state is a problem to be studied rather than a fact to be assumed.” This perspective lends support to the assertion that culture and law interact in the same way that culture or law each interact with the state. For this thesis, this is a critical point. The state is part of this relationship, but as a byproduct and facilitator of these two factors. Arguably culture and law can exist where a formal state does not (such as in indigenous communities). Finally, Engel argues that “[i]n some instances, official law directly touches and influences the lives of individuals, but more often law is mediated through social fields that filter its effects and merge official and unofficial systems of rules and meanings”. This is key to the research questions posed by this thesis and will be addressed in depth in subsequent chapters.

In addition to the nuances associated with law and legal consciousness outlined by Engel, Rosen (2006) emphasizes the disconnect between law and the state when he argues that law does not “depend on express sanctions or even the existence of an actual sovereign; nor does it require utter precision to possess content” (22). This assertion also encompasses the various levels of legitimacy (and surprising amount of cooperation) associated with law at all levels and among different peoples. Understanding law's role in legitimizing relationships is key to understanding how ABS is structured, understood and functions. It is aptly observed that “[l]aw remains the central discourse used in
national and international forums for asserting and contesting sovereignty and control over vital resources. As a result, people from former colonies, like people in colonizing countries, are likely to find that their claims, however intended, are interpreted by others within the framework of assumptions that constitute [law]” (Collier, 1998: 183).

While it is not within the purview of this thesis to answer the many questions that are raised when theorizing the nature and role of law, nonetheless it is important to observe that the nature and role of law are contested, and this reflects the contested nature and substance of culture. The lack of coherent collective perspectives on law and culture open up a wide space to use these two fundamental, yet misunderstood, frames of behavior to situate and legitimize the other.

3.4 Culture and Law

Understanding culture and law, and their interactions internationally, becomes imperative as the world continues to become increasingly interconnected. Indeed, "[l]aw’s cultural lives cannot escape the forces that, at the end of the twentieth century, afflict and transform cultural life everywhere. The cultural lives of law are located in the emergent crisis of representation as well as contemporary changes in the organization of symbols and rhythms of symbolic construction” (Sarat and Kearns, 1998: 9). Learning to work within a cultural-legal framework can only be a positive evolution in international legal relations.
As has been touched upon earlier, the interaction between culture and law is a complex dynamism, whereby each interacts and informs the other. Law is not simply an addition, or technicality to "a morally (or immorally) finished society", it is an active component of the structure and visioning of a society (Sarat and Simon, 2001: 18). A cultural analysis of law rejects a perceived dichotomy between agency and structure, whereby consciousness is historical and situational. Agency and structure inform each other in a similar parallel to law and culture, and where "law is, in part, constitutive of the self-understanding of individuals and communities" (Kahn, 2003: 141).

The utility of this theory is that it insists on engaging and deconstructing the ways that the "cultural lives of law" contribute to inconsistencies in the abilities of individuals, groups and communities to define themselves and their needs. The "[c]ultural study of law connects the symbolic and material by resisting their dichotomization" (Sarat and Simon, 2001: 19). Indeed, law (formal or otherwise) is a part of the lived experience of the everyday world, and contributes intensely to the seemingly stable, nuanced reality of that world, and the shared perception among members of a society that "as things are, so they must be". (Sarat and Simon, 2001: 19). However, according to Legrand, "[t]o argue a symbiotic relationship between culture and legal culture, is to assert a controversial claim..." (1999: 29). This clearly reflects the contentious discourse surrounding culture and law briefly outlined earlier.

The dominant literature in this field points to a constitutive relationship between law and culture, and controversy over the nature and function of their
relationship, rather than its actual existence. It is argued that "[l]aw has played, and continues to play, a large role in regulating the terms and conditions of cultural production" (Sarat and Simon, 2001: 20). The key point in this concept is that law operates within a culture by influencing patterns and modes of thought, rather than by structuring or determining conduct (Sarat and Kearns, 1998: 7). It is this subtle grasping of the relationship between law and culture that plays strongly into the theme of this thesis, and frames the cultural disconnect between players negotiating ABS agreements and the motivations and power differentials that influence the style, production, and outcomes of such negotiations. ABS agreements are comprised of, and fall within the various rubrics of complicated international, national and local legal frameworks, each layered with different motivations, meanings and authority, and complicated with various levels of legitimacy and accessibility (comprehensibility). Connected to this complex legal web are situational and individual agency and notions of 'justice' and 'fairness', in addition to culturally-influenced perceptions of power based on prevailing and pre-existing modes of power and economic-political influence.

Within the literature there is a less-obvious, but deeply implied, conception of culture as being defined and understood oppositionally. By oppositionally, it is meant that culture is defined and understood by what it is not, rather than what it is. For example, a culture may understand itself as not having characteristics perceived as rude or inappropriate that other cultures may have (the stereotype of the loud, obnoxious American tourist is a good example, as many other
cultural groups may identify themselves as *not* loud and obnoxious – rather than self-identifying as quiet, polite tourists – and whether this is actually true or not).

Law’s relationship with culture is highlighted by this oppositional perspective, as law legitimizes the identity and shapes the “other”, and identifies boundaries of behavior within the cultural framework of layered semiotic understanding (for example, the criminalization of people who break the law). This relationship of law to culture is one of evolving dynamic interwovenness, where each informs and shapes the other (Mezey, 1998). She goes on to argue that,

if one were to talk about the relationship between culture and law, it would certainly be right to say that it is always dynamic, interactive, and dialectical – law is both a producer of culture and an object of culture. Put generally, law shapes individual and group identity, social practices, and the meaning of cultural symbols, but all of these things (culture in its myriad manifestations) also shape law by changing what is socially desirable, politically feasible, legally legitimate (Mezey, 1998:45).

It is too simple to say that law arises as a tool of culture to prescribe the acceptable course of action within a myriad of potential situations, but rather it’s culturally incubated, but socially autonomous, foundation informs members of cultural norms in a regulatory, but flexibly evolving manner. According to Mezey: “Law participates in the production of meanings within the shared semiotic system of a culture, but it is also a product of that culture and the practices that reproduce it” (1998: 46). This will be unpacked later in the thesis.

Further to this idea, the cultural-legal influences on an individual’s patterns and modes of thought become even more poignant when two individuals of different cultural roots meet on (theoretically) neutral ground to negotiate the
exchange of services or commodities of which each individual brings different culturally-inscribed concepts of value. All of these culturally-structured perceptions are understood and negotiated under a legal rubric that dictates how they may be accessed in relation to one another. This is not to imply that we each are fumbling through inter-cultural negotiations with a faint and uncontrolled conception of how cultural and legal nuances exert power over our behavior and platforms of negotiation. Indeed,

[w]e are not...merely pushed and pulled by laws that exert power over us from the 'outside'. Rather, we come in uncertain and contingent ways, to see ourselves as law sees us; we participate in the construction of law's 'meanings' and its representations of us even as we internalize them, so much so that our own purposes and understandings can no longer be extricated from those meanings (Sarat and Kearns, 1998: 8).

The materiality and the meanings of law are constitutive and inseparable as a consequence of their production in concrete and situational social relations. "[L]aw and legal ideas do not just colonize consciousness and provide the superstructure for modernist sensibilities. Legal meanings are not invented and communicated in a unidirectional process" (Sarat and Kearns, 1998: 8). This is not a linear process or function. "Focusing on the production, interpretation, consumption, and circulation of legal meaning suggests that law is inseparable from the interests, goals, and understandings that deeply shape or comprise social life" (Sarat and Kearns, 1998: 34). Law does not just simply reflect or encode normative constructs, law is part of, a product of, cultural processes and actively contributes to the composition of social relations (Sarat and Kearns, 1998).
In relation to the exchange of knowledge and financial compensation, law plays a role in "the terms and conditions of cultural production", and the cultural conceptualization of originality, authenticity and ownership (Sarat and Kearns, 1998: 9). According to Sarat and Kearns,

[Law's cultural lives and its power in and over cultural production are continually renewed, re-created, defended and modified. But they are also continually resisted, limited, altered, challenged. Law's cultural lives are, as a result, not placid and calm. They are alive with the push and pull of contestation...Meanings are advanced and resisted strategically, though neither the meanings advanced nor the goals purportedly served in advancing those meanings exist independent of one another. Power is seen in the effort to negotiate shared understandings and in the evasions, resistances, and inventions that inevitably accompany such negotiations (1998: 8-9).

As the world becomes a more complicated place, and cultures, legal systems, and economies become further entrenched, intertwined and related to the domestic and international politics of states and groups, understanding the subtleties of interactions will help to ensure that relationships and interactions are negotiated within a framework of ongoing conviviality and mutual understanding. Indeed, when analyzing the interacting role of culture and law,

[It invites us to acknowledge that legal meaning is found and invented in the variety of locations and practices that comprise the domains of culture and that those locations and practices are themselves encapsulated, though always incompletely, in legal forms, regulations, and legal symbols...To recognize that law has meaning-making power, then, is to see that social practices are not logically separable from the laws that shape them and that social practices are unintelligible apart from the legal norms that give rise to them (Sarat and Kearns, 1998: 10).

3.5 Internationalizing Cultural-Legal Relativity

Although this theory has been originally and primarily used to explain law within one cultural milieu, its principles may also prove valuable in researching
the relations between cultures as they strive to frame actions and understandings towards common goals within the international legal system. Identifying this evolving dynamic between law and culture, and thinking about it in relation to international IP law, raises questions of how power is enacted, compartmentalized or diffused within and between the boundaries of the law-culture dynamic. What occurs in the gaps and real-life scenarios when law and culture do not meet or meaning is not fully ascribed and understood among intercultural parties to the situation? This theory provides a new and interesting framework to explore IPRs and the role of international legal initiatives to ensure social justice and environmental sustainability through ABS agreements.

It has been observed that Cultural-Legal studies have yet to meaningfully address issues outside of the West and Western interests (Sarat and Simon, 2001: 10). In responding to this call to action, this paper utilizes a topic of interest to the West (patent issues) but of arguably even more interest to those (culturally) outside of the West. The objective is to identify problems, gaps and common goals within this broad topic towards a mutually-beneficial understanding, and present recommendations for fairness and practical changes acceptable to all parties involved. Furthermore, it aims to provide greater clarity to the issues and an innovative legal framework that may be accessible to policy-making and further research in this area.

This is a tricky proposition, however, and despite good intentions it may be rightfully claimed that in all practicality, "[l]egal controversy is resolved, in the end, by an assertion of authority, not by agreement on a single interpretation"
The question of who benefits is generally reflected in the question of who possesses the most power in a given situation. This is well-reflected in history, and arguably ingrained in certain cultural practices buoyed by increased political and economic leverage in international law. Even focusing on the role of law outlines a key Western bias because “[t]his language of law’s rule is our dominant, although not exclusive, language of legitimacy” (Kahn, 2003: 154). Kahn cautions against this bias:

Much about the set of beliefs that constitute law’s rule is obvious. It is only obvious, however, because it is so deeply enmeshed in our political culture. That this is our culture, and not some universal order of law, becomes clear as soon as one compares it to the discourse and beliefs of other states and peoples – even other liberal democracies. Our immediate and easy recourse to the language of law is hardly universal. The export of our legal rules often fails to produce anything that looks to us like a polity under the rule of law. We often speak loosely about the need for certain habits of law-abidingness, when we try to explain the failure of a government of law to work elsewhere. Habits are forms of practice that seem to come ‘naturally’ because the world is imagined to have a character within which these forms of behavior make sense. This perception of the world is hardly natural (Kahn, 2003:152).

This perspective applies to the West, but helps explain the worldview through which each culture views itself and the world around it – consciously or otherwise. Law is conceptualized, drafted, enacted and interpreted by individuals who “inhabit a culture and are inhabited by it” (Legrand, 1999: 74). Legrand (1999) is honest when he postulates that “we have to accept the inevitable constraints regarding the extent to which a participant in one legal tradition can learn to think like a participant in another” (65). This is not defeatist, but simply a logical and realistic platform from which to build bridges across cultural divides. It is important that the conscious and sub- or unconscious nature of culture, its
complex mutually-constitutive relationship with law, and their combined roles in communications across and between cultures are considered when looking at Access and Benefit-Sharing, the commercialization (commodification) of indigenous knowledge (and accompanying biological resources), and environmental sustainability.


It has been observed that “[t]he conjunction of culture, property and rights (cultural property, cultural rights, property rights), and the ‘indigenous’ or ‘traditional’ character of many societies seeking international protection, has helped create a phenomenon little short of a global civil movement” (Strathern and Hirsch, 2004: 4). There are several strands that layer and intersect within these domains. The aim of this thesis is to address some of these issues through a framework that seeks to understand the roots and ongoing process of ABS as informed and structured through cultural and legal relativity. In this thesis, there are assumptions that some fundamental concerns and conceptual differences exist that inform each party’s understanding and behavior when approaching the issue of patenting, benefit-sharing, and what constitutes knowledge. These cultural differences are informed through historical experience and current localized politics, and as such dictate that each case, each community, each party to an agreement, will be different.

There are many communities and cultures around the world that do not share the West’s perspectives on ownership and patenting, and construct the
concept of 'knowledge' in an entirely different manner. In many instances, "[t]he process of obtaining private rights over products derived from [T]hird [W]orld resources or knowledge that is considered sacred or beyond private ownership is considered to be morally offensive. Moreover, many of these citizens view Western countries and companies with great suspicion since usurpation of resources harks back to colonial imperialism" (Ho, 2006: 436; also Shiva, 2000).

Generally, "[c]ultural property claims are often made in tandem with accusations of the misuse of power, and of the betrayal of cultural groups through the appropriation of their cultural knowledge, secret rituals and religious icons. But there are also accusations of betrayal that drag in very different scales of social organization – of public trust if objects are treated improperly, or of wider human knowledge systems if cultural rights are allowed to trammel a public interest in scientific research" (Wiber, 2006: 330). It is not within the realm of this thesis to argue the merits of the various cultural differences nor to offer a comparative analysis of legal systems, but rather to highlight their existence, and thus the need to understand and situate this dissonance in order to better inform the IPRs and ABS process and practice.

For many indigenous communities, the knowledge and use of TK is diffused within the entire community, and often localized within a region. Identifying who is the 'owner' of the knowledge and thus who is to be rewarded from ABS agreements is highly problematic (Ho, 2006: 447). This is a fundamental shift in perspective from the West (Ho, 2006: 447), and raises serious considerations regarding the present structure and functions of ABS
agreements, although it is, in part, one of the fundamental problems that the ABS process was designed to address. Ho (2006) demonstrates this disconnect in perspectives:

Although the Western perspective adequately reflects the instrumentalist perspective of patents, it does so in a vacuum, divorced from the implications of such patents on the communities that provided the original traditional knowledge. Because traditional knowledge is part of a society's social fabric and is potentially sacred, the patent represents an improper incentive to commodify what traditional cultures have for years preserved and revered. In addition, some believe that patents based upon traditional knowledge may have a deleterious effect on the environment because while traditional knowledge aims to enhance the existing environment, the Western patent system does not (456).

Ho admits that some patent regimes may take into consideration socio-cultural concerns in excluding or disallowing some subject matter from patentability, but argues that patent laws fail to address specific cultural considerations (Ho, 2006: 457). Domestic patent laws are rooted in international law (TRIPS, CBD), and thus represent additional complications for highly localized indigenous groups and the states that legislate and participate in international treaty negotiations on their behalf (whether democratically or not). An additional complication is the dissonance between the legitimacy and jurisdiction of international law and domestic law. This destabilizes law-infused practices that are caught in a limbo between these two worlds, such as IPR law and ABS. "International law is still overwhelmingly concerned with regulating the conduct of and interactions between states, while domestic law is still primarily focused on governing activities taking place within a state" (Currie, 2001: 19). These do not always harmonize in a manner that is beneficial to all parties affected by the legislation, despite the intentions of the drafters, and raise key
sovereignty issues related to the right of the state to govern itself how it sees fit (and regardless of what international law might say about the activity). All of these different contextual strands intertwine in a cultural narrative and compose parts of the invisible socio-cultural elephant that each person brings to the negotiation table. Indeed, the ideas of individual identities, groups, and states are not fixed, either in themselves or in relation to each other. A 'state' may be stronger or weaker than internal groups, and groups may be internal or external to states – or both, existing as subgroup and as supranatural organization. The relative distribution of power differs in different contexts and is not determined a priori (Weisbrod, 2002: 3).

If Cultural-Legal Relativity is the framework of reference through which interaction occurs, then power, expressed through political and economic advantage becomes the motivation or driving force behind the relationship. Although "a single subject or situation will often be governed by more than one system of law, most, if not all, legal systems have developed rules to address these situations of potential overlap and conflict." It is through the allocation of power that "[t]hese rules will often dictate which system of law will apply or 'trump' in particular circumstances" (Currie, 2001: 193). Strathern and Hirsch raise some important considerations in this regard:

The question that continues to preoccupy many countries outside the industrial West is whether one can in fact apply intellectual property protection to the distinctive artefacts (sic), performances and repositories of wisdom that identify 'a culture'. Culture bearers, it is implied, have an interest in exactly how these at once tangible and intangible aspects of their lives are made available to others. Concerns of this kind could only emerge in a social situation where such aspects already appear appropriatable – where they are not only translated into items to be shared, transacted or otherwise part of the network of communications between people, but where they begin to take on the character of assets to be own and exploited. In short, ownership claims emerge in a world of owners (Strathern and Hirsch, 2004: 3).
In other words, if the language of the interaction is dominated by one party to the agreement, inevitably they possess the greater leverage. This, and the others raised in this Chapter, are highly contentious and multifaceted issues that will be examined later in this study, but in this section it should be understood that these strands of law are complex and intertwined, and present a challenge for researchers who strive to develop a blanket framework for addressing and mitigating the consequences of cultural and legal relativity. "[C]ulture' lies precisely in the relationships, procedures and so forth that burgeon between indigenous communities, governments, NGOs and claimant corporations" (Strathern and Hirsch, 2004: 15). As the world becomes more globalized and interconnected, understanding the role of culture in interaction becomes imperative. This is because "[i]nteractions are the sites of contestation. They provide the stage, the audience, the subtext, and the reasons for the iterative, potentially subversive act of performativity. Interactions are where power and resistance occur" (Henderson, 2001: 257).

5. Conclusion

This Chapter introduced the theory of Cultural-Legal Relativity and outlined the many concepts related to international intellectual property law and rights that will be used in the following two chapters. Although a lesser-known theory, Cultural-Legal Relativity holds great promise to inform legal relationships among peoples globally as the world becomes increasingly integrated and connected. The next Chapter focuses on the legal aspects of international
intellectual property law, especially the two major international legal texts that address patenting and biological resources: the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement of the WTO, and the Convention on Biological Diversity (CBD). These will be examined with an emphasis on the linkages of patents, ABS, TK and associated biological resources.
Chapter Two: International Intellectual Property Law and Access and Benefit-Sharing

Patents, as units of expression of property rights, must serve some moral value, but they cannot be the basis of moral value itself. It is not enough to say that legal regimes, as legal instruments, exist to serve some ends; it would be better to engage in a vigilant and critical scrutiny of law as a means to an end. As such, international law on patents on indigenous people’s knowledge needs to be reoriented. Legal concepts and institutions that merely constitute an avenue for the maximization of individual wealth at the expense of the overall integrity of the earth and its supporting but marginalized human cultures and societies deserve critical reconsideration and a radical shift in values (Mgbeoji, 2006: 7).

1. Introduction

With the advent of the biotechnology field, international Intellectual Property Rights (IPR) has blossomed into a vast and multilayered legal framework that now seeks to regulate – vis-à-vis standardization of domestic laws around the world – all types of Intellectual Property (IP) concerns. One of the issues at the forefront of the current international evolution of law relates to the rights of Indigenous communities over their biological resources and accompanying communal or cultural knowledge. This complex legal topic has been extensively examined in a wide, interdisciplinary body of literature, and the advent of a number of recent internationally binding hard and soft law instruments, as well as an increasing number of Non-Governmental Organizations (NGOs) advocating on behalf of affected communities, will ensure that attention to IPRs for Indigenous communities is only going to increase. Importantly, the intersection of IP law and Indigenous communities illuminates the very real impact of international law as it intersects with vulnerable
populations around the world, and presents a unique lens through which to view the seemingly innocuous nuances of legal doctrine within a cultural milieu.

Although internationally legislated, IPR protection is a relatively recent phenomenon that is often erroneously presumed to be a post-industrial revolution construct. Most, if not all, communities and societies have some form of socially-instituted IPR protection akin to modern legal frameworks, as well as traditions and practices that protect that knowledge (Timmermans, 2003).

"Notwithstanding the attempts at harmonization of patent laws and procedures, there is no international patent system in the strict sense of the word; rather, individual states, while maintaining an essentially domestic patent system of varying degrees of effectiveness, attempt to synchronize their national patent laws and systems with one another" (Mgbeoji, 2006: 32)

What is unique in the current system of IP law is its international character and the widespread applicability of one (Western) interpretation of what defines IPR. According to Mgbeoji (2006), there were three methods through which the concept of patenting was spread from its origins in Italy in the 15th century to the rest of the globe. The first method was through migration and colonization activities by Europeans to the Americas, Africa, Australia and Asia. The second was via voluntary replication by independent states, and the third was through direct and indirect political and economic coercion (the TRIPS agreement discussed in the next section is one example). Currently, there is no one international patent system that applies to all intellectual property considerations, rather there are a number of agreements at the international and regional levels
that seek to synthesize the process within the domestic laws of states (Mgbeoji, 2006).

The patenting of biological resources (plants, animals and microorganisms) is a hot political and legal topic because they "are a valuable source of drugs either directly or indirectly by providing the lead information on which drugs are based" (Sampath, 2005: 12). In addition, "[b]iotechnological techniques have not only enhanced the precision with which natural molecular basis of diseases and disease causation can be identified but have also made it easier for drug research to identify important therapeutic agents using natural products as the basis" (Sampath, 2005: 12). This relates to indigenous peoples because it is often their knowledge that undergirds the efficiency and predictability of biomedical and biotechnology research conducted with biological materials (Quinn, 2001).

The justification for international IP protection legislation is articulated by any of a number of authors and organizations, and may be understood as a motivation or incentive via market exclusivity to innovate. According to Tsioumanis et al., "unless an industry can ensure the capitalization on its investments in technological development, it will not invest in it in the first place. That would make technological breakthroughs unachievable...By conferring temporary market exclusivities, patents allow producers to recoup the costs of investment and reap a profit" (2003: 606). Indeed, "[w]ith existing patent law protection...the entire world community benefits by encouragement of disclosure of inventions and promotes the knowledge and innovation needed to advance in
technology and cure diseases” (Quinn, 2001: 396). Whether a lack of intellectual property protection would actually “make technological breakthroughs unachievable” is a dubious claim, as the “unchallenged assumption at work here is that the inventive process is a completely individual enterprise. The reality is that inventions and innovations do not spring ex nihilo. Inventors, artists, and other creative people draw from the stock of pre-existing human knowledge and cultures” (Mgbeoji, 2006: 18).

The World Trade Organization's (WTO) Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement and the Convention on Biological Diversity (CBD) are the primary legal instruments currently governing international IPRs in relation to biological resources and TK. There are, however, several other conventions, regional agreements, soft law documents and regime initiatives that have, to varying degrees of success, strived to create a balanced approach to IPR protection on a continuum of legal authority. Weaving through the various legal and semi-legal international commitments is complex, as intellectual property and associated rights are not just trade-related. IPR issues extend to education, health, nutrition, agriculture, national and territorial defense, sovereignty, environment, energy, human rights and more (Abbott, 2005). This Chapter focuses primarily on the TRIPS and CBD agreements, with additional information on other current and upcoming legal IPR texts in order to situate and maintain the forward-looking perspective of this research paper.
TK-related IPR concerns are not just about preserving culture, but about the daily realities of people all over the world and the intersections of economics, culture and ethics in a globalizing world. TK has been the subject of intense debate in legal scholarship in the past two decades, as "[t]raditional knowledge, historically dismissed as 'uninformed' or 'unscientific', has...attracted increased attention, as academic and corporate researchers increasingly rely on the knowledge of local communities about the genetic diversity under their stewardship" (Zerbe, 2005: 494). Indeed, "there is a growing recognition that traditional knowledge, technologies and cultural expressions are not just old, obsolete and maladaptive; they can be highly evolutionary, adaptive, creative and even novel" (Dutfield, 2006: 1).

The literature on this topic is replete with critiques and case studies regarding the misappropriation of TK (often referred to as 'biopiracy') and the potential benefits to local economies if proper mechanisms (i.e., ABS agreements) for the sharing of knowledge and associated benefits are implemented for TK that is patented and utilized for profit (Dutfield, 2006: 4). However, it is important to note that there is also a fair amount of criticism towards ABS regimes that strongly restrict or complicate bioprospecting, in addition to research and theory that contradicts the perception of international IPR regimes as being beneficial only to the West. This issue is politically charged and deeply personal. Indeed, one observer described the issue as "who should own or control access to the subcellular genetic sequences that direct the structure and characteristics of all living things..." (Safrin, 2004: 641). If you
include the cultural, historical and economic considerations, it becomes difficult to
make any kind of sweeping statement or assumption about these issues.

Some alternative criticisms of the current domestic ABS systems (which
are almost overwhelmingly in support of ABS in the academic literature) are
summarized by Safrin:

sovereign ownership or extensive sovereign control over genetic material
(1) risks creating an anticommons in raw genetic material, (2) threatens
the liberty and autonomy of individuals and indigenous communities
whose property contains such material, and (3) is premised on a flawed
approach in international law that has led to broad and unenforceable
regimes that will increase tensions between nations (2004: 642).

Safrin goes on to conclude that “collectively the developed countries’ patent-
based systems and the developing countries’ sovereign-based systems have
overreached in permitting or asserting ownership rights over genetic material”
(2004: 642; emphasis in original). At this critical juncture, it is important to situate
IPR and ABS within the greater international legal framework. This Chapter
focuses primarily on the TRIPS Agreement and the CBD, and outlines work
being done in this area by the Secretariat of the CBD and the World Intellectual
Property Organization (WIPO) to show the current state of IP law. The Chapter
also outlines a regional agreement that attempts to synthesize TRIPS and the
CBD in the domestic legislation of African countries. Finally, the Chapter

7 "A tragedy of the commons exists when too many individuals have the right to use a scarce
resource, such as fisheries, and overuse that resource potentially to its complete depletion. An
anticommons can occur when too many individuals or entities have rights of exclusion to a given
resource. A tragedy of the anticommons arises when these individuals or entities employ their
rights to veto the use of a given resource and in so doing waste the resource by its
underconsumption compared with a social optimum" (Safrin, 2004: 652)
discusses the evolution and current political and legal situation of ABS as a segway into Chapter Three.

2. The Trade-Related Aspects of Intellectual Property (TRIPS) Agreement

The World Trade Organization's (WTO) Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement is probably the most robust international IP legal regime and is backed with by a considerable amount of legitimacy (adherence) and enforceability. The TRIPS Agreement arose out of the Uruguay round of trade negotiations that created the World Trade Organization (WTO) in 1995, and aims to address concerns by developed countries (primarily the United States) that patent laws in developing countries were not stringent or transparent enough, and that patent holders (who primarily reside in Northern states) were losing billions of dollars in rents due to unenforced, weak, or nonexistent laws (Trebilcock and Howse, 2005). Specifically, developed countries were (and still are) concerned with tolerance, or lax vigilance, towards the pirating of films, music, and trademarks within many developing countries (Trebilcock and Howse, 2005). When viewed from a Western perspective, the "TRIPS Agreement...underscores the important role that intellectual property protection plays in global trade today" (Sampath, 2005: 40).

The TRIPS Agreement is based upon, and supplemental to, four other conventions, namely the Paris, Berne, Rome and Washington conventions that each deal with specific IPR-related issues (Correa, 1998). Thus, "...the [TRIPS]
Agreement does not constitute a fully independent convention, but rather an integrative instrument which provides ‘convention-plus’ protection for IPRs” (Correa, 1998:2). The Agreement outlines standards that must be incorporated into WTO members’ national legislation. Unlike other Conventions, such as the Convention on Biological Diversity (CBD), TRIPS deals solely with private rights, whereas the CBD and other regional agreements or initiatives primarily address public rights (Timmermans, 2003). The substance of TRIPS addresses eight areas of IP issues: copyrights and related rights; trademarks; geographical indications; industrial designs; patent and layout-designs of integrated circuits; protection of undisclosed information; and anti-competitive practices within contractual licensing (Sampath, 2005). “When compared to earlier international intellectual property agreements, a major achievement of the TRIPS Agreement is the clear-cut prescriptions of minimum standards and scope of intellectual property protection” (Sampath, 2005: 41).

Correa (1998) outlines several factors that intersected during the 1980’s and 1990’s that thrust the need for a TRIPS-like agreement to the top of the agenda of developed nations: a) Technology rapidly became a major factor in international competition; b) The high externalities associated with the production of knowledge that accompanied the development of new technologies limited the profit and scope of R&D; c) Increased exports to developing countries due to elimination or reduction in trade barriers; and, d) The erosion of U.S. supremacy in manufactured goods and technology by Japan, and later the other Asian Newly Industrialized Countries (NICs).
Developing countries were loath to sign onto TRIPs, but eventually acquiesced under pressure and with promises of concessions from developed countries (McRae, 2005; Abbott, 2005). According to McRae, “Developing countries agreed to TRIPs in exchange for a liberalization of agricultural and other trade that never eventuated” (2005: 603). Abbott (2005) shares McRae’s observation but does, however, note that the Agreement has been successful, in that the

objective of the principal developed country demandeurs of the TRIPS Agreement was to increase information and technology rent payments from developing countries...[and] the Agreement has resulted in a substantial transformation of legal infrastructure in developing countries and has increased rent payment outflows to the owners of intellectual property (IP) rights (2005: 77; emphasis added).

The TRIPS Agreement has received a considerable amount of criticism internationally by academics, Non-Governmental Organizations (NGO), and developing countries. To begin, it is important to note that countries that are industrialized today did so without the kind of IPR protection that exists currently. In fact, Cottier (1998) argues that they developed because they were able to reproduce and misappropriate technologies from other places. It is important to understand this hypocrisy because it contextualizes (and adds a hint of irony to) the disagreements regarding these issues from both the perspectives of Northern and Southern States today. However, it must be acknowledged that the current global economic system and globalized information technology have created a very different environment for those countries still considered ‘developing’ today.
For the purposes of this thesis, criticism of TRIPS invariably begins with the fact that it is silent on the issue of TK, and proceeds to the problematic wording of Article 27.3 (b), which reads:

Members may also exclude from patentability:....plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, parties shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof...

Essentially, this has been legally interpreted to mean that WTO members may exclude plants and animals from patentability, but if they do not specifically exclude them in domestic legislation, they are subject to patentability by foreign companies (Shüklenk and Kleinsmidt, 2006: 132). A posting on the WTO website entitled “TRIPS Article 27.3(B) and Related Issues: Background and the current situation” (World Trade Organization, 2005; emphasis in original) addresses this issue:

part (b) of paragraph 3 (i.e. Article 27.3(b)) allows governments to exclude some kinds of inventions from patenting, i.e. plants, animals and “essentially” biological processes (but micro-organisms, and non-biological and microbiological processes have to be eligible for patents). However, plant *varieties* have to be eligible for protection either through patent protection or a system created specifically for the purpose (“*sui generis*”), or a combination of the two.

This legal requirement for patenting (of any type) for genetic and plant species, and the resulting mechanism that allows privately-owned access to genetic and plant resources is problematic for many states or sub-state groups which find this to be in conflict with cultural beliefs and values (Collier, 2006). In addition to this legislated patenting requirement, the largest patenting country in the world, the United States, does not require those applying for patents to
 disclose the source of the material(s) being patented, and, according to some
observers, has rejected calls to do so by international organizations and activists
devoted to protecting TK (Shiva, 2000).

However, this problem has been acknowledged to some extent by the
United States and the European Union, and limited steps have been taken on a
case-by-case basis to remedy unfair patents. For example, in a report prepared
for the World Intellectual Property Organization (WIPO) and the United Nations
Environment Program (UNEP), Anil K. Gupta discussed the steps that the United
States Patent and Trademark Office (USPTO) took to revoke a patent for a
product shown to arise from TK, considered already in the public domain, at the
request of the Indian Council of Scientific and Industrial Research (CSIR). In
turn, the USPTA requested data on Indian traditional knowledge to avoid this
problem in the future (Gupta, 2004).

This highlights an important problem in relation to the issuance of patents
that lies, alongside the problems of cultural differences, at the heart of the matter:
Patent offices cannot possibly know, and those applying for patents within the
United States and other countries are currently not required to prove upon
application, if the material or process they are attempting to patent belongs in the
realm of "public knowledge" or "prior art" in indigenous communities worldwide.
This system currently puts the onus on the originator of the knowledge to prove
that the patented product derives from prior art or constitutes public knowledge
elsewhere, which opens the door for easy opportunism and deception. It would

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WIPO (2001) describes prior art as existing knowledge or an invention already in use, and that
may not be legally patented.
take an incredible amount of funding and bureaucracy to be able to fully research every patent application to prove its originality.

Additionally, legal categories for patenting (as required by TRIPS) may not always be understood the same way across cultural lines and among stakeholders. Herein lies a very difficult problem that intersects with vast geographical and historical differences to create a large degree of contention surrounding IPRs in general, and TRIPS in particular. This is because TRIPS forces each member to incorporate patents, to some degree, within the legal infrastructure of each WTO member state, regardless of cultural practices and beliefs. Considerations of this nature are almost invariably discussed within almost all of the literature on this topic, and which has led to accusations of TRIPS functioning as a tool to further Northern interests.

Strong opponents of TRIPS, including states and non-state actors, have found Northern countries inflexible regarding the TRIPS requirements, despite a mechanism within TRIPS that outlined the right for a review four years after implementation. Shiva contends that, “[a]lthough the African Group, five countries in Central and Latin America, and India have called for changes to Article 27.3(b) on the basis of their right to a review as built into [Article 27.3 of] the Agreement, the US and Europe are determined to block the reform of TRIPs and any attempt to stop biopiracy” (2000: 507; also Shüklenk and Kleinsmidt, 2006). Shiva argues that the changes suggested by these groups were rejected by the U.S. and Europe “…on the grounds that the WTO cannot be subordinated to other international agreements” (2000: 507).
There are additional problems associated with TRIPS. Collier (2006) summarizes the submissions from the African Group outlining their concerns: 1) the IPR protection that is required for plant variety could threaten food security and further entrench poverty; 2) there is a lack of international mechanisms designed to address the misappropriation of genetic and biological resources and TK from developing countries; and, 3) many cultures and their traditions view the patenting of life forms as repugnant and as incompatible concepts.

Other arguments regarding this contentious issue have made the case that it is not the TRIPS Agreement itself that is problematic, but rather the questionable actions of industries and governments that have (mis)used TRIPS to further a corporate or political agenda (Abbott, 2005). Abbott (2005) cites the tragic example of the United States, European Union and several big Pharmaceutical companies attempting to block legislation (that was, in the opinion of Abbott, in line with the TRIPS obligations of the country in question) in domestic courts in South Africa that allowed for domestic companies to develop cheaper HIV/AIDS drugs. Public outcry to the incident saw the case dropped by the U.S., E.U. and the participating pharmaceutical companies, but not before stalling South Africa’s efforts to stop a burgeoning AIDS epidemic from sweeping through the country (Abbott, 2005).

The Ministerial Declaration that started the current ‘Doha’ round of trade negotiations within the World Trade Organization also recognizes the need for a broader and more inclusive IP legal regime (World Trade Organization, 2001: 4). The Declaration instructs the TRIPS Council to examine the relationship between
TRIPS and the Convention on Biological Diversity (CBD) in relation to TK, specifically regarding the sourcing of technologies that might arise from TK. It should be noted that as of 2007, the Doha round is progressing haltingly, and may even be stalled, according to some observers. This does not bode well for the Round, and developing countries in general (International Centre for Trade and Sustainable Development, 2007).

Interestingly, because of this recognition of difficulties with patenting TK and other similar considerations, some observers believe that there has developed recently a “somewhat more balanced approach to TRIPS now achieved at the WTO” (Abbott, 2005: 77). According to Abbott, this is the reason that the U.S. has switched to negotiating bilateral and regional agreements on IP to achieve its objectives of higher standards, protection and enforcement.

3. The Convention on Biological Diversity (CBD)

The Convention on Biological Diversity (CBD) was signed by government leaders at the Rio Earth Summit in 1992 and came into force in December, 1993. It currently has 190 Parties and has been ratified by the majority of the States.\(^9\) The CBD does not solely address IPRs, but rather it addresses biological diversity from a multi-disciplinary perspective, with a focus on sustainability. Within this broad agenda, the CBD addresses the rights of all people to their TK and biological resources, and outlines a process whereby compensation and benefit-sharing may be used in partnerships to exploit, preserve or market TK

products or processes, as the case may be (Secretariat of the Convention on Biological Diversity, 2000). Despite the fact the CBD was drafted for, and signed by, states, key actors and stakeholders recognized by the Convention also include non-governmental organizations, private industry, and indigenous and local communities (Gupta, 2004). In addition, the CBD includes a review mechanism called the Conference of the Parties (COP),\textsuperscript{10} where signatories to the Convention meet to review and act on CBD-related issues (Sampath, 2005: 35).

The CBD originated from a recognized need for an international environmental agreement that would harmonize the various treaties and their respective provisions relating to the protection of biodiversity (Mgbeoji, 2006). What may be the most important difference between previous international environmental legal texts and the CBD is that the CBD recognizes "that conservation and sustainable use of biodiversity can only be tackled when viewed within the economic context in which biodiversity operates" (Sampath, 2005: 35). Although a very different type of document than TRIPS, the CBD is nonetheless comparable in its attempt to address and define the internationally acceptable legal structure under which natural products and knowledge can be compartmentalized towards the economic objectives of sharing, marketing, and technological development. "The CBD takes a comprehensive approach to the conservation and sustainable use of biological resources. Moreover, it goes beyond conservation as such, and addresses issues like bearing the burden and

\textsuperscript{10} Please see the CBD website for further information on COP and Working Group meetings: http://www.cbd.int/default.shtml.
sharing the benefits between countries which supply and countries which use biological resources, as well as between indigenous or local communities and users in the modern sector" (Timmermans, 2003: 747).

The CBD recognizes the authority to determine access to biological resources by national governments, and that the jurisdiction to conserve biodiversity and the equitable sharing of the benefits that might arise from the various uses of biological and genetic resources are the responsibilities of the state (Gupta, 2004). Accordingly, parties are obligated to enact or rewrite legislation that adhere to the aims of the Convention, with contracts and material transfer agreements as the primary instruments with which States are to regulate the Convention objectives (Gupta, 2004).

It is important to outline some aspects of the CBD in order to effectively contrast it with the TRIPS Agreement, and specifically Article 27.3(b) of TRIPS discussed in the previous section. First, the CBD is based upon the three main pillars of: conservation of biodiversity; sustainable use of biodiversity; and, equitable sharing of benefits arising from the use of genetic resources (Chishakwe and Young, 2003). According to Chishakwe and Young, "[i]t is clear, both from the text of the Convention, and from the experiences of the Parties, that these objectives are mutually supporting, so that progress on any one will enhance achievement of the other two, whereas a deficiency in one will cause all to be less effective or successful" (Chishakwe and Young, 2003: 1). This remains an important consideration when examining the whole of the legal foundations, and the future, of ABS.
Article 3 of the CBD gives States the sovereign right to use and exploit their genetic and biological resources and Article 15.5 outlines the principle of Prior Informed Consent (PIC) for contracting parties providing resources or knowledge. "Article 8(j)…explicitly acknowledges Indigenous and local communities' contribution to biodiversity conservation, calls for respect and support for their knowledge, innovations and practices, and confirms indigenous peoples' rights over the knowledge they hold" (Timmermans, 2003: 747). Articles 15(5), 15(7), 16, 19(1) and 19(2) call for fair and equitable sharing, "on mutually agreed terms, of benefits arising from the use of genetic resources and associated knowledge" (Timmermans, 2003: 747; also Gupta, 2004).

It is worth articulating Article 8(j) of the CBD here, as it is the most relevant aspect of the CBD for ABS. It requires each state party to,

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

Firstly, Article 8(j) locates responsibility for implementation within the jurisdiction of state governments, which requires states to create their own conceptual definitions and limitations according to: "(a) the nature of local and indigenous communities, and their knowledge holdings; (b) general organizational limitations on implementing a community intellectual property right; and, finally, (c) specific organizational limitations in implementing the right that may be peculiar to that country itself" (Sampath, 2005: 55). Secondly, the title of the Article is ""In situ
conservation’, which implies that any legal protection for traditional knowledge must be able to connect it to conservation” (Sampath, 2005: 56).

Controversy surrounds the interpretation, application and legitimacy of the CBD in general, but especially in relation to the mode and methods of preserving TK in the CBD (Cottier, 1998). Critics of the language used to codify ABS in the CBD argue that it is vague and poorly articulated, and undermine concrete application of the requirements of the article (Sampath, 2005). Indeed, it is argued that, because of this language ambiguity, countries have been disagreeing over ABS almost since the CBD was ratified (Sampath, 2005). As a result of the ongoing controversy surrounding ABS, the Secretariat of the CBD has been furthering work and initiatives to implement these ABS requirements (including the Bonn Guidelines and the new International Regime outlined in the next sections), and supports a number of working groups addressing various issues such as ABS and technology transfer provisions as well as the Conference of the Parties (COP).

When ABS first started being used, contracts were between bioprospecting firms and public authorities on a case-by-case basis (under Articles 15, 16, and 19), but “[g]enuine rights and entitlements operating outside such contracts with regard to third parties [had] not yet emerged” (Cottier, 1998: 566). Cottier (1998) goes on to acknowledge that “[the contractual approach has its limitations to the extent that it cannot bind third parties and often implies a disparity in negotiating powers” (566; emphasis added). The use and nature of ABS contracts is still considered problematic (Sampath, 2005). From the
perspective of the sharing of benefits, Nnadozie et al., (2003) argue that there is currently little evidence to suggest that royalties and payments have had a positive impact on communities, but suggest that African states and institutions have witnessed success in training and support initiatives for the development of scientific infrastructure. This is important in developing long-term capacity and sustainable economic growth. Sampath agrees, and articulates associated problems with the compensation requirement of ABS:

First of all, although the right of source countries to be compensated for provision of genetic resources is envisaged as one way to mobilize resources for the protection of biodiversity, the Convention does not codify the relationship between the generation of revenues through such activities and biodiversity conservation in a direct way. Secondly, the Convention does not define ‘appropriate’ compensation for the use of genetic resources. Lastly, although it mentions specific forms of benefit-sharing, it does not provide guidelines as to which form of benefits should be shared under what circumstances, again leaving a lot of room for countries to deliberate amongst themselves (Sampath, 2005: 39; emphasis in original)

Gupta (2004) also recognizes the limits of the contractual method, and outlines a number of other important social and ethical problems: a) the importance of ensuring that stakeholders know and understand the real value of their knowledge; b) the importance of ensuring that consent to sharing is truly an informed decision; and, c) the importance of balancing the flow of benefits to indigenous communities and individual knowledge-holders while preserving, or avoiding harm, to traditional ethics of conservation. Marinova and Raven (2006) observed that protection, rather than a multiplicity of options, is all that is offered in relation to TK, and also expressed concern over the availability of appropriate responses for TK that are widespread over a particular area and known, used
and/or practiced by numerous communities simultaneously. This critique is important because it highlights the lack of sound and binding international principles capable of addressing the vastly varied situations that fall under the umbrella of IPR in relation to TK. This is the main weakness of the CBD, and combined with the rigid hard law overhang of TRIPS, it is the reason that regional associations such as the African Union have undertaken initiatives to address their unique TK concerns. At the heart of these criticisms is the fact that the CBD “does not take a categorical stand as to whether or not the patent concept is helpful to the ideals of conservation and equitable use of plants and TK…” (Mgbeoji, 2006: 153).

These concerns are important when considering the rights of knowledge holders. However, there is a flip side to this perspective that Safrin articulates as follows:

[t]he Convention on Biological Diversity, after acknowledging sovereign rights over genetic resources, requires parties to 'endeavour to create conditions to facilitate access' to such resources. The trend of genetically rich countries, however, has been the opposite: to restrict and encumber access to raw genetic material within their borders, largely in response to the increased patenting of genetic material and bioengineered goods since the conclusion of the CBD...Thus, as corporations from developed countries, particularly the United States, increasingly obtain patents over genetic material and biotechnological innovations, developing countries increasingly enclose their raw genetic material (2004: 648).

Access restrictions may be problematic because they limit the options and freedom of choice for Indigenous people who may wish to sell their knowledge and the corresponding resources, but find a lack of buyers due to tough and complex domestic laws. This corresponds with Safrin’s concept of the
anticommons and presents a case for the pendulum swinging too far to the opposite side.

3.1 The Bonn Guidelines

At the sixth meeting of the COP to the CBD in 2002, the Parties adopted the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization (hereafter referred to as the Bonn Guidelines) (Secretariat of the Convention on Biological Diversity, 2002). The Guidelines are not legally binding (although they were adopted unanimously by 180 countries), but rather are intended to provide guidance for states that are implementing legislative, administrative or policy measures on ABS as well as when States or other groups are negotiating contractual ABS agreements (Secretariat of the Convention on Biological Diversity, 2002).

The Bonn Guidelines "recognize the need for flexibility of application, that each country is a provider and user of genetic resources, and that the Guidelines may be used in the development of national ABS strategies" (Laird et al., 2003). In general, the ABS issues addressed by the Bonn Guidelines are already available and/or legally possible in most states, but the Bonn Guidelines synthesized their implementation and functions (Chishakwe and Young, 2003). These functions include: the development or designation of a centralized administrative function and structure; the creation of a system and standardized terms for permit and contractual creation; civil participation; and, the identification of potential non-monetary forms of payment (Chishakwe and Young, 2003).
Importantly, it should be understood that the Bonn Guidelines are voluntary and nonbinding on states and users, unless stipulated within an ABS contract (Chishakwe and Young, 2003).

Essentially, the Bonn Guidelines were designed to assist source countries when changing the legal and administrative systems to facilitate the development and use of ABS agreements. However, "at present they do not offer any tools to enhance the source countries' bargaining power or understanding, or to enhance the effectiveness of ABS as a tool for supporting the conservation and sustainable use of objectives of the convention" (Chishakwe and Young, 2003:7).

3.2 The New International Regime by the CBD Working Group on ABS

There is a new International Regime on Access and Benefit-Sharing currently being negotiated by the Working Group on Access and Benefit-Sharing under the auspices of the Secretariat of the CBD. Although the Regime is still under negotiations, and will be until 2010, it provides an interesting window into the creation of an international legal text, and arouses a debate on the relative merits of the type of legal text that is evolving. There are indicators within the present form of the Regime and the current state of international IP law that the new Regime will eventually become a soft law\textsuperscript{11} instrument.

\textsuperscript{11} Birnie and Boyle describe soft law as "the articulation of a 'norm' in written form, which can include both legal and non-legal instruments; the norms what have been agreed by states or in international organizations are thus recorded, and this is its essential characteristic; another is that a considerable degree of discretion in interpretation and on how and when to conform to the requirements is left to the participants. Its great advantage over 'hard law' is that, as occasion demands, it can either enable states to take on obligations that otherwise they would not, because these are expressed in vaguer terms... The 'soft law' approach allows states to tackle a problem collectively at a time when they do not want too strictly to shackle their freedom of
An 'International Regime' may be understood to consist of a set of norms, principles, rules and decision-making processes which converge around a given situation and group of actors (Secretariat of the Convention on Biological Diversity, 2003). The 2002 World Summit on Sustainable Development in Johannesburg, South Africa outlined the necessity for an international legal regime devoted specifically to fair and equitable access and sharing of biological resources, which was to fall under the auspices of the CBD and with specific reference to the Bonn Guidelines (United Nations, 2002). At the invitation of the U.N. General Assembly, the COP took up the call to develop and negotiate the Regime (Secretariat of the Convention on Biological Diversity, 2003). At the eighth meeting of the COP, the Working Group on ABS was instructed to complete the negotiations before the tenth meeting of the COP in 2010 (Secretariat of the Convention on Biological Diversity, 2003).

As the regime is currently in negotiation, the nature of what the legal status of the final agreement will be is currently unknown. This aspect of the agreement has been left to the Ad Hoc group to negotiate, as the terms of reference do not specify whether it is to be legally binding or act as an addition to the existing soft law literature in this area (Convention on Biological Diversity, 2003). Interestingly, the Regime draft text also has the opportunity to bridge a number of separate regulatory initiatives; for example, its current draft incorporates wording from WIPO's ongoing project: "The Protection of Traditional action". Birnie, P.W. and Boyle, A.E. (2002) International Law and the Environment, 2nd ed., New York: Oxford University Press at 5.
The current objectives of the Regime are to provide a harmonized international framework to: facilitate fair and equitable sharing of benefits arising out of the utilization of genetic resources; encourage the development of legal conditions that allow for access to, and utilization of, genetic resources; and, provide for the protection and preservation of traditional knowledge, innovations and practices (Conference of the Parties of the Convention on Biological Diversity, 2004). All of this is to be done under the practices of Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT) for, and among, all parties involved in an ABS agreement (Conference of the Parties of the Convention on Biological Diversity, 2004). The Regime will not address human genetic resources (Conference of the Parties of the Convention on Biological Diversity, 2004).

The question then turns to whether the proposed IR will be the creative and flexible framework under which mutually beneficial bioprospecting relationships will be able to flourish and contribute to technological advancement, economic growth and environmental sustainability for all parties involved. It thus far appears that the new IR will be a regulatory framework of the soft law variety, and as a result, outside of formal legally enforceable mechanisms and institutions to coordinate and legitimate such mechanism. This could change as negotiations evolve, but as ABS is already codified, albeit vaguely, in the CBD, it appears unlikely that States will agree to further treaty obligations in this area.
However, soft law is often a precursor to hard law (legal binding treaties) and thus the Regime may be an important step on the road to international legal legitimacy, via treaty or customary law (Birnie and Boyle, 2002). Mgbeoji points out that the “complex existence of soft law presents a living paradox in the sense that soft law both is and may become international law. This may be the case where the norm in question has been the subject of repeated reaffirmation by various states or international entities” (2006: 156).

There are problems with the Regime, however, that have the potential to balance out the advantages and leave the current system at the same place it started. Dutfield (2006) argues that the international harmonization of IP practices needed to provide effective legal protection of TK in foreign jurisdictions cannot easily accommodate diversity, and may result in a Regime that is not appropriate to any culture, and thus rendered useless. Chishakwe and Young argue that if the Regime is to function, it must choose between two understandings of genetic resources. Either they must be defined as nationally owned and in which case buyers shall not be allowed to patent resources against any countries that are not party to the particular ABS agreement. Or, the resource is considered international and no country shall be entitled to benefits from one a resource without compensation to countries who are also sources of that resource (Chishakwe and Young, 2003: 9). This is a complicated situation, and presents the Regime with a unique opportunity to change the face of intellectual property protection for TK and genetic resources. Whether that will materialize or not will undoubtedly be the subject of future research.
4. The World Intellectual Property Organization (WIPO) and the Draft Objectives and Principles

WIPO is considered the most specialized agency of the United Nations with a mandate to develop and promote creative solutions to intellectual property activities, laws, and institutions. WIPO is seen to be "at the forefront of exploring various avenues of redress for indigenous peoples in regard to the appropriation of their biocultural resources" (Mgbeoji, 2006: 42), and indeed has conducted a large number of research reports and conferences aimed to synthesize issues and ideas towards mutually-beneficial resolutions.

Much like the Ad-hoc Working Group on Access and Benefit-sharing of the COP to the CBD, WIPO has an Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore that is currently working on a document entitled “The Protection of Traditional Knowledge: Draft Objectives and Principles”. This document aims to “present in a coherent and focused form the kind of specific questions that may need to be weighed by policymakers at national, regional and international level, when considering the appropriate form and means of protecting TK” (Secretariat of the World Intellectual Property Organization, 2006). The Draft Objectives and Principles contain policy objectives, general guiding principles and specific substantive principles that are complimentary with other TK protection regimes (Secretariat of the World Intellectual Property Organization, 2006).

The policy objectives of the Draft Objectives and Principles aim to: recognize the value and holistic nature of TK; promote respect for TK systems and those who conserve and maintain those systems; and, meet the needs of,
and empower, TK holders. However, it should be noted that the document does not indicate whether TK holders may have the final say over their biological resources and associated TK. Finally, like the Bonn Guidelines, WIPO's Draft Objectives and Principles are soft law and thus not as legally binding as a treaty would be. This does not necessarily mean that the document has less value, because, as mentioned previously, “over time, soft law can have hard-edged consequences. It can serve as a focal point for gathering and exchanging information. It can help to reshape interests and preferences. And it can generate a rich set of principles, norms, and rules to challenge existing legal paradigms” (Helfer, 2004: 128). But this does limit its applicability and enforcement capabilities.

5. Regional and Other Legal Instruments

The only other international treaty that directly addresses ABS is the United Nations Food and Agriculture Organization’s (FAO) International Treaty on Plant Genetic Resources for Food and Agriculture, which was adopted in 2001. This treaty has a comprehensive ABS regime aimed at the work and knowledge of breeders and farmers, but does not address traditional knowledge in a broad manner (Secretariat of the Convention on Biological Diversity, 2003).

There are common international human rights treaties such as the United Nations International Covenant on Civil and Political Rights (ICCPR; 1996), the United Nations International Covenant on Economic, Social and Cultural Rights (ICESCR; 1966), the United Nations Universal Declaration on Human Rights
(UDHR; 1948), and the United Nations Declaration of the Rights of Indigenous People (DRIP; adopted by the U.N. General Assembly September, 2007), that may be credited with setting the overarching framework of human rights that allow for the development of IPRs and practices (Posey, 2002).

However, "[a]lthough international law provides the overarching framework for interfacing state and regional regulatory systems, it is at the domestic level of respective states that such norms are played out. International law draws an effective distinction between accession to treaties and conventions and the domestic applicability of such treaties" (Mgbeoji, 2006: 45). As such, there are several regional and national agreements that have taken place, or are currently ongoing, that are playing a role in the evolution of ABS. The African Model Legislation for the Protection of the Rights of Local Communities, Farmers, Breeders and for the Regulation of Access to Biological Resources (AML) is the largest, and most articulate regional IP law and clearly outlines the role of ABS in relation to regional cultural considerations. The AML is referenced in Chapter Three of this thesis as part of a Model Treaty designed to address key issues relating to IP law and Cultural-Legal Relativity and thus is outlined below.

5.1 The African Model Legislation for the Protection of the Rights of Local Communities, Farmers, Breeders and for the Regulation of Access to Biological Resources (AML)

Disputes over key international instruments governing the debate on TK have led to tensions among states and other international actors, ultimately leading to the development of regional approaches to address this complex issue
(Ekpere, 2003). Arguably, the most ambitious of these is the Organization of African Unity's (OAU) African Model Legislation (AML) which "seeks to develop a comprehensive regional framework governing all aspects of biodiversity management, intellectual property rights, and protection of indigenous knowledge" (Zerbe, 2005: 494). The AML arose out of a partnership by a diverse range of actors within Africa (including African States, the OAU, NGOs and academics) to research "options for governing genetic resources in Africa, and is part of a broader research and capacity-building initiative to advance African perspectives on governing genetic resources" (Nnadozie et al., 2003). The AML was developed to serve a number of purposes. According to Zerbe,

"[t]he OAU Model Legislation is...not merely a benefit sharing agreement or a sui generis system of intellectual property protection. It is intended to assist member states in the development of sui generis IP systems that would move beyond TRIPs requirements without undermining the effectiveness of the CBD benefit sharing regime. The scope of the Model Legislation is consequently broad, applying not just to in situ resources (like the CBD), but also to ex situ collections, derivatives from biological resources, community knowledge, innovations, technologies and practices, local and indigenous communities, and plant breeders (2005: 498)."

Adopted in 1998, 12 it essentially provides a framework for a sui generis 13 IP system model that incorporates common African beliefs so that African states can implement their CBD and TRIPS obligations in a manner that addresses

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12 Information on the AML may be found on the CBD website at http://www.cbd.int/programmes/socio-eco/benefit/measure.aspx?id=6112

13 The WIPO Glossary defines sui generis as: "a Latin phrase meaning 'of its own kind'. A sui generis system, for example, is a system specifically designed to address the needs and concerns of a particular issue. Calls for a "sui generis system" for TK protection are sometimes heard. This could mean a system entirely distinct from the current intellectual property (IP) system, or alternatively a system with new IP, or IP-like, rights". Please see the Annex Two: Glossary of Terms for further terms and definitions employed in this thesis. The WIPO Glossary may be found on the WIPO website at http://www.wipo.int/tk/en/glossary/index.html.
cultural considerations. In the preamble, the AML makes reference to the CBD, specifically Articles 15 and 8(j) which address genetic resources and in situ conservation, respectively. The preamble does not address TRIPS as such, but makes reference to the need to “promote and support traditional and indigenous technologies…and to complement them by appropriately developed modern technologies” (Organization of African Unity, 2000: 1). Article 9 of the AML strongly and specifically prohibits patents for life forms and biological processes:

1) Patents over life forms and biological processes are not recognized and cannot be applied for.
2) The collector shall, therefore, not apply for patents over life forms and biological processes under this legislation or under any other legislation relevant to the regulation of access and use of a biological resource, community innovation, practice, knowledge and technology and the protection of rights therein (2000: 7).

Another important aspect related to IPR protection and TK falls under Article 23 (Organization of African Unity, 2000: 10):

1) Non-registration of any community innovations, practices, knowledge or technologies, is not to mean that these are not protected by Community Intellectual Rights
2) The publication of a written or oral description of a biological resource and its associated knowledge and information, or the presence of these resources in a genebank or any other collection, or its local use, shall not preclude the local community from exercising its community intellectual rights in relation to those resources.

The importance of community rights is emphasized strongly throughout the AML. A whole section of the model legislation is devoted specifically to community rights issues, and builds upon the CBD in acknowledging the central role of communities as guardians and responsible for preserving, maintaining and (if desired) promoting biodiversity (Zerbe, 2005). As Zerbe (2005) aptly observes:
Under both the CBD and the African Model Law, the right of local communities to benefit from innovations based on the genetic diversity under their stewardship is established as an incentive mechanism to ensure the in situ conservation of biodiversity. Community rights are thus envisioned as a check on the capacity of private actors to monopolize the rewards from innovation based on the traditional knowledge and practices of indigenous communities. In this respect, community rights under both instruments represent a moral claim over the results of innovation based on the historical contribution of local communities in maintaining biological diversity, as well as providing material incentives for the continuance of such practices (499; emphasis added).

Zerbe (2005) outlines some problems with the AML:

1) It is unclear as to whether the AML will be able to effectively balance the Western and African notions of IPRs;
2) African countries must reform existing infrastructure (or create it where it does not currently exist) to adopt the AML, and this may be difficult in some African states due to a dearth of funding and capacity;
3) There are difficulties with awareness and understanding of the AML nationally and locally;
4) The greatest strength and weakness of the AML is that its development was primarily retrospective, focusing on the historical importance of African culture and community. While it affords the Model Legislation a great deal of legitimacy among African Constituencies, it simultaneously undermines its applicability to areas outside the continent (505).
5) Relying primarily on a system of benefit sharing or capacity building founded on historical references to the role of the communities [sic] in African life might undermine the capacity of African states to develop new, innovative responses to emerging issues (505).

The intentions of the AML speak loudly to the failings of previous texts to address the complex needs of IPR protection at the individual state level. The AML intends to be a practical document that goes deeper than the Bonn Guidelines to address more fundamental concerns about culture and the importance of law in re-enforcing cultural values. It is not clear how many countries have adopted legislation based on the AML, but nevertheless it serves as an important initiative that attempts to bridge the dominant international IP law and the cultural considerations of a region.
The value of the AML to African countries will remain to be seen, and it should be cautioned that "[t]he development of effective ABS systems, like the development of any new area of law, must occur over time." (Keating, 2005: 546). What is key to this thesis are the differences in tone, perspective, and ideology between the AML, the TRIPS, and the CBD. Although they all have slightly different purposes, each is rooted in the cultural and philosophical perspectives of those who had the most power during the negotiation process.

6. Access and Benefit-Sharing (ABS)

The final section of this Chapter attempts to start a dialogue on access and benefit-sharing and build upon the legal frameworks discussed previously. ABS is the process of sharing the benefits, including profits and/or technological advancements, arising from the patenting of biological and genetic resources equitably among all parties. Schroeder and Lasén-Diaz define access and benefit-sharing as "a technical term used in the context of human and non-human genetic resources between those granting access to a particular resource and those providing compensation or rewards for its utilization" (2006: 136). ABS may be understood as

based upon a 'quid pro quo' principal (sic), whereby a country provides access to genetic resources to an entity in exchange for a share in any benefits that may arise from their exploitation. Benefits may be tracked and transferred efficiently through contract law. As each state may exercise sovereign control over the resources within its own borders, it has the option of entering into a contractual arrangement with parties seeking access to these resources for monetary or non-monetary benefits" (Keating, 2005: 543).
The concept of benefit-sharing first arose during the 1970’s, when it was closely linked with notion of the common heritage of humanity (de Jonge and Korthals, 2006: 146). The global commons perspective on biological resources was quickly abandoned when patents started being granted for living organisms and genetic material. The death of the notion of the Common Heritage of Mankind\textsuperscript{14} was supported for different reasons by both the North and the South, as the North saw ownership as connected with market exclusivity (and thus profit) (Sampath, 2005) and the South saw it as a form of colonialism that allowed developed countries to exploit the (biological) resources of the South (Keating, 2005). Safrin points out, “[i]n most developed countries, patents now issue for micro-organisms, genetically modified plants and animals, and isolated and purified genes and genetic sequences...The ability to patent such genes is significant because the holder of a patent on an isolated and purified gene can prevent all others from making or using that gene” (2004: 645). It is because of this exclusionary power of patents that ABS has become an important legal concept for developing countries and indigenous groups eager to influence the uses made from their knowledge and resources and to participate in associated benefits.

ABS became an international legal obligation with the coming into force of the CBD in 1993 (Dutfield, 2006: 11). Since that time, ABS has become the

\textsuperscript{14} Although the concept of Common Heritage of Mankind is fairly large and complicated, Safrin succinctly summarizes it: “Traditionally, genetic material belonged to a global commons or open system. No one exclusively owned this material and countries freely shared it. In sharp contrast, today exclusive ownership and restrictions on the sharing of genetic material are the international norm” (2004: 641).
subject of policy and academic debate, including the ongoing development of international (and the requisite domestic) hard and soft legal instruments, and has also become a pivotal point for civil society action on behalf of Indigenous cultures worldwide (Strathern and Hirsch, 2004). For this thesis, ABS is interesting because of the interaction among cultural groups and the various historical, legal, economic and political strands that are brought together within the ABS framework.

The structure and philosophy of ABS is not always perceived legally, and culturally, in the same manner. "Access refers to the entry/bioprospecting/collection/removal of genetic resources. Benefit-sharing is fair and equitable sharing of the benefits arising from the utilization of genetic resources, which is based on the idea of utilization and means much more than just 'payment' for access" (Madeglia, 2004: 211). Sampath points out three trends among bioprospecting contracts over the past decade:

(a) long-term collaborations with multilateral contractual relationships between various actors involved in the drug discovery process, or bilateral/trilateral relationships between the drug company, source country and/or community; (b) a series of bilateral contracts; and (c) spot-market transactions. In both (b) and (c), the tangible genetic material as well as traditional knowledge based-information gains in value as it climbs the R&D chain (2005: 26).

There are a number of problems associated with ABS. One issue that has been identified highlights the lack of market information relating to the value of biological resources. As "a consequence, value is often determined by the user, who frequently determines the value of the genetic resource by comparison to a non-genetic substance that is currently in use – an approach that ignores the
very different objectives of ABS..." (Chishakwe and Young, 2003: 8). This relates not only to basic market value, as considerations of practicality and equity are equally important, but it also emphasizes "the need to ensure that ABS is an incentive to conservation and sustainability. In this way, it is clear that the value must recognize that the particular specimen might not exist at all, if its entire ecosystem had not been protected" (Chishakwe and Young, 2003: 9)

Another key problem identified by Chishakwe and Young is the fact that genetic resources are understood in three distinct ways within the CBD and most national legal regimes: "[t]hey are treated as physical substances (when the user obtains physical 'access' to the resources, and the right to bio-prospect); [t]hey are treated as the property of the country that provides access, when the user negotiates the ABS agreement; and, [t]hey are treated as internationally patentable information, when the user obtains a patent for his work with them" (2003: 9).

Definitional concerns relating to IPRs and ABS are rampant throughout the literature. Madeglia argues that the definition of property rights is "one of the most complex issues related to ABS. The sovereignty concept is different from patrimony and from property; the latter is not approached by the Convention [on Biological Diversity] itself, giving each State the freedom to decide whether the genetic resources are private or public property..." (2004: 208). Madeglia, in his

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15 Chishakwe and Young argue that "[t]he consequences can be compared to a simple story – five people meet together and write a song. They all agree that any one of them is free to sell the song to anyone he or she chooses. The one of them quickly sells the 'exclusive rights' to the song for a large sum, and does not share with the others. Since the buyer has received the 'exclusive rights' none of the others can ever sell the song again" (2003: 9).
research on various domestic patenting regimes based on the CBD from around the world, concluded that most of IPR legal regimes lack adequate monitoring and evaluation mechanisms, although there was considerable and widespread emphasis on ABS and compliance with mutually agreed terms (2004: 214).

There is currently a push for a new international disclosure requirement to track and transfer benefits from biological resources in order to curb unauthorized exploitation of biological resources and associated traditional knowledge (Keating, 2005). However, it has been argued that there is little evidence that the new proposals would promote ABS, and that they may actually have a negative impact on the patenting system (Keating, 2005). Keating argues that, "[i]n and of themselves, they are not capable of transferring benefits from those who exploit genetic resources to those who provide them. Furthermore, they would not be able to track benefits where an invention is not patented or where a patented invention is not commercialized" (Keating, 2005: 543). In addition, new disclosure requirements would not address rapid changes in biotechnology and the fact that these changes are making biological resources less relevant to science and technological development. "While it was once more common to obtain lead molecules for research from the rainforest, companies are now generating these molecules in a laboratory through techniques such as combinatorial chemistry and combinatorial genomics. New disclosure requirements would discourage companies from conducting research on genetic resources in the developing world" (Keating, 2005: 544)
Keating argues that “[t]he idea of a new disclosure requirement was born in the CBD, an organization that was originally intended to promote conservation. The CBD has no expertise in the principals of patent law” (Keating, 2005: 544). Furthermore, proposals for ABS through a new disclosure requirement “has consumed a major portion of the time and resources of...” the CBD and has stifled discussion and research on other IP and IPR considerations. Keating argues further that ABS, “despite its political popularity...is not consistent with the purposes of the patent system. The patent system is intended to provide an incentive for innovation and to be technology neutral. It is not designed to address environmental or development-related issues” (2005: 545)

7. Conclusion

This Chapter covered the current snapshot of the vast, complex, and deeply intertwined collection of international laws and regimes aimed at addressing intellectual property considerations as they relate to TK, biological resources, and ABS. This Chapter does not claim to have comprehensively addressed all of the critiques and proponents of each legal text, but rather to provide an overview of the law, the context of the law, and some of the key practical and philosophical debates surrounding their objectives and implication in relation to TK. The next Chapter provides a more in-depth analysis of the current situation of IPRs in relation to TK and indigenous peoples using Cultural-Legal Relativity as a window into the nature of this legal relationship among key players.
Complicating this IPR debate is that the objectives of each Agreement represent different, often clashing, ideologies and perspectives that attempts to reconcile via international law have arguably failed. Although many legal scholars agree that the TRIPS and the CBD are complimentary in most respects, it should be noted that even if there were, “the overriding nature of the TRIPS Agreement would hardly have provided a way out for developing countries to coin restrictions on use of traditional knowledge or access that bypass the stipulations of the TRIPS Agreement” (Sampath, 2005: 44; also Mgbeoji, 2006).

The next Chapter offers a critical perspective on the legal issues touched upon in this Chapter, and provide an important, forward-looking analysis via Cultural-Legal Relativity towards a more productive and practical understanding of the issues and methods of resolution.
Chapter Three: Analysis

The fates of human beings are not equal. Men differ in their states of health or wealth or social status or what not. Simple observation shows that in every such situation he who is more favored feels the never ceasing need to look upon his position as in some way 'legitimate', upon his advantage as 'deserved', and the other's disadvantage as being brought about by the latter's 'fault'. That the purely accidental causes of the difference may be ever so obvious makes no difference (Weber, 1968: 953).

1. Introduction

The first two chapters of this thesis examined the burgeoning theory of Cultural-Legal Relativity and the evolution of international intellectual property law and intellectual property rights, with a focus on ABS of TK and associated biological resources. In this final Chapter, an analysis of IPRs and ABS will be examined from a cultural-legal perspective towards the two objectives of providing an insightful analysis on these issues and providing meaningful policy prescriptions towards a more positive and inclusive international IP legal framework.

This Chapter is divided into two sections. The first section outlines an analysis of IPRs from a Cultural-Legal Relativity perspective. This analysis attempts to bring the theory into the international realm, and does not claim to be complete. Rather, the analysis is exploratory, raising questions and highlighting structural relationships, towards deeper thought and understanding on the complex social, cultural and legal issues that characterize international intellectual property rights. As Mgbeoji argues, "it is not enough to analyze what the legal norms of the patent system seek to protect; what they neglect to protect is equally relevant. In short, the patent system must be thoroughly interrogated
and its intellectual integrity should not be presumed" (Mgbeoji, 2006: 14). This is what this thesis attempts to do.

The second section uses some of the key issues identified throughout the thesis to outline some policy and legal recommendations geared to addressing the key current issues discussed in the analysis. After examining the policy options, a skeletal Model Treaty is outlined in an attempt to bridge a number of the current international IP legal texts with a Cultural-Legal Relativity perspective. The Model Treaty aspires to provide a more productive legal regime that would effectively address some of the concerns raised in the analysis of the present system. The last section is a summary and conclusion of the Chapter.

2. Analysis

2.1 Indigenous People and Communities

This analysis does not aspire to present a complex cultural and historical dissection of indigenous people. What is important here is an overview of the cultural and legal situation of indigenous people in a generalized, but accurate, manner. Indigenous people comprise a myriad of different cultures, languages, arts, perspectives, historical experiences and current power differentials within and beyond their home territories. If the cultural-legal theoretical lens is to be transferable to international law and legal concerns, it must be able to identify the intersections and disconnections between law and culture within a milieu where multiple stakeholders from multiple cultures are required to operate within one dominant cultural-legal framework.
The historical connection of indigenous peoples with their natural environment, and the nature of a community's relationship with that environment is central to the role of indigenous peoples' TK and the use and ownership of associated biological resources (Manus, 2005). Indigenous people, or the term 'indigenous' itself, may be understood as:

racially distinct populations whose long-term histories connect them with identified areas of land situated within the borders of globally recognized nations. Within this construct, the 'indigenous peoples' concept relies on temporal, cultural, racial, and territorial elements as identifiers of particular indigenous communities. Of central importance among these elements in defining a community of people as indigenous is that community's various associations with a particular environment. Both a people's historical connection with its environment and the nature of its relationship with the environment – whether static or nomadic, for example, or exclusive or shared – are core features of an indigenous people's identity (Manus, 2005: 553).

However, in any analysis of indigenous groups or indigeneity, it must be understood that different indigenous populations are very different culturally and politically, each have different future goals and objectives, and each have different relationships with the environment and their host states (Bluemel, 2005). Furthermore, indigenous people are different within and among themselves along gender, social, familial or other culturally-specific lines (WIPO, 2001). It is important to understand that the "legal and political vulnerability of indigenous peoples rests heavily on the fact that indigenous life patterns are, generally speaking, environmentally benign, and so differ fundamentally from those of the dominant cultures whose laws, moral codes, and life patterns are, generally speaking, environmentally exploitive. Thus, the environmental values of indigenous peoples are not merely a distinguishing feature of their cultures; they
are a key element of their disenfranchised status" (Manus, 2005: 554). This aspect separates indigenous peoples from other minority groups in a substantial manner (Potaka, 2004).

It may be ‘trite’ to assume that indigenous peoples operate in different spaces of political and socio-economic rights and status from other minority groups (Potaka, 2004), but there are dominant characteristics and experiential themes that resonate among many indigenous groups. These themes may be linked to a common future via common historical experiences (colonization, ongoing state marginalization) and possession of alternative worldviews and perspectives (however different among each other) within a globalizing world that is becoming increasingly homogenous (Potaka, 2004). Some of these common experiences relate to the subjects discussed in the following section, such as colonization, globalization, protection of culture (that encompasses TK), meaningful and voluntary participation in the international system (via international law largely, and agreements such as ABS on a smaller scale), economics and associated ethics, and ongoing marginalization from host-states.

It is at the juncture of common political and socio-economic future through common political and socio-economic history that one indigenous observer concluded that: “[o]ur political rights and status may be the same as other groups at some level. However, to suggest that we are limited to the same individual and collective rights as non-indigenous folks, and nothingmore (sic), is potentially suicidal. Our distinct political rights and status fundamentally underpin our cultural survival” (Potaka, 2004: 269). Cultural survival may be placed alongside
TK preservation and environmental conservation as intertwined and mutually-supportive.

Where this subject gets particularly complicated is when certain, arguably inseparable, rights are drawn into the discussion relating to indigenous sovereignty over land, natural resources, and political representation (i.e. self-determination, permanent state sovereignty over natural resources). These are highly controversial topics that have been explored extensively in the literature and within various international forums.\(^{16}\) They are only marginally touched upon in this Chapter as part of a greater discussion on the relationships between history, culture and law, and cultures operating within laws that have no relationship or connection to legitimize each other.

In addition, this disconnection between cultures internationally also occurs at the domestic level for indigenous peoples. Indeed, it is arguable that this cultural-legal disconnect is most acute in the experiences of indigenous people within their own states, as "[s]tates, with several notable exceptions, have not generally protected the rights or interests of indigenous or traditional communities but, instead, have often facilitated their destruction" (Safrin, 2004: 660). There is a fear among states that indigenous claims to self-determination would lead to legally recognized nations within the greater state and destabilize

host states legal rights to sovereignty over resources and authority over citizens (Bluemel, 2005). However, this fear has not materialized as indigenous expressions of self-determination have separated "self-determination from its historical roots of decolonization and attempts to reassert it as a relational, evolutionary process that results in changing agreements to reflect changing relationship between each localized ethnic group and its host state" (Bluemel, 2005: 62). Indeed, Manus observes that "[s]elf-determination, when accepted literally, encompasses the idea that indigenous people might evolve from its ancestral life patterns by choice even as it retains the right to recognition and protection as a distinct entity with the power to determine its own cultural future." (Manus, 2005: 571)

Indigenous rights are contentious because the community's legal and cultural worldviews are generally not connected to the legal and cultural understandings of the dominant group(s) of their host state and of the international legal structure, and thus each delegitimizes the other, leading to mistrust and misunderstanding. Indigenous groups are forced to operate within a foreign legal and cultural hierarchy that ultimately does not, and perhaps cannot, recognize their perspectives, because legal categories, definitions, and structures cannot be indiscriminately flexible and legitimate. Legal structures are created and reinforced through an essentially cultural process that intentionally or unintentionally structures definition, boundary, syntax, and semiotics, and that is not supportive of alterity. This is, of course, for its own survival requirements because boundary definitions are necessary for substantial application and
coherency. Small culturally-prescribed flexibilities may be built into a legal
regime to create a rhetorical space for symbolic discourse (and thus allowing
creators to present an argument for universality and universal legitimacy). This is
conducted in a marginalizing manner that is rooted in historical political and
economic 'superiority'.

By the nature of a legal system itself, there must be operational structures,
and therefore boundaries, and too much flexibility and accommodation renders
the legal system less functional, less coherent, and less practical. However,
international law crosses boundaries and legal systems, and deeply impacts the
lives of people all over the world. This is an incredible disconnect that clearly
indicates a breakdown in the cultural-legal dynamic that undergirds social,
cultural and political relationships.

2.2 Colonization and Globalization

An analysis on the current political situation of indigenous peoples cannot
be separated from the historical imperialism that has brought about their current
marginalization at the international (and often local) levels. The experiences and
impacts of colonialism are unique to each community in which it occurred, but as
it happened in many regions all over the world by a relatively small number of
colonial powers, there are common themes that emerge from those experiences
and speak to the current distrust that operates between governments, citizens
and indigenous people in many places. This distrust may be particularly acute as
state legal systems, as informed by, and in conjunction with, the culture of the
dominant people in the state, interact with indigenous communities which in practice operate within an entirely different cultural-legal reality. These different realities are informed, structured, understood, and contested by historical factors and current social situations (Ho, 2006).

The standard narrative in the literature speaks to a dichotomization between the Northern and Southern perspectives on patenting. Ho neatly situates the indigenous perspective: "The process of obtaining private rights over products derived from third world resources or knowledge that is considered sacred or beyond private ownership is considered to be morally offensive to many citizens of developing countries, as well as those with sympathetic interests in other countries. Moreover, many of these citizens view Western countries and companies with great suspicion since usurpation of resources harks back to colonial imperialism" (Ho, 2006: 436). This dichotomy presents legitimacy difficulties for the philosophy and practicality of ABS agreements, which attempt to bridge the various worldviews into workable and fair contracts.

Imperialism, or historical colonization, is still a reality for many indigenous peoples and communities, and has deeply structured the interrelationships and cultural evolution of these communities (Ho, 2006). In addition, those experiences continue to inform the understanding and interpretation of IPRs by many colonized, and colonizing, cultures. For example, although it is binding on all members of the WTO, TRIPS may not be recognized by all of the members of the WTO as morally and culturally legitimate. As Coombe aptly observes, "[l]egal regimes of intellectual property shape (although they do not determine) the ways
in which cultural signs are re/appropriated by those who assert difference in the spaces of similarity, imitating and mimicking signs of authority to express relations of alterity” (1998b: 27).

In the space between the administrative intentions of the document and the cultural interpretations of its legal requirements there is illuminated a structural inequality among states internationally that is exemplified in the differing understandings and interpretations of hard international law. When viewed through the lens of colonized and economically disadvantaged people, “[l]aw is not simply an institutional forum or legitimating discourse to which social groups turn to have preexisting differences recognized, but, more crucially, it is a central locus for the control and dissemination of those signifying forms with which identities and differences are made and remade” (Coombe, 1998b: 28-29).

Interestingly, it is through this crack in the symbiosis of culture, and cultural alterity, and the law, that each may be deconstructed and understood. The eminent scholar, Edward Said, argues that:

studying the relationship between the ‘West’ and its dominated cultural ‘others’ is not just a way of understanding an unequal relationship between unequal interlocutors, but also a point of entry into studying the formation and meaning of Western cultural practices themselves...when supposedly otherwise neutral departments of culture like literature and critical theory converge upon the weaker or subordinate culture and interpret it with ideas of unchanging non-European and European essences, narratives about geographical possession, and images of legitimacy and redemption, the striking consequence has been to disguise the power situation and to conceal how much the experience of the stronger party overlaps with and, strangely, depends upon the weaker (Said, 1993: 191-192)

This dependency among parties within a power relationship (if there is even a such thing as parties that are not in a power relationship), regardless of
their role within that relationship, is the basis of the symbioses between law and the objects and people it regulates, for each provides the other with substantial legitimacy and functionality. “Law generates positivities as well as prohibitions, legitimations, and oppositions to the subjects and objects it recognizes. Legal discourses are spaces of resistance as well as regulation, possibility as well as prohibition, subversion as well as sanction” (Coombe, 1998b: 25). Fortunately for the future of ABS, when there is a crack in this relationship of dependence, there is a dysfunctional mechanism that creates opportunities for shifting power balances and legal evolution.

The disparity in negotiating powers discussed at various spots throughout this thesis highlights not only the source and symbolism that comes with any overarching legal regime, but raises important questions about the nature of global interdependence and the sharing of valuable knowledge and resources. Each of the stakeholders in these relationships have something to gain and something to give, but the inherent unequal power balances within these relationships make it difficult to assess the success of any initiative in accordance with the CBD principles of social justice and environmental sustainability. Indeed,

The globalization of patent regimes ignores grassroots concerns about the particularities, perspectives, localisms, and contingencies of societies at various stages of development or with different conceptions of material well-being. Given that patent laws have international implications, there is the corollary issue in international law of state responsibility for domestic juridical and cultural institutions that facilitate the appropriation of indigenous people’s knowledge. As an instrument of Western notions of capital and property, the patent system reveals an intentional socioeconomic and political instrumentality that is alien to many other cultural philosophies (Mgbeoji, 2006: 6).
Globalization is the great-grandchild of imperialism, and although its essence has rapidly changed, its economic underpinning remains the same. Anghie (2000) argues that despite the difficulty of generalizing about something as vast and complex as globalization, "considerable evidence suggests that globalization intensifies inequalities both within and between states and that, on the whole, it further undermines the precarious position of the poorest and most vulnerable, the vast majority of whom live in third world countries" (Anghie, 2000: 246). This inequality is informed by globalization, and perpetuated through the international legal system, and certainly plays into decisions about how and when to share intellectual and biogenetic resources and the roles that stakeholders take when negotiating ABS agreements.

2.3 Traditional Knowledge

It has been highlighted previously that TK systems have become widely accepted as important and innovative sources of information and technology, and important models for ongoing sustainable development. "In fact, traditional societies often have highly-developed, complex and effective customary systems for TK protection. These systems have, until now, existed in virtual independence of the formal IP system. The point, therefore, is not that TK holders do not recognize intellectual property concepts, but rather that the formal IP system is a type of intellectual property system with which they are not familiar" (WIPO, 2001: 221; emphasis in original). Thus, unfamiliar structures for the use and protection of TK inspires tension and distrust that may be
perpetuated through miscommunication, historical experiences, and a lack of resources to properly understand the foreign process.

Part of what makes TK valuable, economically and intrinsically, is that the knowledge is not limited to a specific technology field or art, but rather TK often naturally converges disciplines, in addition to providing insight into complicated natural systems (WIPO, 2001: 211). This convergence of natural innovations encompasses intrinsic worth in addition to scientific and commercialization value, as it opens an important window into a people and a community:

Understanding the interplay between practical knowledge, social history, art, and spiritual or religious beliefs provides a valuable foundation for developing an understanding of the people who hold this knowledge… Intertwined within practical solutions, traditional knowledge often transmits the history, beliefs, aesthetics, ethics, and traditions of a particular people. For example, plants used for medicinal purposes also often have symbolic value for the community (WIPO, 2001: 211).

This convergence between culture, society, knowledge and the natural environment is valuable across disciplines and illuminates an important interfacing that arguably many in the West have lost touch with. TK develops, interacts, and evolves within a multifaceted social, cultural and environmental incubator (WIPO, 2001). This applies to all forms of knowledge, whether identified as ‘traditional’ or ‘modern’, and whether held individually or collectively (WIPO, 2001). However, “traditional knowledge, as representative of cultural values, is generally held collectively. This results from the fact that what can sometimes be perceived as an isolated…invention…is actually an element that integrates a vast and mostly coherent complex of beliefs and knowledge, control of which may not vest in the hands of individuals who use isolated pieces of
knowledge, but be vested in the community or collective" (WIPO, 2001: 211). Although this is a generalization only, the collective element of knowledge in indigenous communities is inseparable from the legal structures of the community or culture. The legal structures will vary widely among peoples, but ABS as it is currently understood results from the Western contractual method, and this creates and perpetuates a cultural-legal vacuum when ABS is the sole structure for TK economic relations among different cultural systems.

There are a number of problems that arise from this cultural-legal vacuum. For example, TK is generally transmitted orally between generations and remains undocumented in the same manner required by dominant Western IPR systems, in addition to being a continually and dynamically evolving kind of knowledge (WIPO, 2001). The oral transmission of knowledge (or however it is managed within a community) represents the indigenous IP system, but an oral system will generally not be considered legitimate under international law (although marginally recognized by requirements to work with indigenous groups via ABS). Synthesizing an oral system with contractual requirements and domestic and legal structures takes a large amount of specialized knowledge and cross-cultural interfacing if the process is to be fair, effective, and address the necessities of knowledge-holders and associated biodiversity conservation. As an added requirement, TK must be allowed to continue to evolve after patenting has occurred, in order to allow for ongoing cultural evolution and preservation of biological resources (Chishakwe and Young, 2003).
The 2001 WIPO Fact Finding Mission summarized the needs and expectations of indigenous peoples from around the world in relation to the protection of, and rights to, their TK. Many of the requirements related to: clear definitions and descriptions of terms for IP purposes; education about IPRs and TK for knowledge-holders, relevant government officials, and bioprospectors to raise awareness and facilitate dialogue; legal education regarding customary laws and protocols in traditional communities and the international IP system; further research in options for internationally recognized sui generis systems to protect TK; and, legal assistance related to every aspect of the IP process, including the negotiation, drafting, implementation and enforcement of ABS agreements (WIPO, 2001).

It is quite clear that TK holders are looking for legal translation services to bridge the gap between their cultural-legal system and the one that structures the international IPR system. The WIPO research indicated that it is not necessarily a negative relationship among partners, but rather one whose functions and interactions cannot be contested by indigenous groups and are not always in sync. Clearly, these problems are not always located in the IPRs law itself: indigenous groups often have operational concerns that go above and beyond legal considerations (WIPO, 2001). Many individuals and communities do not have the knowledge and resources to utilize their IPRs. In addition, the current system cannot protect all aspects of TK, such as methods of dispute-settlement and governance, language, human remains, and genetic resources in their natural state (WIPO, 2001). However, “IP has consistently evolved to protect
new subject matter, such as software and layout-designs, the emergence of which was unforeseeable even twenty years earlier...IP is now moving forward to protect databases. Given its evolutionary and adaptive nature, it is not inconceivable that IP principles might provide effective protection for traditional knowledge” (WIPO, 2001: 8). It is also very important to point out that while the IP system may have failed in some specific and highly-politicized circumstances, they may be instances of bad patents rather than of a poor system itself (WIPO, 2001).

During the research that WIPO did, they observed that operational, as opposed to legal, concerns were considered equally or more important. The researchers described these operational impediments as “the financial and political power to use and take advantage of IP, to influence the progressive development of IP law and policy and to challenge IP claims made by others...These broader questions fall beyond the scope of IP, but the more specific need to facilitate access to the IP system to enable TK holders to use it more effectively, and to provide information and assistance to TK holders to enforce their rights were keenly felt by WIPO during all the FFMs” (WIPO, 2001: 227). This is important to the cultural-legal perspective because it highlights a very obvious detachment between the legal requirements to be a full participant in the dominant international legal regime, and the reality, and predictable consequences, of those unwilling or unable to achieve those requirements. Additionally, many of the IP requirements relating to TK are outlined in the CBD, and this document was developed and designed to facilitate effective
participation of indigenous peoples in IPRs relating to TK. However, it can be argued that the problem here is not really about whether indigenous people have a capacity deficit to participate in IPRs, but whether they have a choice. Some groups may eagerly embrace IPR and ABS opportunities, and some may strongly reject them, but neither substantially have a choice in the matter because ultimately the choice and details rest with the dominant state (whether it is the host state of the indigenous group or those states determining the structure and philosophy of the dominant legal regime – arguably both).

Generalizations about patent regimes mirror those about indigenous peoples. It must be acknowledged that some domestic patent regimes may be structured so as to permit socio-culture considerations (and indeed, that is one of the pillars of the CBD), however, patent laws cannot, and some might argue should not, address the cultural concerns that are inherent to the highly stratified discourse surrounding TK and patenting (Ho, 2006: 457). However, the very nature and structure of patenting already employs the Western perspective and is structured accordingly. Furthermore, the international agreements that structure patenting systems in states, especially TRIPS, but also the CBD in some respects, were negotiated and thrust upon developing countries which had little bargaining power (Abbott, 2005; Ho, 2006). Indeed, just as dominant Western nations previously 'conquered' land without regard for the rights and interests of indigenous populations, so too TRIPS was imposed upon countries with less political power. In addition, just as Western colonial conquerors claimed that they were improving the lifestyle of natives (or savages), so too TRIPS was presented as beneficial to developing countries based on the premise that patents spur innovation. Not only has TRIPS not resulted in spurring innovation or foreign direct investment in these countries, but the premise is questionable for pre-industrialized countries, given that most nations that
presently thrive on patent protection only adopted such protection at a later period in their industrialization (Ho, 2006: 469)

At the intersection of the intentions of international IP law (practical administration of rights and protection for patent holders and economic incentive for future innovation), and the understanding and experiences of international IP legal regimes by many non-Western peoples affected by it (usurpatory, neo-colonialistic), that we can view the undergirded structure of power and subjectivity that frame culture and law, and that perpetuate their interconnectedness. This highlights the reality of IP rights, TRIPS, and the CBD, in that "...the reception and reinterpretation of legal meaning [are] usually quite different from its production – different in ways that are made comprehensible by placing legal acts and omissions in their cultural contexts" (Mezey, 1998: 59).

To understand this relationship, one need only look at the hegemonic forces within a society or legal system (such as international law) to identify and understand how culture chooses to shape and interact with law, and law thus compartmentalizes and categorizes culture. The grouping together of alternative perspectives, as exemplified by the African Group’s efforts to reform the TRIPS agreement at the WTO, and the legitimacy of dissent in shaping alternative realities, may be understood as a proponent for, and comprising of, the evolving dynamic between culture and law:

If law is central to hegemonic processes, it is also a key resource in counterhegemonic struggles. When it shapes the realities we recognize, it is not surprising that its spaces should be seized by those who would have other versions of social relations ratified and other cultural meaning mandated...Historically structured and locally interpreted, law provides means and forums both for legitimating and contesting dominant
meanings and the social hierarchies they support (Sarat and Kearns, 1998: 35).

The undisputable economic hegemony of Northern states as the controlling force within the microcosm society of international relations dictates the defining values of the laws that provide meaning and synthesize action among states. The intention of TRIPS, made clear by understanding the forces of power of those who drafted and worked successfully to implement it, serves to reaffirm the hegemony of Northern states economically, and thus politically. There is a yawning gap between the reality of the hegemonic legal domination of one cultural worldview and the intentions of the law itself. The TRIPS Agreement exemplifies this because of the semiotic stratification amongst peoples all over the world, and the spaces for resistance and alternative perspectives that have arisen from the individual interpretation of the Agreement and intellectual property law in general.

Because law is a social and cultural construct, it inevitably possesses gaps through which hegemonic forces can help shape its evolution and redefine its boundaries. Indeed, Coombe argues that it is equally important “...to recognize the symbolic power of law and law’s power over signification in concrete struggles over meaning and textuality as well as their daily political consequence” (1998b: 28).

2.4 Ethics and Economics

At its core, the IPR debate is about ethics and economics, and the valuations that accompany and intertwine each. Both ethics and economics can
employ multiple meanings and definitions even within one group, and as such create even more stratification at the international level where layers of culture, power, and history interact and counteract. There are layers of domestic and international perspectives on ethics and economics that create a hierarchy of control (power) over discourse, meaning, and action. Indeed, Boucock observes that the "unequal distribution of human fortune, which all but the most simple social orders tend to create and perpetuate, must be given a practical-ethical justification. The distribution of fortunes must be shown to conform with a coherent normative conception of some kind, that is, it must be shown to make ethical sense" (Boucock, 2000: 52). Cultural status here connects with legal status to provide an argument-resistant 'legal' method of retaining position at the top of the economic hierarchy to create, recreate and perpetuate the current economic structure. The domination of TRIPS with the softer ethical persuasions of the CBD is a perfect example of the legal relationship between North and South. The subtle interactions and persuasions of each are not always obvious.

The current international capitalist market economy sets the tone for how IPRs and ABS are to be structured and negotiated. The contract method used in intellectual property protection may be understood as a kind of "mastery and control" that is "obtained through the exploitation of knowledge, particularly technical expertise, but more generally through the objectification and depersonalization of social arrangements" (Boucock, 2000: 41). Furthermore, the individualism of the current market is not designed to address group concerns. Boucock, a scholar who specializes in Weberian theory, argues that
the "rationalism of modern social arrangements and the conceptions of individualism prevalent to modern society presuppose, first, a fundamental distinction between knowledge of 'facts' and judgments of 'value', and second, the importance of intentionality in the attribution of meaning to the 'facts' of the world" (2000: 41). Boucock here grasps the power-role of actors within capitalist relationships, such as ABS agreements, and the systemic designations that structure the understanding and interaction that occurs through social and legal formation, and the power of knowledge (which is always understood and structured culturally) in the creation of perceptions of value. The social arrangements of international law create barriers for indigenous peoples to fully participate in allocating value to knowledge – they are required to submit to someone else's interpretation.

The connection between culture, law and economics is key to understanding the marginalized position that IPRs have put indigenous people in: "Treaty regimes such as that of the WTO/GATT and the operation of international financial institutions such as the Bank and the IMF have vigorously and effectively promoted the economic policies and processes associated with globalization: liberalization, privatization, and the creation of legal regimes facilitating commercial transactions and foreign investment" (Anghie, 2000: 247). This creates a number of ethical considerations as the international IP regime, which is considered key to modern western notions of scientific and technological development and enhancements, also devalues and marginalizes important social issues (Ho, 2006). As such, "in an increasingly global economy, ranging
from the creation of the EU to bilateral and multilateral agreements, the role of ethics may need to similarly be considered on a more global basis...In particular, whereas patentable subject matter limits may have previously been able to reflect cultural perspectives on the appropriate limits of what should be patentable, this is impossible if there are multiple cultures involved" (Ho, 2006: 556).

2.5 Cultural-Legal Relativity and ABS:

Because there are vast variations in resources and negotiation power, indigenous people are vulnerable to exploitation (Bluemel, 2005). When this exploitation encompasses objects that threaten both the culture and environment that sustain and define the community, the threat becomes existential and mortal. Compared with the conspicuous objectives of bioprospectors - scientific advancement, breakthrough medical therapies - the balance of power creates significant discomfort for the informed observer. Not that scientific advancement, new medical therapies (or cures!), or other potential beneficial technologies are nefarious objectives, they are in fact quite noble and necessary. But the question of 'at what cost?' must always be at the fore of human interaction when the existential and mortal are in question.

Law, designed by culture to negotiate cultural meanings and cultural behaviors, loses some of its utility when confronted by alternative sets of meanings and behaviors and is not flexible enough to synthesize and interact with those meanings. This can have important consequences, such as the
delegitimization of alternative perspectives rather than the delegitimization of the law in question. It has been argued that from a national Western perspective, "[d]ebates about the meaning and significance of culture become arguments about 'civilization' itself in which acknowledgement of cultural pluralism and its accompanying decanonization of the 'sacred' texts of the Western tradition are treated as undermining national unity, national purpose, and the meaning of being 'American'" (Sarat and Kearns, 1998: 2). Or Canadian, or European, etc. It becomes personal as soon as law (rooted in cultural assumptions) comes into question.

At the international level, where there are only alternative perspectives, this takes on new meaning and may foster aggressive treaties (such as TRIPS) that maintains control over legal meanings and legal behavior by certain powerful countries (and cultures). Indeed, "[b]ecause law and legal meanings are produced in concrete and particular social relations, the meaning and the materiality of law are inseparable" (Sarat and Kearns, 1998: 8). When negotiating agreements in an environment that is inherently unequal and that comprises misaligned perspectives, law becomes a tool for political, social and economic domination – whether intentional or otherwise.

Because the political, social and economic are structured within culture, it becomes –importantly –a cultural domination, and may thus be connected intimately with the historical experiences of each party and the status quo of power allocation. These allocations are constantly and continually altering in
small ways as present situations become historical experiences and propel future cultural-legal interactions. Sarat and Kearns argue that:

"Law's cultural lives and its power in and over cultural production are continually renewed, re-created, defended and modified. But they are also continually resisted, limited, altered, challenged...Meanings are advanced and resisted strategically, though neither the meanings advanced nor the goals purportedly served in advancing those meanings exist independent of one another. Power is seen in the effort to negotiate shared understandings and in the evasions, resistances, and inventions that inevitably accompany such negotiations (1998: 8).

It can, and has, been argued that there are no relationships without power and that power is structured into agreements (such as ABS) and relations between cultures and cultural legal systems. This is a recurring theme across disciplines in the literature: "Law may be about reason. But it is also about power. Power may take any number of forms – from sovereign command and brutal force to subtle social pressure and appeals to apology – but the effects will be deeply entrenched in the overall structure of power through which that society enacts its cherished values or the interests of those who possess control" (Rosen, 2006: 163). In that vein, the argument must be presented that "[o]nly the conversation between traditions can create a public space which is not identified with a single tradition and which allows for an enhanced understanding of reality through the dialogical mapping that pluralism fosters" (Legrand, 1999: 19).

What is important here is that interactions among parties, regardless of the power allocation, remain sites of contestation where resistance and power play out in predictable or unpredictable ways (Henderson, 2001: 257). ABS agreements, arising from such legal foundations, cannot provide the balance and equity that TK holders require to ensure that their place at the table is ensured
and respected. This would require a fundamental shift in the international IP regime itself.

2.6 Towards a New International Legal System

In Chapter One, Kahn was quoted as observing that a culture structures society so that people are already inside the law, deploying legal resources in an ongoing daily manner, whether consciously or otherwise (Kahn, 2003: 149). Because of this, individuals are inevitably trapped by set boundaries formulated to be mutually supportive and delegitimize behavior operating outside of those boundaries. Although alternative discourse and instances of action may be tolerated or even permitted in such places as the academy, unless they are on a revolutionary scale they are operating on the fringe and thus become easy targets for marginalization and regulation. However, it is not that change is impossible. Rather, discourse must operate within the cultural-legal milieu, must speak the legal language and walk the cultural walk, in order to be heard, understood, categorized, and accessible. Many, like Ngugi (2002), would disagree with that assumption, but the law is structured in such a way that disagreeing requires regulation, while options exist for legal evolution inside of the system itself (sunset clauses, new treaties replace old treaties, etc).

It is the symbolic in the discourse – the semantics – that fosters the cultural-legal relationship. “[T]he power of words is invariably part of the equation of power, and legal systems – however institutionalized, however separate from state control – are nothing if they are not forums for capturing the terms of
discussion" (Rosen 2006: 166). This becomes more difficult when crossing cultural boundaries as there are considerations of legitimacy and practicality that divert the flow of common understanding within legal negotiation (Rosen, 2006). If the symbolism is not mutually-shared, the legal instruments at play are reduced to instruments of power wielded towards an objective that is meaningful to one group. The CBD, which was designed to address IP issues with the rights and requirements of indigenous communities and environmentally-minded states, has been usurped by TRIPS and suffers from a credibility crisis. With this in mind, the next section offers some hope for the evolution of IPRs and a deeper understanding of the role that Cultural-Legal Relativity theory can play in facilitating dialogue and legal harmony among stakeholders around the world.

3. Policy Recommendations and Model Treaty

3.1 Policy Recommendations

One of the purposes of theory is to illuminate spaces within a phenomenon in order to expose the unseen, or unforeseen, consequences of the concepts examined. It is important that theory provides some grounding in reality and proffers more than just illumination, but also options for correction, innovative action, or confidence that the system or structure is working according to its purpose. It has been established previously that the IPR system is working towards its (Western-defined) purpose, but on a precipice where the existence of communities and sub-state nations all over the world, and the natural environment that benefits all of humanity, are hanging in precarious balance.
The purpose, then, of this section is to provide some policy analysis and prescriptions towards a more equitable and balanced IPR system. This is clearly not a new undertaking, and many of these ideas are taken from the literature. This section examines some current policy prescriptions from a cultural-legal perspective, and then outlines a model legislative framework (the Model Treaty) that incorporates these recommendations. Abolishing the IPR regime all together, while the ideal solution for some, is not a realistic solution in today’s evolving global world.

At this juncture, it is worthwhile to remember the needs identified by the WIPO Fact Finding Mission Report, which speak most poignantly to the gaps in the current system identified by indigenous people worldwide. These needs represent the operational aspects of the system, while the structure of the system itself encompasses an array of historical and political levels, layers and historical influences that facilitate these operational problems. The needs were identified as: clear definitions and descriptions of terms for IP purposes; education about IPRs and TK for knowledge-holders, relevant government officials, and bioprospectors to raise awareness and facilitate dialogue; legal education regarding customary laws and protocols in traditional communities and the international IP system; further research in options for internationally recognized sui generis systems to protect TK; and, legal assistance related to every aspect of the IP process, including the negotiation, drafting, implementation and enforcement of ABS agreements (WIPO, 2001). These are important considerations that have the potential to be incorporated, with the cooperation of
states and communities, under the auspices of either the WIPO or CBD secretariat. Funding and bureaucratic management, as well as considerations of decision-making power, are clear barriers.

Important for both short and long term policy making, considerations of the ‘local’ must always be taken into account when developing new regimes or participating in the evolution of ongoing regimes (Rosen, 2006). Indeed, the “human propensity to differentiate categories of experience suggests that one ignores the local at one’s peril, and it may be that it is in the law that the contest between a sense of the local and the global will receive some of its most serious testing” (Rosen, 2006: 197). When framing and negotiating ABS agreements, considerations of the local must be at the forefront of each aspect of each agreement and understood within the relationships among stakeholders. To a certain degree, this is already happening in many places under the framework of the Bonn Guidelines, the new international regime, and practical application by organizations such as the International Cooperative Biodiversity Group (ICBG).

Fortunately, with the rapid spread of information technologies, it is becoming increasingly difficult to hide unethical bioprospecting activities, and thus consumer awareness is helping in part to create market incentive to engage in ethical behavior.

A recommendation found extensively throughout the literature relates to the compensation component of access and benefit-sharing. Ho argues that "monetary compensation is a Western solution that fails to acknowledge that traditional knowledge often transcends monetary value due to its sacred status. To many groups, sharing commercial proceeds is morally offensive because it necessitates acceptance of the very activity – patenting of sacred information – which they protest as improper" (2006: 459). For example, better results have been seen in African communities with training and support initiatives, rather than royalties (Nnadozie et al., 2003). There is a challenge to bioprospectors, states and communities to find innovative solutions to the sharing component of ABS that are productive, proactive, and situationally-relevant. Structuring true flexibility into these relationships could sincerely assist in rebuilding the trust and mutual understanding that has been missing since colonial times.

However, the negotiating power of indigenous peoples in many instances may be curtailed by the state, which ultimately possesses sovereignty over all resources in its territory under international law. The "situation is further complicated by the fact that the holders of traditional knowledge are generally not the government and may in fact have diametrically opposed interested from governments who purport to speak on their behalf. In particular, although many communities contest that patents and associated monetary compensation are fundamentally inconsistent with the promotion of traditional knowledge, their countries may welcome patents on the presumption that profits will flow from such activity" (Ho, 2006: 461). Some of these considerations have been
addressed in the United Nations Declaration on the Rights of Indigenous Peoples (DRIP; adopted by the U.N. General Assembly in September, 2007), and indeed widely throughout the literature on this topic.

It is unlikely that States are going to voluntarily give up control, so that innovative solutions are becoming increasingly necessary to ensure beneficial and productive relationships. Manus cautions that “[i]f the intermingling of dominant and indigenous lifestyles is perceived as the indigenous peoples’ relinquishment of their cultural identity, then most, if not all, indigenous peoples are doomed to extinction. If, however, an indigenous people’s intermingling with a dominant people is perceived to be a feature of the indigenous people’s own cultural evolution, then the indigenous people remains intact and worth of the international community’s protection.” (2005: 571). As such, it is important that indigenous people across the world participate immediately in all legal and social decision-making relating to international IP considerations.

In addressing the disconnect between indigenous and Western patenting systems, it is important that the architects of the dominant legal system – the Western countries – see the problems of the current patent system from a Western perspective. In such a case, it must be shown that considerations of environmental and cultural preservation are also problematic for Western countries (Ho, 2006: 494). Structuring the discourse around the consequences of poor patent behavior as root issues for Western countries may help to create a common bond among stakeholders and would ideally (theoretically) mobilize support for international law and initiatives that operate under different, more
inclusive cultural-legal structures. A more inclusive international legal system is important because it would “recognize that law has meaning-making power” (Sarat and Kearns, 1998: 10). Furthermore, it would acknowledge that “social practices are not logically separable from the laws that shape them and that social practices are unintelligible apart from the legal norms that give rise to them” (Sarat and Kearns, 1998: 10).

As outlined in Chapter Two, there is a new ‘International Regime’ being negotiated by the Secretariat of the CBD which aims to better define IPRs in relation to TK. A regime similar to this was recommended by WIPO in the 2001 Fact Finding Mission Report: “[b]ecause TK, like modern ‘knowledge’, is an ongoing, innovative process, it has become not only desirable to develop a system that documents and preserves traditional knowledge created in the past and which may be on the brink of disappearance: it is also important to envisage a system that contributes to the promotion and dissemination of innovations which are based on continuing use of tradition” (WIPO, 2001: 212). This type of system is not simply about freezing existing knowledge, but about “preserving what exists as an indispensable and powerful tool for fostering continued traditional innovation and creativity” (WIPO, 2001: 212). This may be the intention behind the Regime, however, it is unlikely that this will occur with the present Regime because it appears to be heading to soft-law status. The magnitude of this type of undertaking would almost require an entirely new organization to encompass the bureaucracy that it would entail, and while theoretically that should fall under the purview of WIPO, it would require an
immense amount of funding that may be difficult to acquire given that the primary
donors would be Western while the primary beneficiaries would be sub-state
groups (and indeed, many Western states may feel disadvantaged under such a
regime). However, this is not inconceivable if, like Ho (2006) recommends,
indigenous IPR concerns are structured so as to seem to be Western problems
as well.

It is arguably unrealistic to presume that it is currently possible to develop
a new or alternative international legal system where sub-state groups such as
indigenous peoples are considered equally alongside states and within a
structure that supports all types of legal worldviews. The alternative to this is to
allow indigenous groups to participate with greater say in the current international
legal system. This would present a number of options for empowerment and the
restructuring of legal regimes with greater cultural implications. Greater
participation by indigenous groups may act as a way of: enhancing transparency,
accountability and democratic legitimacy; giving non-state affected peoples a
participatory role in the outcome; and serving human rights interests (Bluemel,
2005).

However, greater participation may not actually address these issues and
may not be feasible in the current system. Indeed, “[g]roup participation is not
necessarily justified as a means of rectifying the ‘democratic deficit’ since the
participating groups may not be democratic in nature, may be considered
illegitimate by other actors, or may fall victim to a host of other pathologies”
(Bluemel, 2005: 59). In addition, indigenous groups may feel that they are
rendering the state-centered system legitimate by participating in a subservient manner.

The international system is not really designed for involvement by non-state actors, and there is a "lack of voting power provided to civil society groups in the United Nations. Where civil society groups, and by extension indigenous groups, are only provided 'observer' status or limited participatory rights, it cannot be said such groups have truly participated in the decision-making process" (Bluemel, 2005: 74). There is diffused or, arguably, nonexistent accountability, in the international system, and indigenous peoples or groups are not generally recognized as international lawmakers (Bluemel, 2005: 76). "Although this view is based on a Western conception of lawmaking and therefore is inappropriate, it is nevertheless the case that indigenous groups are not respected by all as valid international actors. Allowing their participation in a system designed solely for legitimate international actors would undermine the legitimacy of that regime" (Bluemel, 2005: 78). The only option is to change this. It may start incrementally, and indeed has with the Declaration on the Rights of Indigenous People (DRIP; adopted by the U.N. General Assembly September, 2007) and ongoing civil-society participation in various organizations, but it is the only way forward if peaceful and productive solutions are to be found.

The main recommendations may be summarized as:

- Rather than advocate for total abolition of the current IPR system, groups and sympathetic states must work towards active evolution of
IP legal principles and structures towards clearly identified objectives that are culturally and legally inclusive;

- When working towards IP legal evolution, and structuring international treaties and domestic legal systems, the 'local' must always be considered in the text, and there must be flexibilities within the text to incorporate local considerations into all activities under the mandate of the legal regime;

- Operational considerations are as important as legal rights' considerations, and must be incorporated into the law through supporting institutions to ensure power equity and inclusive participation;

- Compensation for knowledge and associated resources is integral to the ABS system, but must be accomplished in a culturally-relevant, situational, and innovative manner;

- Participation in a secondary, subservient manner is not the solution. Indigenous peoples must be equal participants in the legal regime. An ideal system would include Indigenous communities in the drafting and signing process, and as ongoing legitimate parties to the agreement.

Therefore, it is imperative that an alternative system for developing international law be designed and implemented if cultural and environmental preservation, as well as true universal human rights, are to be achieved. Cultural-legal studies are particularly useful at illuminating the interactions
between and among legal structures and culture, but have not yet evolved to articulate the complex and nuanced relationships among culture. However, the next section takes the ideas of this section, and some of the critiques of the legal texts from the previous section and outlines a potential legal text that incorporates some of the above policy considerations, critiques of TRIPS and the CBD, and uses Cultural-Legal Relativity concepts as its starting point.

3.2 A Model Treaty for IPR Evolution

Despite the fact that the CBD came before TRIPS, States, activists and scholars continue to reference it as presenting alternative options to, or in coordination with, TRIPS to address the complicated and nuanced problems associated with IPR protection and TK (Nnadozie et al., 2003; Shiva, 2000; Ganguli, 2000, among others). The African Model Law outlined in Chapter Two was developed specifically to confront these nuances, and attempts valiantly to synthesize the TRIPS and CBD requirements within a regionally-sensitive framework.

As outlined in the previous pages, there is a tremendous amount of literature that advances a number of critiques of the current manifestations of international IP law, especially regarding TRIPS and the CBD. However, there is also some positive discourse surrounding the current evolution of protection for TK, where it is argued that "...a TK regime that encouraged the conservation and continued use of TK relating to health and food production could potentially

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improve the lives of millions of people” (Dutfield, 2006: 3). Furthermore, there is a possibility that a TK regime could help improve the performance of many developing country economies by encouraging greater commercial use of biological wealth and exports of related products (Dutfield, 2006). However, it is cautioned that the economic benefits of TK should not be overestimated.

How this protection regime is to be accomplished is a separate debate, and has at its roots perceived differences in legal systems between the dominant Northern states and North-based international organizations and institutions and the customary legal practices of indigenous communities (Dutfield, 2006). The problem is not solely that different systems exist, the problem is also the assumptions and categorization of how each system operates, and the danger of over-generalization. For example, “the idea that traditional property rights are always collective or communal in nature while Western notions of property are inherently individualistic is an inaccurate cliché” (Dutfield, 2006: 3). Developing a new legal framework for IPR issues that would work within these complex cultural interactions requires some creativity and flexibility in order to simultaneously address the various types of legal and regulatory IPR systems that exist formally and informally around the world, and to bring together the various international legal guidelines under one authoritative umbrella.

Prabuddha Ganguli (2000) advocates for an agreement that combines TRIPS, the CBD and the International Convention for the Protection of New Varieties of Plants (UPOV). In this section, I have taken this idea and modified

19 Please see the International Union for the Protection of New Varieties of Plants (UPOV) website for further information: http://www.upov.int/.
it slightly, and developed a reasonable (albeit skeletal) outline of what Model Treaty that combined the TRIPS, CBD and the African Model Law (AML) might encompass. The objective of this exercise is to address and stimulate ideas for an international treaty that speaks to the needs of both Northern and Southern patenting and IPR protection requirements.

1. Source and Ownership of Legislation

Despite wide-ranging criticisms and intense skepticism in the South on the ability of the WTO to provide a true level playing field for all States, it has been demonstrated that the WTO is nevertheless a relatively democratic institution, although there is clearly (and always) areas for improvement (Trebilcock and Howse, 2005). Furthermore, it is likely the most capable institution currently operating internationally to develop and enforce an international treaty that would effectively protect and enforce agreed-upon IPRs while maintaining the sovereignty of each State to protect TK and the rights of Indigenous communities. Aspects of this agreement as outlined below will benefit cooperation with other international organizations, such as WIPO, for requirements that fall outside of the mandate of the WTO.

This is understandably a controversial assertion, and at first glance it appears to operate under the assumption that the WTO is capable of providing a level playing field for all states. With the advent of TRIPS, that is clearly not the case. However, the real assertion here is that at present moment in international legal history, there is no other institution that is capable of having the same level
of democracy and enforceability. It is the economic component of IPRs and the WTO that make them a natural fit for legal oversight.

To create a forum of inclusivity, and to support the bureaucracy needed to administer the complicated recommendations outlined here, the ownership of this Model Treaty must be jointly held between WTO and another organization such as WIPO. This project may be agreeable for all parties as it combines the strength of WTO with the mediation, experience, and expertise of WIPO that would be integral to any treaty that seeks to move beyond the current international legal system into one capable of addressing the cultural roots of law and legal behavior. In order to facilitate this relationship, a joint WTO-WIPO committee, comprised in part by members of each organization and in part by indigenous representatives from around the world, should be formed to oversee the bureaucratic functions of such a Treaty and ensure proper implementation and adherence by member states.

Additionally, in an increasingly complicated and dense international economy, it is important for institutions such as the WTO to maintain cooperative and communicative relations with other organizations, such as the various branches of the United Nations, to accomplish their trade objectives effectively and efficiently.

2. Enforcement Mechanisms

As advocated in the first section, the source and ownership of the legislation will establish the legitimacy and realization of enforcement
mechanisms to ensure state compliance. The WTO legislation provides for numerous provisions for democratic and universal enforcement of the Agreements under the WTO umbrella via the Dispute Settlement Body (DSB) (Trebilcock and Howse, 2005). The DSB outlines robust enforcement mechanisms for parties who violate WTO rules, including retaliatory options such as compensation, suspension of concessions or sanctions (Trebilcock and Howse, 2005).

Whether this will in fact work in the Treaty being proposed is unclear, but with any legal evolution risks must be taken to establish best practices. Giving dual power over natural resources associated with TK to states and knowledge-holders may create difficulties in drafting legally useful contracts, and may create problems for other legal regimes that impact indigenous rights by setting a precedence of international participation of sub-state actors. Whether this new agreement will be able to trump the long-standing right of states to maintain Permanent Sovereignty over Natural Resources is debatable, but the inevitable evolution that occurs in every legal system makes it a possibility.

3. Applicability

Because this Model Treaty is under the auspices of the WTO, the applicability is limited to members of the WTO. However, it is arguable that most countries that trade internationally are currently members, with the exception of a few notables, such as Russia. Like TRIPS and the CBD, this Model Treaty would require all states to develop or alter domestic legislation to conform to its
principles. In addition, if this legislation is to fall within the purview of the WTO, it will have to trump or replace TRIPS for legal consistency.

Unlike TRIPS, however, this legislation would incorporate culturally-diverse options for different states regarding contentious issues, such as TK. States would not be required to allow for the patenting of plants, genetic and biological resources under any type of system, if it is perceived to be incompatible with their cultural worldview. Rather they would be required to specify the manner in which these resources are to be approached for bioprospecting according to the cultural and economic desires of the country. If a country strongly disagrees with the patenting of biological or genetic resources, as many do, they must specify this in the legislation they adopt or adapt their current system to ratify the Treaty.

For consistency the Treaty must provide specific and clearly outlined options for the types of patenting system that countries may adopt based on widespread consultations and input from participating countries and indigenous communities. Some options might be: the standard system as outlined under TRIPS; the patenting of inventions and plants, but not biological resources (or vice versa); and, no patenting of plants or biological resources at all. Within this last option might be a requirement for a regular review mechanism for domestic legislation, to ensure that requirements continue to meet the cultural and economic needs of the individual country. If no patenting of plant, animal, and/or biological resources is allowed, the country must specify what qualifies under those designations, and how or where exceptions might apply.
This becomes complicated because within one country there might be numerous different communities with different interpretations of IPRs and different needs. If a country possesses this array of diversity, there should be a mechanism built into the treaty to allow for a number of domestic options to be used at the discretion of the knowledge-holders. The state must give leeway to the needs of each local community. This should be more flexible than the sui generis option provided for in the CBD. Because of this complication, it would be ideal if indigenous communities were able to sign onto the Model Treaty to indicate their rights and needs to other states and state members. This recommendation raises a host of problems, including: an unlimited number of other 'communities' (NGO's, businesses, etc) that may feel they are entitled to equal representation within the regime, concerns over the democratic legitimacy of indigenous representatives (and how to allocate seats), and, giving sovereignty and self-determination to sub-state groups. However, if culture and law are to be understood as intertwined, there are few other options if culture and the environment are to be preserved.

4. Protection of Rights and Compensation for Indigenous Communities

The legitimacy and robust enforcement mechanisms of a WTO Treaty will provide the Model Treaty with the substance it requires to be able to effectively protect the rights of Indigenous communities and the TKs they possess. The rights of these communities are neatly outlined in the AML, and should apply to all indigenous communities regardless of their geographical location. An
effective and workable definition must be developed to identify what peoples may be considered “indigenous” and a succinct and practical test developed to identify what constitutes TK (Shüklenk and Kliensmidt, 2006). ABS and compensation schemes must be an optional and enforceable part of the Model Treaty, and it must outline a minimum established level of compensation that is reviewed on a relatively frequent basis to ensure it remains relevant to the situation of markets internationally. However, they should not just relate to monetary restitution, but should rather facilitate innovative options that can be monitored and mediated by the central secretariat to ensure that all stakeholders are included in the structuring and negotiation of agreements. Ideally, the joint WTO-WIPO Treaty Oversight Council would review contracts to ensure compliance with the Model Treaty and appropriate and consensual compensation is leveraged.

Furthermore, Indigenous communities or TK experts who have provided an informed consented to a patent of their knowledge or a resource must have the option for withdrawing their consent to the patent for demonstrated and valid reasons (such as environmental degradation or the demonstrated misuse of the product) (Gupta, 2004). An arbitration mechanism would be necessary to deal with such disagreements between indigenous communities and patent holders. This function lies outside of the reach and mandate of the WTO to monitor and enforce, and thus could be incorporated into the work of the WTO-WIPO Treaty Oversight Council to ensure that these issues are addressed and enforced. This Treaty Oversight Council should also have a grievances section that is widely
accessible and culturally sensitive so that indigenous groups who wish to lodge a complaint against another state or company, and vice versa, have the opportunity. Ensuring widespread accessibility for people and communities (which are often isolated or disenfranchised) is a tricky proposition, but one that is absolutely integral to the international evolution of this legal issue and to the protection of the rights of some of the most vulnerable people in the world.

5. The Development of a Database to Monitor TK From Around the World

Although there are numerous problems with developing a database of TK from around the world, this would work to support the enforcement mechanisms of the Agreement and help curb biopiracy and misappropriation of TK. There are numerous initiatives around the world that are attempting to put together databases on TK from various countries (such as China and India) and regions that could be used as models for a worldwide system.\(^2\) However, developing one database that includes all of this knowledge requires a massive amount of funding, bureaucracy and research capabilities, which are each, separately and together, problematic. One idea would be to work a mechanism into the Treaty to require that a certain percentage of patent fees or profits obtained from patents based upon or incorporating TK might be earmarked for the development and maintenance of such a database.

\(^2\) Please visit WIPO website for links to a selection of these databases and view WIPO’s initiatives in this area at [http://www.wipo.int/tk/en/databases/tkportal/](http://www.wipo.int/tk/en/databases/tkportal/) (last accessed 22/10/07). WIPO is also currently in the process of developing a database on Access and Benefit-Sharing Agreements, information for which may be found on their website at [http://www.wipo.int/tk/en/databases/contracts/](http://www.wipo.int/tk/en/databases/contracts/) (last accessed 22/10/07).
6. A Mechanism for Environmental Protection and Resource Sustainability

Perhaps the most important, and probably the most controversial, aspect of this Model Treaty would be an emphasis on the granting of patents and use of patented resources only within an environmentally sustainable manner. This would be extremely difficult to identify, define, and enforce, as each country has different regulations and definitions of what constitutes environmental protection and sustainability as well as enforcement capacity. Abbott (2005) presents a persuasive argument for objective impact assessments to be completed prior to new intellectual property arrangements, in recognition that intellectual property rules “...have significantly different public welfare implications depending on their field of application and the level of development of the implementing country” (77). This, again, is not within the mandate of the WTO to enforce, but may be an obligation within the Model Treaty for countries to adopt some form of environmentally sustainable laws and requirements for impact assessments.

The above model attempts to combine the legitimacy and enforcement mechanisms of TRIPS with the flexibility and cultural relativity of the CBD and AML. There are numerous problems with this approach, and it is questionable whether something like this would ever be approved by WTO members (especially the members with the largest economies, such as the United States or European Community). Even if all the members acquiesced to such an Agreement, several major concerns might be: 1) How does a country that is not a member of the WTO benefit from, and enforce, these rights?; 2) the WTO is not
mandated to collect TK, oversee the enforcement of domestic patenting practices or address the environmental impact of their Agreements; 3) The flexibility of the Agreement might create problems in terms of member implementation, and interpretation and enforcement within the DSB; and, 4) the Agreement still may not be able to fully address international economic power imbalances and the political economy of member States. There are ways to mitigate these concerns and dozens of others that haven't been addressed here. It is important to note that truly no international regime is going to be perfect, but what is important is that law evolves based on past successes and mistakes, and new ideas are given contemplation before being discarded (or rashly implemented).

4. Conclusion

This Chapter attempts to bring together the many IP and IPR issues addressed in the previous chapters with a cultural-legal analysis in order to provide greater depth and knowledge to the discourse surrounding TK and ABS. Although the policy and legal prescriptions presented in this Chapter are broad, they are intended to be so in order to capture the necessary flexibility and generality that is required if meaningful and situational solutions are to be found. Applying a cultural analysis to this legal issue creates a bridge across divided perspectives and perceptions, and importantly, "cultural concepts may fill in the facts not only through images of self, action, and inner states but through a naturalized view of human relationships themselves." (Rosen, 2006: 113).
It is clear that Cultural-Legal Relativity has a strong role to play in understanding the complex interfacing of TK and associated biological resources, IPRs, patenting, and ABS. Understanding this subtle dance between law and culture can only increase the way in which law is utilized to mitigate differences and structure behavior among stakeholders to a relationship. There are considerable difficulties with the policy and Model Treaty recommendations of this Chapter, but there is also an essence of hope, whereby the present status of the international legal system is to be understood as flexible and evolving by virtue of its dynamic relationship with culture and knowledge. Understanding this presents options for bright and meaningful future possibilities.

More than anything else, this Chapter aims to stimulate creative and positive discourse that is able to step away from invectives rooted in historical wrongs and consider a future where, informed by said past wrongs, harmonious legal and cultural relationships are anchored into the structures of international interactions.
Conclusion

In an interdependent global world, the forces, significations and materiality of international law are daily realities for people around the world. Many of them are socially and economically hindered by the consequences of legal and political decisions and historical experiences that have structured the power relationships among states. International law and domestic law deeply affect the cultural and community legal systems that indigenous people operate under, and can present a plethora of complexities when trying to create space for discourse and cultural accommodation. If individual state citizens have little say over actions taken on the international stage (except peripherally via informed voting in some countries), then marginalized indigenous groups have even less. Indeed, “Indigenous groups often are not provided equal political space by local and national political systems, are discriminated against, suffer political obstacles similar to other indigent communities, and face other political obstacles to fair representation in national political systems” (Bluemel, 2005: 82)

This thesis was organized into three chapters. The first Chapter outlined the theory of Cultural-Legal Relativity and how it can be succinctly applied to considerations of intellectual property, and intellectual property rights, and the access and benefit-sharing of traditional knowledge and associated biological resources. Chapter One addressed the intersection of culture and law, and the role of power at the intersections of international law and bioprospecting. Cultural-Legal Relativity has thus far been used only within the domestic realm to
highlight the interaction, connection, and mutually-reinforcing relationship that exists between law and culture.

The second Chapter broadly examined the various international legal texts that play a role in facilitating IPRs and ABS agreements, primarily the Convention on Biological Diversity (CBD) and the World Trade Organization’s Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreements. These and others were examined from a critical perspective rooted in the literature on the topic.

The final Chapter of this thesis brought together the many strands of social, political, economic and legal categories that relate to TK and ABS, and examined them through the Cultural-Legal Relativity lens. This analysis proved that there is a place for Cultural-Legal Relativity theory in examining the role between international law and culture. Using critiques of the current international legal situation of IP law from the second and third Chapter and Cultural-Legal Relativity theory, the final section of Chapter Three outlines a number of important policy options to improve the current ABS system and presents a Model Treaty that utilizes innovative ideas to inform and spur the next evolution of international IP law.

At the heart of IPRs and other international and human rights activities lies the issue of gross social inequities and the very prevalent social problems and marginalization found among indigenous groups around the world. Any type of ABS agreement, whether as an international regime or in treaty form, would only benefit Indigenous communities that had complete rights and access to their own land (Dutfield, 2006). “[I]t must be cautioned that devising the most sophisticated
and elaborate system is useless if the potential users and beneficiaries remain unaware of its existence or have more immediate concerns, such as extreme poverty, deprivation and societal breakdown caused by the insufficient recognition of their basic rights. It will also fail if it does not take their world views and customary norms into account" (Dutfield, 2006: 23).

Resolving basic impediments to enfranchisement is a complex task, as

Empowerment of indigenous peoples is no panacea to planetary environmental and human problems. Empowerment of indigenous peoples in resource decision-making brings no guarantee of more equitable or sustainable local outcomes, as many indigenous peoples have internalized many of the values of industrial society. Yet empowerment of indigenous peoples is a necessary step in creating new political and cultural spaces in which to shape alternatives to the New World Order. In this sense, then, empowerment of indigenous peoples will involve the decolonization of indigenous spaces, and the development of new ways of seeing the relationships between resource industries, their host communities, and the wider industries and communities that rely on them (Manus, 2005: 641).

Benefit-sharing should not be expected to compensate or redress social inequities or be relied upon to provide economic reform for impoverished communities, as it is just one aspect of social upliftment, and ultimately that responsibility rests with the state (Shüklenk and Kleinsmidt, 2006). However, “a sense of fairness necessitates that the holders of knowledge are compensated when that knowledge is used to generate financial gain for commercial operators” (Shüklenk and Kleinsmidt, 2006). Understanding the balance between domestic obligations and international law and addressing the precarious position in which indigenous people often reside will ultimately have to be the foundation of any new regime that has any chance of succeeding in more than a couple of legal and cultural environments around the world.
The nuances of international IPRs and IP law in relation to TK presents an interesting example of the shifting of international law from constituting a system governed by diplomatic relations among states to a more complex and layered legal order where non-state actors are also major players, and the emphasis in legal negotiation and development is consistently situated on the preservation of fundamental human rights, especially for less powerful and minority communities (Smagadi, 2006). The soft law evolution of international legal norms has shown that international regimes, despite often constituting soft law, are considered important and relevant towards achieving collective goals and protecting the rights of people around the world. This gives much hope to the evolution of international IP law.

However, as mentioned previously, patenting and effective ABS agreements are not a cure-all. Indeed, "[i]n the midst of debilitating diseases, illiteracy, political instability, and unspeakable economic exploitation, it would take far more than a compendium of strong patent laws to ‘induce’ inventiveness. Despite weak patent laws, Korea, India, Taiwan, and Singapore have transformed themselves into emerging industrializing giants by making huge investments in education and research and development, thus creating strong public infrastructure and vibrant export-oriented economies" (Mgbeoji, 2006: 36). Further research into the role of TK, development, and IPRs, with a Cultural-Legal Relativity lens, could provide important feedback to the assertions of this thesis as well as contribute valuable insight to the body of knowledge on this topic.
**Annex One: Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABS</td>
<td>Access and Benefit-Sharing</td>
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<tr>
<td>CBD</td>
<td>United Nations Convention on Biological Diversity</td>
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<td>CSIR</td>
<td>Indian Council of Scientific and Industrial Research</td>
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<td>DRIP</td>
<td>United Nations Declaration on the Rights of Indigenous People</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>FAO</td>
<td>United Nations Food and Agriculture Organization</td>
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<tr>
<td>ICBG</td>
<td>International Cooperative Biodiversity Groups</td>
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<tr>
<td>ICCPR</td>
<td>International Covenant on Civil and Political Rights</td>
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<tr>
<td>ICESCR</td>
<td>International Covenant on Economic, Social and Cultural Rights</td>
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<tr>
<td>IP</td>
<td>Intellectual Property</td>
</tr>
<tr>
<td>IPRs</td>
<td>Intellectual Property Rights</td>
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<tr>
<td>MAT</td>
<td>Mutually Agreed Terms</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>NIC(s)</td>
<td>Newly Industrialized Country(ies)</td>
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<tr>
<td>PIC</td>
<td>Prior Informed Consent</td>
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<td>TK</td>
<td>Traditional Knowledge</td>
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<tr>
<td>TRIPS</td>
<td>Agreement on Trade-Related Aspects of Intellectual Property Rights</td>
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<tr>
<td>WIPO</td>
<td>World Intellectual Property Organization</td>
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<tr>
<td>WTO</td>
<td>World Trade Organization</td>
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<tr>
<td>UDHR</td>
<td>Universal Declaration on Human Rights</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNEP</td>
<td>United Nations Environment Program</td>
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<td>US</td>
<td>United States</td>
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<td>USPTO</td>
<td>United States Patent and Trademark Office</td>
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Annex Two: Glossary of Terms

Access Benefit-Sharing (ABS) Agreements: This is the process of sharing the benefits arising from the patenting and profits of biological and genetic resources equitably among all parties. This process is legally stipulated in Article 1 and further elaborated in Article 15 of the Convention on Biological Diversity (CBD). For further information please see the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization (Secretariat of the Convention on Biological Diversity, 2002).

Biological Diversity (also Biodiversity): “Article 2 of the 1992 Convention on Biological Diversity defines the term, “biological diversity”, often shortened to “biodiversity”, as meaning the “variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems” (The World Intellectual Property Organization Glossary).

Biological Resources (also see Genetic Resources): “Article 2 of the Convention on Biological Diversity, 1992 defines the term 'biological resources' to include 'genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity’” (The World Intellectual Property Organization Glossary). This thesis uses Biological Resources and Genetic Resources interchangeably, although by the definitions provided here they are slightly different. Where possible in this thesis, Biological Resources was employed over Genetic Resources because the definition is broader and includes Genetic Resources within its boundaries. Many of the authors cited in this thesis separated Biological and Genetic resources into two distinct categories, and that dichotomy was respected to the greatest degree possible when citing their work. However, they may be understood as interchangeable when examining the issue from a broad perspective.

Biopiracy: According to the ETC Group website (2007), “[b]iopiracy refers to the appropriation of the knowledge and genetic resources of farming and indigenous communities by individuals or institutions who seek exclusive monopoly control (patents or intellectual property) over these resources and knowledge”.

Biotechnology: Article 2 of the 1992 Convention on Biological Diversity defines the term “biotechnology” as meaning “any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use” (The World Intellectual Property Organization Glossary).

**Genetic Material:** Article 2 of the 1992 Convention on Biological Diversity defines the term, "genetic material" as meaning "any material of plant, animal, microbial or other origin containing functional units of heredity" (The World Intellectual Property Organization Glossary).

**Genetic Resources (also see Biological Resources):** "Article 2 of the 1992 Convention on Biological Diversity defines the term, 'genetic resources' as meaning 'genetic material of actual or potential value.'" (The World Intellectual Property Organization Glossary).

**Intellectual Property:** Intellectual Property is defined by the World Trade Organization (WTO) Glossary as "[o]wnership of ideas, including literary and artistic works (protected by copyright), inventions (protected by patents), signs for distinguishing goods of an enterprise (protected by trademarks) and other elements of industrial property". Article 2(viii) of the Convention Establishing the World Intellectual Property Organization (page 2) outlines the following rights as inclusive under the label of Intellectual Property:
- literary, artistic and scientific works;
- performances of performing artists, phonograms, and broadcasts;
- invention in all fields of human endeavor;
- scientific discoveries
- industrial designs
- trademarks, service marks, and commercial names and commercial designations;
- protection against unfair competition;
- and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

**Intellectual Property Rights:** "Intellectual Property Rights are like any other property rights – they allow a creator, or owner, of a patent, trademark, or copyright to benefit from his or her own work or investment. These rights are outlined in Article 27 of the Universal Declaration of Human Rights, which sets forth the right to benefit from the protection of moral and material interests resulting from authorship of any scientific, literary, or artistic production. The importance of intellectual property was recognized in the Paris Convention for the Protection of Industrial Property in 1883 and the Berne Convention for the Protection of Literary and Artistic Works in 1886" (WIPO, date unknown).

**Sui Generis:** "Sui generis is a Latin phrase meaning "of its own kind". A sui generis system, for example, is a system specifically designed to address the needs and concerns of a particular issue. Calls for a "sui generis system" for TK protection are sometimes heard. This could mean a system entirely distinct from

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22 The WTO glossary may be found at:
http://www.wto.org/english/thewto_e/glossary_e/glossary_e.htm
the current intellectual property (IP) system, or alternatively a system with new IP, or IP-like, rights” (The World Intellectual Property Organization Glossary).

**Sustainable Use:** The use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations (The Secretariat of the Convention on Biological Diversity Glossary).

**Traditional Knowledge:** The WIPO Secretariat uses the term "traditional knowledge" in two senses. First, within the IGC and elsewhere, "traditional knowledge" (or "TK") is used in a narrow sense to refer to the content or substance of knowledge that is the result of intellectual activity and insight in a traditional context, and includes the know-how, skills, innovations, practices and learning that form part of traditional knowledge systems, and knowledge that is embodied in the traditional lifestyle of a community or people, or is contained in codified knowledge systems passed between generations. It is not limited to any specific technical field, and may include agricultural, environmental and medicinal knowledge, and knowledge associated with genetic resources.

Second, previously for the purposes of the fact-finding missions carried out by WIPO in 1998-1999, the WIPO Secretariat used the following all-encompassing and working concept of 'traditional knowledge':

“‘traditional knowledge’ ... refer[s] to tradition-based literary, artistic or scientific works; performances; inventions; scientific discoveries; designs; marks, names and symbols; undisclosed information; and all other tradition-based innovations and creations resulting from intellectual activity in the industrial, scientific, literary or artistic fields. “Tradition-based” refers to knowledge systems, creations, innovations and cultural expressions which: have generally been transmitted from generation to generation; are generally regarded as pertaining to a particular people or its territory; and, are constantly evolving in response to a changing environment. Categories of traditional knowledge could include: agricultural knowledge; scientific knowledge; technical knowledge; ecological knowledge; medicinal knowledge, including related medicines and remedies; biodiversity-related knowledge; “traditional cultural expressions” (“expressions of folklore”) in the form of music, dance, song, handicrafts, designs, stories and artwork; elements of languages, such as names, geographical indications and symbols; and, movable cultural properties. Excluded from this description of TK would be items not resulting from intellectual activity in the industrial, scientific, literary or artistic fields, such as human remains, languages in general, and other similar elements of “heritage” in the broad sense.” (The World Intellectual Property Organization Glossary)

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Organization of African Unity (2000) *African Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the


