Cultural Challenges to Biotechnology: Native American Genetic Resources and the Concept of Cultural Harm

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Introduction

Our society currently faces many complex and perplexing issues related to biotechnology, including the need to define the outer boundaries of genetic research on human beings and the need to protect individual and group rights to human tissue and the knowledge gained from the study of that tissue. Scientists have increasingly become interested in studying so-called "population isolates" to discover the nature and location of genes that are unique to particular groups. Indigenous peoples are often targeted by scientists because "the relative isolation of the communities ensures minimal gene flow."[1] Such studies raise a number of issues related to privacy rights, property rights, informed consent, and group rights versus individual rights. These issues recently came to light in a case brought by the Havasupai Tribe and its members over the use of blood samples, handprints, and genealogy information initially taken by researchers at Arizona State University (ASU) for a diabetes project. These materials were then allegedly used by researchers at ASU and other institutions for a multitude of unauthorized purposes, including research into the frequency of mental health disorders and the origin of human populations.[2] Consequently, the affected members sued for damages under several legal theories. However, underlying all of these claims was the allegation that this unauthorized use of genetic resources and data not only injured the individuals who gave samples, but also caused a collective harm to the Havasupai Tribe and the cultural and spiritual beliefs of its members.[3]

The predominant approach of bioethicists is to determine the limitations of such research according to the secular systems of ethics generated by Western philosophers over the past couple of centuries. This ethical framework also governs our legal concepts of property and privacy, which construct the actual rights of litigants in American court systems. Thus, contemporary courts distinguish between the property rights held by persons while the body is intact versus the rights held when blood and tissue are removed.[4] This difference suggests that certain interests are better adjudicated under contract or tort theories, while other interests merit protection under privacy law, and still other interests merit no protection (such as what appear to be "privacy" rights articulated in the context of human bodies that are dead). Thus, claims made by an individual or group that are perceived

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to be asserting a cultural or spiritual harm based on the alleged misuse or mishandling of blood, tissue, or knowledge gained from DNA analysis may not be cognizable within existing legal theories.

This article examines the intercultural context of issues related to genetic research on Native peoples. The article probes the disconnect between Western and indigenous normative frameworks to assess the appropriate use of blood and tissue samples taken from Native peoples, as well as the appropriateness of securing information from these human resources, whether such efforts are directed toward commercial profit, knowledge used to benefit the national or global populace in general (i.e., the "public good" argument), or knowledge used to benefit the discrete population being studied. I suggest that the interests of Native groups cannot be accurately understood or assessed within our legal system unless we attempt to understand the different normative conceptions of property, ownership, and privacy that exist for these groups. This article situates the issue of Native rights to genetic resources within a larger cultural rights framework that is capable of evaluating distinctive claims for cultural harm. This article concludes that, along with new technologies, there is a need to formulate new concepts of rights, and it suggests an intercultural framework for accommodation based on theories of intergroup equality and fundamental human rights.

I. The Legal and Moral Framework for Evaluating Native Claims

The dominant legal framework used to assess rights to human blood and tissue is constructed around the tangible products to be gained from a human body.[5] The information gleaned from the study of these materials represents an intangible product that is normally assessed under principles of intellectual property law. Importantly, however, the normative basis for both tangible and intangible aspects of biomedical research is founded on the same suppositions and principles. This section of the article discusses the dominant discourse on concepts of property and privacy and then highlights the intercultural implications of this discourse as it applies to rights in genetic resources.

A. Property Law: The Basic Structure Applicable to Tangible Resources

Under American law, property is conceptualized as a "bundle of sticks" (each stick representing a right or privilege) that governs the relationships between persons with respect to tangible resources.[6] This bundle typically includes the rights to include, exclude, use, sell, transfer, purchase, and encumber, and the model reflects the pervasive idea that there are "multiple rights in a single piece of property" and that ownership occurs in "multiple layers."[7] Importantly, then, the law of property is focused on allocating rights and responsibilities of ownership between private parties and between individuals and the collective society. According to this paradigm of property law, private property rights are of predominant importance, and theories of economic efficiency, moral rights, social utility, and contract law sustain the importance of these rights. Relying on the venerated utilitarian theory, contemporary theorists such as Richard Posner posit that the legal protection of property rights has an important economic function: to use resources efficiently.[8] Posner's theory neatly distills the three criteria of an efficient property rights system:

1. **Universality:** All resources should be owned or capable of being owned by someone, except resources that are so plentiful that everyone can consume as much of them as he or she wants without reducing consumption by anyone else.
2. **Exclusivity:** Owners should have the incentive to incur the costs required to make efficient use of resources owned by them.
3. **Transferability:** If a property right cannot be transferred, then there is no way to shift a resource from a less productive to a more productive use through voluntary exchange.[9]

A key question for consideration is whether this supposedly "universalist" conception of property rights can apply across cultures and across time periods. Many property theorists argue that it can. For example, Harold Demsetz asserts that the emergence of private property systems among Native Americans engaged in the fur trade was a response to modernization and the market economy that Europeans brought to the New World.[10] Demsetz theorizes that Native Americans were persuaded to adopt these more complex and nuanced private property systems because they shared a basic need for efficiency and utility.

How would we evaluate such claims within an intercultural framework? Although Native peoples' property systems are tribally specific, they share many similarities and are generally based on a very different normative framework from Western property systems. Tribal property systems tend to be group oriented and may have aspects of both collective and communal ownership. Collective ownership systems place ownership in the community, but may allow individuals to acquire superior rights to or responsibilities for part of the collective property. Communal ownership sys-

tems, on the other hand, do not permit individuals to acquire special rights to any part of the property vis a vis other community members.

Native property systems also include a "bundle of rights" that attach to property, but most often these are couched in terms of certain duties and responsibilities that people have with respect to resources. The notion of alienability is not a core feature of such systems, although many types of property are alienable, either within the society or even outside of the society. Other categories of objects may be strictly inalienable, depending upon the purpose of the object (e.g., as fundamental to the collective future of the group or its cultural expression) or because of specific group responsibilities or duties for the appropriate care of objects.[11]

Indigenous property systems may also respond to values that are not generally encompassed within Western property law. For example, there may be a notion that certain resources have a value that is sacred or spiritual in nature. Such ideas generally stem from world views that adopt different metaphysical premises about the nature of the relationship between human beings and the rest of the universe. The purpose of the object and duties associated with the object respond to these relational values, rather than to the values about material profit and utility that undergird the Western utilitarian model.

Thus, although Native peoples clearly have concepts of property and also of rights, duties, and responsibilities, the normative basis for these concepts is quite different from Anglo-American society. Robert Clinton points to an essential difference, which is that Western thought "begins with the isolated individual separated from organized society," and therefore focuses extensively upon the relationship of the individual to the state.[12] "Rights are legal constructs that limit state action."[13] Or, in relation to interpersonal disputes, rights can be asserted by one individual against another in order to maintain the relationship deemed appropriate by social norms. In comparison, within tribal cultures, individuals do not exist "isolated from others in some mythic, disorganized state of nature."[14] Rather, "human beings are born into a closely linked and integrated network of family, kinship, social and political relations."[15] Thus, individual rights and responsibilities exist only within the framework of these relationships.[16] Norms reinforcing communal and group rights "derive from basic principles of mutual respect and respectful behavior within and between kinship and tribal groups."[17]

These norms are importantly represented in Native property systems and are often misunderstood by Anglo-American scholars. Theorists such as Garrett Hardin typically associate "communal property systems" with inefficiency (e.g., "the tragedy of the commons"), but this view makes no sense in a society that is committed to sharing ownership of resources and also to rigorous regulation of planting, harvesting, and land use.[18] This communal approach ensures that all community members respect the central ethic that resources must be used in a way that is productive and beneficial to all members, including future generations. Not surprisingly, the same normative differences characterize Western and Native approaches to intangible resources.

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B. Intangible Resources and "Intellectual Property Law"

Anglo-American property law recognizes various categories of property rights in intangible resources, including artistic creations (mainly protected by copyright law), technological innovations (mainly protected by patent law), and commercial endeavors (mainly protected by trademark law, but also protected by trade secret law and legal doctrines, such as misappropriation). Again, these legal protections primarily rest on a utilitarian moral framework positing that knowledge and ideas are the common resource of all humankind and normally should be freely available to all. In exceptional circumstances, however, society must accord property rights when necessary to preserve certain social values and interests (e.g., to reward creative enterprise and technological innovation, to prevent economic harm to entrepreneurs, and to protect consumers against fraudulent or misleading conduct by competitors).

Anglo-American intellectual property law provides a poor fit for indigenous peoples' concerns about protecting intangible cultural resources, in part because the suppositions about knowledge are culturally quite different for Native peoples. Article I of the U.S. Constitution recognizes the authority of Congress to enact statutory protections through copyright and patent law in order to "promote the progress of science and

useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."[19] The state awards a limited monopoly to certain individuals to provide economic incentives to create novel and useful works. Knowledge and ideas are the common property of all members of society; individual rights to creations and inventions are the exception rather than the rule. As Justice Brandeis observed in *International News Service v. Associated Press*, "The general rule of law is, that the noblest of human productions – knowledge, truths ascertained, conceptions, and ideas – become, after voluntary communication to others, free as the air to common use."[20]

However, two problems exist with fitting Native claims into this model. First, the structure of the model is not amenable to Native claims because it was generated in response to the cultural assumptions about property rights within Western tradition. For example, both copyrights and patents protect "new" knowledge (e.g., novel inventions, original expressions), rather than existing knowledge, but much of what Indian nations seek to protect is "traditional" knowledge that has longstanding importance to the group. In addition, Native societies may be reluctant to "fix" knowledge into a tangible medium that objectifies the intangible qualities of the knowledge. An additional problem is that copyrights and patents generally secure the rights in an individual or entity that has standing as an individual (e.g., a corporation). Within tribal communities, there may be an assumption that knowledge is part of the group's overall identity, but that certain members have the duty to keep the knowledge on behalf of the group and that it would be inappropriate for such individuals to share the knowledge, even with other members of the group. Finally, copyrights and patents establish a limited, rather than perpetual, protection of the invention or creation. American property law frowns on monopolies because they are seen as causing economic inefficiency and promoting socially destructive behavior, such as discouraging competition. But limited monopolies are acceptable to the extent that they promote socially beneficial behavior, such as increased innovation. These assumptions about ideal social behavior are based on economic values and generally do not resonate with Native peoples, who seek to protect intangible cultural resources based on values and beliefs that stem from their own cultural traditions.

Secondly, the "voluntary communication" point suggests that somehow individuals knowingly give up their rights to knowledge when it is expressed to others. However, Native people would charge that cultural knowledge is being gathered and has historically been gathered through practices that are hardly voluntary on the part of the Native group.[21] For example, at the turn of the century, anthropologists flooded the reservations, seeking to record valuable cultural data about Native Americans before they became "extinct."[22] Today, some New Age gurus have appropriated aspects of Native culture, such as sweat lodge ceremonies, for their own commercial use.[23] Thus, exploitation informs both historical and contemporary practice and must be a factor in adjudicating Native peoples' rights to cultural knowledge.

C. The Effect of Privacy Law

As Radhika Rao notes, individuals may be afforded autonomy over their bodies under the umbrella of constitutional privacy rather than rules of property.[24] Cases protecting rights to contraception and abortion, for example, have constructed the human body as the subject of a privacy interest, and not the object of property law. The constitutional right of privacy consists of two principal components: the right of personal privacy, which is sometimes characterized as a right to bodily integrity (a liberty interest), and the right of relational privacy. According to Rao, the right of "personal privacy preserves the integrity of the body, safeguarding its inviolability. It includes the right to resist forced invasions of one's body and the right to prevent its physical alteration, but it does not necessarily encompass the affirmative exercise of power over the body."[25] In comparison, the right of relational privacy immunizes certain "intimate and consensual relationships" from state interference.[26] Individuals are thus entitled to create and maintain intimate associations apart from the state, but the doctrine in no way shields "commercial transactions between strangers."[27]

Rao observes that while property consists of a "bundle of rights" possessed by persons relative to objects, privacy may similarly be characterized as a cluster of personal interests that encompasses the right to possess one's own body and exclude others. Unlike property, however, privacy omits the right to use and the right to transfer and instead focuses on the right to include some individuals by joining with them in close personal relationships. A number of cases exist in which claimants assert rights of control over bodies or body parts either under property theories or under privacy theories. In the context of cases dealing with state interference into the right of a decedent to control disposal of his or her body, or the relational privacy right of family members to make such decisions free of state interference, the courts have largely held that "the next of kin's right in a decedent's remains is based upon the personal right to bury the body rather than any property right in the body itself," and that no common law

tort action for mistreatment of the corpse would trigger constitutional protection.[28] Rather, as the court noted in *Florida v. Powell*, "the [privacy] cases recognize only freedom of choice concerning personal matters involved in existing, ongoing relationships among living persons as fundamental or essential to the pursuit of happiness by free persons," and the "right of the next of kin to a tort claim for interference with burial... does not rise to the constitutional dimension of a fundamental right traditionally protected under either the U.S. or Florida Constitution."[29]

A further problem in these cases relates to the notion that the privacy right encompassing the right to make decisions concerning the integrity of one's body is a personal right that ends with the "death of the person to whom it is of value" and may "not be claimed by his estate or his next of kin."[30] The courts that have recognized a right to redress mistreatment of a corpse have largely done so based on the notion that the next of kin have a quasi-property right in the body of the decedent that may justify a claim in tort for mistreatment (although this tort is not one of constitutional dimension).[31] The property theory appears to be more appealing to some courts in the context of claims that arise from the appropriation of tangible body parts (e.g., corneas) without permission from the decedent or next of kin. For example, in *Brotherton v. Cleveland*, the Sixth Circuit Court of Appeals upheld a widow's right to control the disposal of her husband's body against a state law that authorized the coroner to extract corneas from decedents in the course of an autopsy without the consent of the next of kin.[32] The court found that the "aggregate of rights granted by the state to the wife in the body of her dead husband, which included a right to possess the body, to control disposal of the body, and to file suit for disturbance to the body, rose to the level of a property interest protected by the Constitution."[33] In this case, the state's interest in enhancing organ and tissue donation was not substantial enough to allow the state to disregard the property rights which it had already granted. The court relied on the broad "bundle of rights" conception of property and suggested the following:

> The importance of establishing rights in a dead body has been, and will continue to be, magnified by scientific advancements. The recent explosion of research and information concerning biotechnology has created a market place in which human tissues are routinely sold to and by scientists, physicians and others....The human body is a valuable resource....As biotechnology continues to develop, so will the capacity to cultivate the resources in a dead body. A future in which hearts, kidneys, and other valuable organs could be maintained for expanded periods outside a live body is far from inconceivable.[34]

As the court notes, modern innovations in biotechnology require us to identify the conceptual challenges posed by existing legal frameworks and work to develop alternative frameworks that can better address the interests of claimants.

D. Property and Privacy Law and the Protection of Rights to Genetic Resources

Reading the property and privacy cases together as a group, Rao concludes that property protects the owner's autonomy over that which is owned (envisioning a person who "owns" and is thus distinct from his or her body), whereas privacy safeguards an "inviolable corporeal identity" (envisioning the person as "embodied" and the body as personified).[35] This notion is bolstered by the notion that property rights attach to "objects" whereas privacy rights attach to "persons." The boundary between the body as person and the body as object is drawn according to basic suppositions that include whether the body is characterized as "alive" (i.e., susceptible to privacy rights) or "dead" (i.e., not susceptible to privacy rights); whether the body is "whole and intact" (i.e., considered a "person" who can maintain privacy rights to avoid unauthorized intrusion); or whether body parts have been separated from the body and thus may be commodified. According to Rao, this conceptual bifurcation triggers several concerns.

The first issue is that of fragmentation. The legal conception of property produces a fragmented relationship between the body and its owner. The body parts may be severed from the owner, and an owner's "bundle of rights" can be disaggregated and assigned to several different parties. This issue was apparent in the Moore case, in which the patient's spleen, blood, and tissue were removed in the course of medical treatment and then used by the treating physicians to develop a patented cell line.[36] The California Supreme Court held that upon his voluntary consent to removal of these body parts, Moore surrendered any property interest in his organs and tissue. The researchers, on the other hand, gained a protected property interest when they used the organ and tissue to develop a patented cell line. In contrast, privacy law forecloses fragmentation by identifying the person with his or her physical presence. Thus, disassembling rights in a human body may be inconsistent with the privacy paradigm, which identifies the body with the person and maintains the wholeness of the body to preserve its physical identity.

The second issue is instrumentalization. Privacy is a purely negative entitlement that guarantees security from governmental interference, whereas property possesses an affirmative dimension that enables purposive activity. Constructing the body as property allows the freedom to "instrumentalize one's body by technologically manipulating it or otherwise putting it to productive use."[37] Privacy, on the other hand, perceives the body as a passive entity to be protected (while alive) from physical interference and alteration, but not mined, manipulated, or exploited for profit. Given this tension, conflicts exist between notions of individual autonomy (e.g., to protect sanctity of body, to use body for commercial profit) and ownership of the body, as well as potential conflicts between individual use of the body and governmental regulation of such use.

The third issue is alienation. If the body is property, it can be carved up into its component parts, and those parts can be separated from the original owner and transferred to others. After all, alienability is a central norm of property law. Personal privacy, on the other hand, does not carry the right to sell or do anything with one's body. Moreover, the constitutional concept of relational privacy safeguards intimate, consensual relationships but not commercial relationships.

The fourth issue is expropriation. Under the Due Process clause, deprivations of property are considered constitutional if rationally related to a legitimate state interest, whereas invasions of privacy warrant heightened scrutiny. Moreover, property can be taken from one person and reassigned to another upon payment of compensation, whereas privacy rights are specific to the individual and cannot be reassigned. As Rao demonstrates in the context of the *Moore* case, the two theories offer radically different forms of protection for the human body. Under a property theory, the state of California would have the power to extract Moore's spleen against his will for any public purpose as long as the state paid just compensation for this "taking."[38] Under a privacy theory, Moore would have a constitutional right to refuse removal of his spleen from his body.[39] "The state could not seize his spleen unless it demonstrates that such a course of action does not 'unduly burden' his liberty interest in his body or is narrowly tailored to serve a compelling state interest of the general public."[40]

The final issue is inequality. Property rights are inherently unequal in the sense that some individuals may own a great deal of property while others may have little or none. Property theories actually "presuppose such disparities as perfectly natural and normal."[41] Inequalities in privacy, on the other hand, are viewed as especially problematic because all persons possess an equal capacity for privacy and an equal right to be free from government interference.

As Rao observes, these concepts of property and privacy law as applied to the human body raise several challenges for the recognition of rights to genetic materials.[42] In the context of property law, intellectual property rights in the body (e.g., a gene patent) receive much greater protection than tangible bodily property, which is treated as "raw material." This disparity appears to be due to the association of individual labor and creative effort as the value that merits legal protection, rather than the value of the raw materials themselves (which may be considered "fungible" because they may be obtained from multiple donors). Secondly, property law privileges utilitarian values (e.g., economic efficiency, social utility) over other values (e.g., human dignity, autonomy, and equality), which are relegated to the realm of privacy law, when appropriate. Finally, property law prefers private property regimes to communal property regimes, and what is within the public domain is very contested.

In the context of privacy law, the challenges include the manner in which boundaries are established to maintain property claims versus privacy claims, and whether the complaint is directed toward the fragmentation of the body and extraction of genetic information, or toward the act of commercialization. The existing law demonstrates a fundamental disconnect between models for the protection of bodily property, such as genes and spleens, and models for protection of intellectual property in the body, such as gene patents and cell line patents.

It is quite clear that the property and privacy paradigms under domestic law are incapable of adequately addressing the concerns of Native peoples over the use of bodily materials or genetic knowledge. Rather, we must broaden the inquiry by recognizing the sovereign status of Native nations, including their right to maintain their own laws and legal systems, and the position of Native peoples as distinctive cultural groups who are entitled to maintain their cultural integrity against the laws and policies of the dominant society. Thus, tribal law and international law should form alternative frameworks to assess the concerns of Native peoples, as they are the cultural and political groups who are most impacted by domestic U.S. law and policy.

II. Understanding Cultural Claims: The Legal Protection of Native Cultures and the Concept of Cultural Harm

In many cases, the challenges to biotechnology raised by indigenous peoples have been lumped into a category of "cultural claims" that rests on some vague concept of "cultural rights." The standard model used

to evaluate cultural claims suggests that such rights ought to be adjudicated within pluralistic societies according to a secular model of rights that respects individual claims to autonomy, equality, and liberty. In exceptional cases, theorists acknowledge that we may need to recognize "special" rights for particular groups to ensure their equal treatment in society. This, for example, is the argument that philosopher Will Kymlicka makes in favor of recognizing special rights for particular groups under some circumstances and why he maintains that such recognition does not violate norms of equality and liberty for other citizens in pluralistic societies.[43] However, Native peoples' "cultural claims" can only be fully understood by examining the underlying rights claim, as well as the concept of harm that generates the rights claim. This section of the article examines the concept of "cultural rights" and also "cultural harm."

A. The Significance of Cultural Rights for Indigenous Peoples

Native peoples often assert cultural rights as a way to assert a central claim for "cultural survival." The need for cultural survival is particularly compelling for Native peoples, who have been subjected to nearly two centuries of government laws and policies designed to destroy Native cultures and political systems and forcibly assimilate them into the dominant society. Of course, contemporary policymakers argue that the United States is now committed to "pluralism" and respects basic civil rights, providing an appropriate barrier to governmental overreaching. Native peoples are not convinced, however, that the modern norms of "equal citizenship" or "liberty" will be used to preserve their cultural context. All too often, these norms mask policies that have severe and detrimental results for Native peoples as distinctive cultural groups. Yet group rights (including cultural rights) are often perceived to be "dangerous" and antagonistic to liberal values.[44]

Existing theories justifying group rights often fail to capture the distinctive concerns raised by Native peoples.[45] For example, theorist Will Kymlicka argues that cultural rights should be recognized when necessary to preserve a secure "cultural context" for the members of particular groups.[46] This theory protects Native peoples against involuntary and forcible assimilation, but does not provide a positive right to protect Native peoples from cultural attrition or misuse of aspects of the group's culture by outside groups. Nor does the communitarian view – that human beings can develop and exercise their distinctive human capacities only through their participation in a "common life" – address the root problem for Native peoples as to why their own culture and common life must be protected, even if they are offered equal rights to participate in the culture and common life of the dominant society. It also does not address why this right is essential for Native people, but presumably not for the members of immigrant groups or other ethnic minorities.

Native peoples in the United States have rights claims that are different from those of any other group and necessarily must be addressed under more inclusive theories. First, unlike any other group, Native American peoples are separate political as well as cultural groups. Native nations were involuntarily subsumed within contemporary civil society as sovereign political units, designated under United States law as "domestic, dependent nations," and thus, it is not always appropriate to apply the "equal citizenship" norm to issues confronting Native peoples.[47] In fact, Native Americans as a class are treated for purposes of equal protection jurisprudence as "political" rather than "racial" groups.[48] Secondly, the barbarous history of forcible assimilation that Native people have been subjected to should lead to a different type of jurisprudential analysis for their contemporary cultural claims. When indigenous people across the globe argue for a right to "cultural survival," they are arguing for a collective right, as groups, to protect and preserve their cultural practices, which have been attacked both directly and indirectly by domestic policies focused on cultural assimilation and the appropriation of Native lands and resources. For Native people, the commitment to cultural survival embodies a resistance to genocide that is both physical and cultural. This commitment to cultural survival has enabled Native nations to persist as distinctive cultural and political groups into the contemporary era. Native peoples tend to see their cultures as encompassing systems of knowledge and understanding that are fundamental to the continuation of the tribe itself. Any harm to culture is perceived as a direct harm to the ability of the tribe to continue into the future.

B. The Concept of Cultural Rights within International Human Rights Law

Theorists Avishai Margalit and Moshe Halbertal maintain that "human beings have a right to culture – not just any culture, but their own."[49] "Culture" has been defined as the "material, spiritual, and artistic expression of a group that defines itself" as a distinct entity, both according to daily lived experience and according to practice and theory.[50] For Margalit and Halbertal, the right to culture rests on a concept of culture as "a comprehensive way of life" belonging to an "encompassing group, such as an ethnic, religious, or national group."[51] International human rights law

reflects this notion of cultural rights.[52] For example, Article 27 of the International Covenant on Civil and Political Rights provides the following:

> In those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with other members of their group, to enjoy their culture, to profess and practice their own religion, or to use their own language.[53]

The Draft Declaration on the Rights of Indigenous Peoples, which is being developed by a United Nations Working Group, goes further and states that indigenous peoples are entitled to the right of "self-determination," which ensures the autonomous self-expression of the group within contemporary nation-states in connection with their status as the "first nations" of that land. Thus, Native peoples have political and cultural rights in association with their distinctive status and relationship with their traditional lands. Moreover, because of their distinctive status and history of dealings with the national governments, Native cultural rights are promoted as including both a "negative right" to prevent the state from engaging in practices that would harm or destroy Native cultures, and also an affirmative right to require the state to support the group's way of life within existing state legal, social, and political institutions. Both rights are necessary to allow the culture to "flourish" rather than merely to "exist."

Of course, an important part of this analysis is to recognize when actions by members of the dominant society – individuals, corporations, institutions, or the government itself – harm Native cultures and thus, give rise to legal duties to protect Native cultures and repair the harms that have been caused. The next section of this paper addresses the existing framework for evaluating claims of cultural harm.

C. The Concept of Cultural Harm

There are at least two different ways to view the concept of cultural harm. First, we can understand cultural harm to arise from situations in which Native peoples' access to their own cultural systems is somehow blocked or precluded. This obviously occurred during the last century when the federal government banned the practice of Native religions[54] and required Native children to attend boarding schools where they were punished for speaking their languages or carrying on their traditions.[55] It continues to occur in cases where the federal government allows land use development that jeopardizes Native access to sacred sites on government land or precludes groups from repatriating Native American human remains that are culturally tied to contemporary groups within their own traditions and belief systems.[56] A second sense in which cultural harm arises is through cultural appropriation. In the most rudimentary sense, cultural appropriation occurs when one group asserts the right to control aspects of another group's culture. For example, symbols, names, or rituals from one culture are taken by another culture and are assigned with a different meaning and significance. For example, a non-Indian entrepreneur may appropriate a sacred tribal symbol for commercial use. The two categories can overlap in certain cases. For example, if an American museum physically appropriates a sacred object from a tribe for purposes of public display in its collection, then this act both bars the tribe's access to its own culture as well as constitutes a form of cultural appropriation in the display of the "state's" history.

It is apparent that many Native groups find the existing regulatory framework inadequate to protect their rights, in part because it does not provide any private right of action. Thus, many Native groups maintain an active distrust of biomedical researchers, particularly in light of the Havasupai Tribe's case.

So, how are Native peoples' claims for cultural harm adjudicated within the contemporary legal system? And what are the limitations of existing legal theories to resolve "cultural conflicts"? Native claims for cultural harm have been litigated as harm to religion, to the environment, to tangible property interests, and to intangible property interests, but none of these categories sufficiently protects the multiple cultural interests at stake. Many claims of cultural harm are assessed as claims for religious freedom. Although the two categories are related, they are not coextensive. A profound connection exists between Native culture and religion which makes it very difficult, if not impossible, to separate the two concepts. Native culture is, in addition, closely related to the natural environment that is perceived, alternatively, to be the place of origin for the people, the source of their identity as a distinctive people, and the source of the Creator's law (natural law)

that is intended to govern the people in their appropriate interactions with the rest of the natural order.[57] This integration of values is perhaps best illustrated by Native peoples' "traditional ecological knowledge," which constitutes the "culturally and spiritually based way in which indigenous peoples relate to their ecosystems."[58] For example, Ojibwa scholar and activist Winona LaDuke describes the traditional ecological knowledge of the Dene people of Canada as a "spiritually based moral code that governs the interaction between the human, natural and spiritual worlds."[59] Under such systems, Native people often consider themselves to be "stewards" of the land with a set of spiritual duties (e.g., annual renewal ceremonies) and physical requirements (e.g., cultural constraints of the use of a fish resource). Because of this complex intersection of religion, culture, and environment, harming any aspect of this way of life carries profound consequences for the cultural survival of Native people.

Unfortunately, these intersections are frequently disregarded by the dominant society's courts when Native people seek protection for the lands and environments that are central to their cultures. Native peoples have brought a number of actions under the Free Exercise Clause of the First Amendment to protect the integrity of sacred sites on federal lands from development that would foreclose their religious practice. These claims have largely been unsuccessful, particularly after the Supreme Court's opinion in *Lyng v. Northwest Indian Cemetery Protective Association*, which held that the federal government's management and development of its own "public" lands did not constitute the type of coercive government behavior that would trigger the Free Exercise Clause, even if the undisputed effect of this development was to "virtually destroy" the religious practice of the Native people.[60] Nor has cultural harm been recognized as a legitimate basis for awarding damages for the destruction of the natural environments that support indigenous lifeways. For example, in the wake of the Exxon Valdez oil spill, Native people sought to recover damages for the injury to their lands and resources.[61] In particular, the Native claimants asserted that the spill had a devastating impact on their traditional subsistence way of life, including the cultural and spiritual aspects of those lifeways, and sought damages for that non-economic harm. In the ensuing litigation, the Ninth Circuit Court of Appeals affirmed the district court's ruling that cultural harm could not constitute a basis for the recovery of non-economic damages under a public nuisance claim.[62] The Ninth Circuit Court of Appeals found that the effects of the oil spill on the communal and subsistence lifestyles of the Native people were not appreciably different from the effects on all other rural Alaskan people.[63] In the words of the district court, "[O]ne's culture – a person's way of life – is deeply embedded in the mind and heart. Even catastrophic cultural impacts cannot change what is in the mind or in the heart unless we lose the will to pursue a given way of life."[64] Both court decisions are based on an assumption that culture is an "inner" state, rather than the basis for a right that merits protection and compensation for loss.[65]

Similarly, Euro-American concepts of property have been used to prevent Indian nations from enforcing their rights to tangible cultural objects, necessitating the enactment of federal legislation on the subject in 1990. The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 defines Native rights to four categories of cultural objects: ancestral human remains, funerary objects, sacred objects, and objects of cultural patrimony.[66] NAGPRA is the first statute to recognize Native legal rights to cultural objects and the first statute to recognize a group entitlement to cultural property. The federal law relies heavily on tribal law and tradition to establish the protected nature of a given object.[67] For example, the category of cultural patrimony under the statute includes cultural items that have "ongoing historical, traditional or cultural importance central to the tribe itself," such that they may not be alienated, appropriated or conveyed by any individual tribal member.[68] Tribal law or custom is used to determine the legal question of alienability at the time the item was transferred. NAGPRA also covers sacred objects, which are defined as "specific ceremonial objects which are needed by traditional Native American religious leaders for the practice of traditional Native American religions by their present day adherents."[69] The criteria used to define these categories of cultural objects clearly highlight the vital role of indigenous beliefs (e.g., an intangible aspect of culture) in establishing rights to what is considered a tangible cultural object. Significantly, many of the current problems under NAGPRA deal with Native claims to ancient human remains, which triggers a conflict between the cultural value of ancestral remains for contemporary Native peoples and the value of the human body as a source of knowledge or the property of science. These claims are discussed in the final section of the paper.

Notably, no current statute protects the intangible cultural resources of Native peoples, including the expressive aspects of culture, such as symbols, art, ceremonies, songs, and traditional knowledge. These are the aspects of culture that are most likely to be associated with the concept of the "sacred," which generally is not accorded legal significance (apart from some recognized claim under the First Amendment)

in American jurisprudence. In general, Anglo-American property law segregates the religious aspect of a cultural claim from the property aspect and handles each claim under a disparate legal framework. For example, the Sioux Nation's claim to the Black Hills, as its cultural origin place and an important site for the Nation's continuing need for cultural renewal, was bifurcated into a free exercise case (that failed) and a property rights case (that succeeded because the federal government was found to have "taken" treaty-guaranteed lands without paying "just compensation").[70] The relief ordered (monetary damages) was commensurate with the property rights model, but did not mitigate the cultural harm to the Lakota people.

Tribal interests in intangible cultural resources are generally evaluated under standard frameworks of intellectual property law or federal Indian legislation based on this framework, which respond to claims for economic harm but are devoid of notions of cultural harm. So, for example, under the federal Indian Arts and Crafts Act,[71] an individual tribal member or an Indian tribe has a cause of action to prevent a non-Indian from falsely marketing his or her creation as an "Indian product," but no statute protects against the appropriation of tribal symbols by non-Indians or the production of rugs, baskets, or jewelry that are copied from tribal designs, as long as they are appropriately labeled.

Similarly, the Lakota people, and specifically the descendants of 19th-century tribal leader Crazy Horse, employed a variety of legal theories to challenge the Hornell Brewing Company's use of Crazy Horse's name to market a malt liquor product, all of which eventually failed.[72] Crazy Horse was well known for his opposition to liquor and his steadfast adherence to the traditional culture. The Lakota argued that the use of Crazy Horse's name caused tangible harm to the tribe and its members by suggesting the association of a venerated leader with alcohol, one of the worst evils for Native people since European contact. Moreover, the descendants of Crazy Horse argued that his name had a particular significance under tribal law, that his spirit was "alive" and could be harmed by the misuse of his name, and that his descendants had an obligation to prevent this harm.[73] In the first federal action, the court held that Congress could not issue statutory protection by prohibiting the use of Crazy Horse's name to market liquor products because this violated the Hornell Brewing Company's First Amendment right to engage in commercial speech.[74] In the second action, the Eighth Circuit Court of Appeals held that the descendants of Crazy Horse could not maintain an action against the Brewing Company in tribal court because the tribal court lacked jurisdiction over the defendant, who had not done business on the reservation and did not market its products on the reservation.[75] Thus, no claim could redress the harm under federal law, and there was no venue to address the claim for cultural harm under tribal law because of these jurisdictional constraints.

III. Native Peoples and Genetic Research: Applying Concepts of Property, Privacy and Cultural Harm

Genetic research on Native peoples is problematic for a variety of reasons. Although many Native groups are hopeful that genetic research can, in fact, provide important information about the causes of diseases (such as diabetes and certain cancers) that may be found disproportionately among particular Native groups, the costs of such research are often perceived as outweighing any potential benefit. To some extent, informed consent requirements and human subjects protection regulations, including Institutional Review Boards (IRBs), are asserted to provide adequate protection to donors.[76] Without delving into the complexities of that issue, it is apparent that many Native groups find the existing regulatory framework inadequate to protect their rights, in part because it does not provide any private right of action.[77] Thus, many Native groups maintain an active distrust of biomedical researchers, particularly in light of the Havasupai Tribe's case.[78]

The concerns expressed by Native peoples can roughly be grouped into four categories.[79] First, Native groups seek to protect the integrity of bodily substances, such as blood, tissue, or embryos, against potential abuses that are perceived to directly affect the donor and may also affect members of the donor's family.[80] This concern reflects a pervasive belief that bodily substances continue to retain the essence of the individual, even after removal from the body. Second, Native groups worry that the data secured from scientific study of these samples will be incorporated into unauthorized research and used to support theories that are in conflict with traditional beliefs about the origin and identity of the group. They point to current efforts by scientists to undertake DNA analysis of ancient human remains in connection with studies about the origins of human populations.[81] This is also an asserted interest of biomedical researchers doing DNA testing of contemporary populations to map the human genome and its diversity among different groups.[82] Third, because many Native nations are quite small (many have fewer than 1,000 members and some fewer than 100 members), research data can easily be tied to families and even individuals, posing

a clear potential for breach of privacy rights even if the donor is not identified by name.

Finally, Native groups worry that their tissue and DNA will be used to manufacture commercial products that will provide economic benefit to researchers, and that they will have no right to share in this profit,[83] given the existing case law, such as *Moore v. Regents of the University of California*[84] and *Greenberg v. Miami Children's Hospital*.[85] Such fears may relate to a fear of economic exploitation, a fear of commodification of a sacred resource (the human body and its component parts), or some combination of these fears. In any case, these suspicions are situated within a historical context of European exploitation of Native peoples and appropriation of Native resources. The discovery doctrine of medieval Europe was used to assert that the lands in the New World were vacant and available for ownership by the first Christian nation to settle these lands, and this doctrine became the basis for the United States' sovereign right to extinguish the Native peoples' "right of occupancy."[86] Native peoples fear that their genetic resources are the new "common property" that researchers are laying claim to. In addition, traditional narratives that place indigenous peoples as the first occupants of these lands may be challenged by researchers, who assert that the DNA of the land's ancient inhabitants is not the same as that of contemporary groups.[87]

How can we address these concerns in the contemporary era? First, we must examine existing cases dealing with Native peoples' rights to the body, which have primarily arisen in the context of NAGPRA claims. These cases illustrate how the frameworks of property, privacy, and intellectual property rights operate to deny Native claims for cultural harm. And second, we must evaluate the possibility of an intercultural legal and ethical framework to address these concerns.

A. The "Grey Zone" of NAGPRA: Cultural Harm and Human Bodies

One of the most relevant cases asserting cultural harm based on the mistreatment of Native bodies is *Na Iwi O Na Kupuna O Mokapu v. Dalton*,[88] in which a Native Hawaiian group sought to protect its ancestral human remains from scientific study and documentation pursuant to NAGPRA's inventory requirement. In that case, the Department of Navy had disinterred hundreds of Native human remains during its construction many years earlier of a facility on the Mokapu Peninsula. The remains were disarticulated and housed by the agency in large crates until NAGPRA was passed in 1990. NAGPRA required any federal agency in custody of Native American human remains to produce inventories of the remains that identified their number, their tribal affiliation if known, the place of acquisition, and any other information that would allow lineal descendants and affiliated tribes to make a claim. Hui Malama, a Native Hawaiian organization with standing under NAGPRA, entered into a consultation with the Department of Defense in the course of this process.[89] The remains were given to the custody of the Bishop Museum to prepare an inventory that would accurately list all sets of human remains and funerary objects taken from the Mokapu Peninsula. The museum argued that it was impossible to prepare an inventory without scientific examination of the remains in order to document their age, sex, skeletal completeness, and pathologies. However, the museum ultimately prepared an inventory that reported this information and consisted of the narrative report and appendices, including photographs of the remains and the results of scientific analysis.[90]

If the available legal and ethical frameworks are intercultural in nature, this might inspire cooperative relationships and partnerships that would be perceived to mutually benefit researchers and Native communities. What would it mean to have an intercultural legal and ethical framework to evaluate these issues?

Hui Malama then brought suit against the federal government and the Bishop Museum in its capacity as guardian for the Na Iwi remains for various alleged violations of federal law and the rights of the remains.[91] Hui Malama asserted that the federal defendants had violated NAGPRA by undertaking scientific research on the remains (the statute allows scientific study of Native American remains only when necessary to finish a significant study that was already in progress when the statute became effective but bars any new study of remains without the consent of the affiliated tribes). The organization also claimed that the release of this data to third parties would cause a profound and serious harm to the remains (which were asserted to have an essence as living beings) and their descendants (whose interests were being advanced directly by Hui Malama). The organization's complaint even

listed the Na Iwi remains as plaintiffs in their own right, asserting that "according to Hawaiian custom, human remains are spiritual beings that possess all of the traits of a living person" and that the remains had "suffered an injury to their spiritual well-being" that must be the subject of legal redress.[92] In addition, Hui Malama asserted that "both spiritual and physical harm" had resulted to living members of Hui Malama from the actions of the federal defendant."[93] According to the leaders of Hui Malama:

> By accepting a sacred covenant under Hawaiian tradition and custom to care for the disinterred remains, harm will allegedly befall members who fail to protect and care for or who permit the desecration of the remains. Members allege that they also suffer emotional trauma as a result of publication of the inventory report, and fear for the physical and spiritual safety of themselves and their families.[94]

The court purported to express "respect for these personal beliefs,"[95] but ruled against all of the claims for redress of cultural harm in this litigation.[96] The court first held that the remains did not have independent legal standing as plaintiffs[97] even though Hui Malama had pointed to cases finding that non-human entities such as corporations and ships had legal standing in support of their claim. However, the court said that it could not find any case law addressing the issue of whether human remains have legal standing at common law, nor had Hui Malama demonstrated that some tangible benefit to living members of society would result from the grant of such standing (finding that the policy basis of allowing standing to corporations and ships served the public interest in "business and commerce").[98]

The court found that Hui Malama had standing as a plaintiff group, who were comprised of living members of a cultural group claiming descent from the remains. However, the court found that the scientific study of the remains was permissible because the intent of the federal defendant was to affiliate the remains through the inventory process and not purely to gain knowledge from undertaking a scientific study of the remains.[99] Moreover, the court found that the Freedom of Information Act (FOIA) mandated the disclosure of the data to any interested third party since the federal government generated and controlled this information, and the duty of the agency was to disclose such information so long as no statutory exemption applied.[100] In particular, Hui Malama argued that the information could be withheld under FOIA pursuant to exemption three, which covers materials exempted by other ("withholding") statutes, and exemption six, which excludes materials such as personnel and medical files, which, if released, would constitute a "clearly unwarranted invasion of personal privacy."[101] The court spent very little time in finding that NAGPRA was not a "withholding" statute and then moved on to the discussion of invasion of privacy. According to the court, this exemption was intended to protect information regarding "particular (e.g., identifiable) living persons" by preventing the disclosure of personal information, such as that found in personnel records and medical records.[102] In this case, the information was gained from the study of deceased individuals, and thus, "there is no reasonable fear that any individual with a legally cognizable privacy interest" would be affected by disclosure of the inventory.[103] Nor did the court find that its equitable powers were required, since Hui Malama had "failed to legally substantiate its claim that dire results will ensue from permitting disclosure of the inventory."[104] In short, the Na Iwi case demonstrates the standard bias against invoking privacy claims on behalf of any claimant other than a living individual.

Another recent NAGPRA case, *Bonnichsen v. United States*, tested out the claims of five claimant tribes that they were culturally affiliated to a set of ancient human remains excavated on federal land within the traditional joint use area of the tribes.[105] The Ninth Circuit Court of Appeals found that human remains of this age (approximately 8,000-9,000 years old) could not be considered Native American for purposes of NAGPRA without a way to prove that a person this ancient shared any cultural or genetic similarity with contemporary Native Americans.[106] Instead, the court drew on narratives of discovery and conquest, finding that the skeleton was "one of the most important American anthropological and archaeological discoveries of the late twentieth century" and thus, should be made available for study by scientists.[107]

In the *Bonnichsen* case, the court specifically denounced tribal narratives as a method to prove the type of cultural connection between ancient and modern Native Americans that would trigger NAGPRA. The court disregarded NAGPRA's statutory requirement that accords oral history and tribal narrative the same evidentiary weight as scientific data in the assessment of cultural affiliation, finding that the preliminary cultural connection requirement did not encompass the same standard. The court maintained the following:

> Because Kennewick Man's remains are so old and the information about his era is so limited, the record does not permit the Secretary to conclude

> reasonably that Kennewick Man shares special and significant genetic or cultural features with presently existing indigenous tribes, people, or cultures.[108]

The result of this opinion ultimately held that the skeleton of this ancient Native person was federal property available for scientific study. The court omitted any discussion of cultural values or cultural harm. Tribal leaders had testified that ancestral remains held a paramount spiritual significance for the Native people of this region based on an ethical principle associated with the sanctity of life and death. This sacred law establishes how human beings relate to each other in the human and spirit world. If something is disturbed, then everything else suffers. Adhering to the traditional ways of life ensures the continuity of the world. Upon death, the essence of life dissipates, but still pervades the remains. Thus, holding that human remains are property and can be subjected to an indefinite series of invasive and destructive tests is perceived as a cause of harm to Native people, whether understood as a tangible harm (i.e., depriving Native people of access to ancestral remains) or an intangible harm (i.e., doing things to the remains that injure their essence and misdirect the "power" or "agency" associated with them).

As these cases illustrate, the legal categories of property rights and privacy rights inadequately address the claims being expressed by Native people with respect to human remains, bodily materials, and the intangible components associated with study or research that generates information and knowledge about these remains and materials. These legal categories are not capable of redressing the claims for harm being advanced by indigenous groups.

B. Structuring an Alternative Framework Based on Intercultural Justice

It is clear that the standard legal theories and legal venues inadequately address Native peoples' claims, which has inspired certain Native nations to consider issuing a moratorium on genetic research on the tribe or its members that is not specifically requested and controlled by the Nation itself. Native nations possess sovereignty over their lands and members and can exercise the right to exclude non-members from trust lands.[109] Native nations can enter contracts with researchers, asking for adherence to tribal standards as a condition of the research agreement. These contracts are legally binding, although the risk of breach and the attendant limitations on potential remedies may be a factor here. To the extent that the breach results in actions that occur off the reservation and involve non-members (e.g., sharing samples with researchers at a different institution), the Native nation might have to rely on non-tribal judicial institutions to secure adequate relief. Moreover, if the researchers approach individual tribal members living off the reservation, then the tribe's jurisdiction may not be sufficient to bar an independent agreement between the individual and the researcher.

However, if the available legal and ethical frameworks are intercultural in nature, this might inspire cooperative relationships and partnerships that would be perceived to mutually benefit researchers and Native communities. What would it mean to have an intercultural legal and ethical framework to evaluate these issues? First, it would require an open acknowledgment that the existing legal frameworks inadequately protect Native peoples from the types of harm they undergo (e.g., unauthorized use of genetic resources); it would also require a commitment to develop frameworks that can achieve justice. The concept of "intercultural justice" is a means of restructuring the legal relationships among Native nations and the United States and its non-Indian citizens to alleviate the historical and contemporary grievances and harms that continue to affect Native communities.[110] In relation to Native rights to genetic resources, the main question is who has the power to decide what Native peoples' rights to genetic resources entail. This question has at least three components: (1) What are the institutional frameworks for decision-making? (2) What is the ability of those institutions to incorporate the relevant values and norms of the affected groups? and (3) What is the ability of our society to generate new and different theories of law that respond to cultural concerns and also to the challenges of new technologies and emergent issues?

The jurisdictional considerations involved in cases such as those of the Havasupai Tribe means that the majority of these conflicts will be decided by the state or federal courts. These courts will apply state and federal law to the issue, which in most cases, means that the tribe's claim for cultural harm will be disregarded. Moreover, other institutions (such as universities and hospitals) will have IRBs that reflect the dominant society's approach to biomedical research and human subjects protection. In the context of Native peoples' rights to genetic resources, there is a need for collaboration with tribal court systems and the development of tribal IRBs, which can contribute tribal values and norms for application to these cases. Tribal law has the capacity to generate a distinctive moral and ethical framework in order to determine how human materials and human beings ought to be treated. Moreover, in resolving disputes, tribal courts often employ

norms dealing with restorative justice. Thus, rights claims may therefore be adjudicated under a different set of norms than would apply in federal court. For example, norms of equal respect, group solidarity, good relations, and compatibility with "natural" (i.e., universal) principles may be used to understand and provide redress for cultural harm.

Native peoples are quite concerned with the ethical boundaries of research, given their understanding of fundamental norms that guide human interactions with the natural world. The continuing perception that a "battle" exists between Western science and Native religion masks a fundamental difference in the metaphysics that structures Western and Native cultural traditions. As Vine Deloria and Daniel Wildcat have noted, Western metaphysics largely reflects a "mechanical" and "reductionist" understanding of the Universe, and one which focuses on the "tangible" quality of "matter."[111] Under this view, scientists dissect the natural world into core elements, which then provide a platform of knowledge that can be applied to many different things. For example, the study of genetics is largely a study of the chemical and biological components of living entities, and the human body itself can be "mapped" (i.e., the genome). Thus, by understanding the components of the body as a machine, one can then understand the machine.

In comparison, Native metaphysics comprises a set of first principles which must be understood in order to make sense of the world. Many Native cultures see the world and all of its possible experiences as forming a "fabric of life," in which every aspect is dependent and related to all other aspects. There are two basic experiential dimensions, located in place and in power (i.e., the spiritual essence of the life force of the natural world). Each living thing has its own essence and personality and its own place within the natural world. If human beings understand this first principle, then they can order their conduct accordingly. In this view, the intangible components of thought are quite important. If humans can understand the nature or psychological characteristics of the Universe, then they can then describe the morphological structure of the Universe. Human experience is obviously important to this understanding, as is an appreciation that the relevant ethical system appreciates the relational, reciprocal nature of the universe, sees all aspects as imbued with power and agency, and understands the interconnections of humans to the rest of the Universe.

Because of this different metaphysical structure, scientific technology such as cloning, stem cell research, and cell line manufacture likely will inspire a different set of reactions from Native peoples as to the overall effect and consequence of this research. Similarly, the use or misuse of human tissue, hair, and blood, raises serious concern among Native peoples, as does the mistreatment of human bodies, body parts, and human remains. If the United States is truly committed to a pluralistic and multicultural democracy, then it must incorporate intercultural systems of ethics into its national decision-making, which will set a standard that can also be implemented at the state level. Opponents will likely cite the multiplicity of cultures within the United States as a reason to foreclose such expansion in national policy. However, this article takes the position that intercultural justice is a necessity for Native nations because of their political status as sovereigns. The rights of Native nations are not purely the rights of cultural or ethnic groups. Rather, they are separate sovereigns with the right to self-determination as peoples within the domestic federal system.

Conclusion

In *Ethics for the New Millenium*, the Dalai Lama calls upon all peoples, cultures, and faith traditions to engage the inquiry of what is the appropriate relationship between individual and societal ethics.[112] He encourages us to look for universal points of connection, including, for example, the need to promote human happiness and well-being, as well as compassion and tolerance. He suggests that in order for this to occur, we should be committed to recognizing several spiritual (not religious) values, including restraint (self-discipline) and virtue (cultivating inner strength and resilience). Is that the enterprise that we as citizens of the United States are committed to at a national level? At an international level? Probably not. At the national level, we tend to rely on the Constitution and Bill of Rights to ensure that our conduct is appropriate. At an international level, we feign commitment to a universal set of human rights, yet routinely the United States declines to actually sign onto human rights conventions, let alone bind itself to any enforceable guarantees.

Biotechnology is a high stakes game. Researchers are playing with the fundamental structure of the natural world, and the consequences are as yet unknown. Is the benefit worth the risk? How can we possibly adjudicate that question under our standard economic model, informed only by the basic constraints of our Constitution? These questions must be evaluated using an intercultural normative framework, in which equal respect is given to all peoples who will suffer the consequences of these innovations. Genetic research on Native peoples must be evaluated under a framework that is inclusive of Native norms and values.

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61. *In re Exxon Valdez*, 1994 W.L. 182856 (D. Alaska), 1995 A.M.C. 1440 (D. Alaska, 1994); affirmed 104 F.2d 1196 (9th Cir. 19997)
62. *In re Exxon Valdez*, 1994 W.L. 182856 (D. Alaska), 1995 A.M.C. 1440; *In re Exxon Valdez: Alaska Native Class v. Exxon Corp*., 104 F. 3d 1196 CA9 (Alaska) 1997.
63. 104 F. 2d at 1198.
64. 1994 W.L. 182856 at *4.
65. See 1994 W.L. 182856 at *5 ("enjoyment of life damages are unavailable…[T]he plaintiffs must find recompense for interference with their culture from the public recoveries that have been demanded of and received from Exxon.")
66. *Native American Graves Protection and Repatriation Act*, 25 U.S.C. 3001-3013.
67. See J. F. Trope and W. R. Echo-Hawk, "The Native American Graves Protection and Repatriation Act: Background and Legislative History," *Arizona State Law Journal* 24, no. 1 (Spring 1992): 35-77, at 66.
68. 25 USC § 3001 (3) (D).
69. 25 USC § 3001 (3) (C).
70. See *United States v. Sioux Nation*, 448 U.S. 371 (1980) (holding that 1877 federal statute extinguished tribal treaty rights to the Black Hills without payment of just compensation in violation

of the Fifth Amendment); cf. *Crow v. Gullet* (D.S.D.) (Native claimants not protected by the First Amendment in efforts to protect the integrity of Bear Butte, a sacred site within the Black Hills).
71. 25 U.S.C. 305-305(e) and amendments.
72. These claims were brought in federal court and in tribal court under different legal theories. For an excellent summary of the litigation, see N. Jessup Newton, "Memory and Misrepresentation: Representing Crazy Horse in Tribal Court," in Ziff and Rao, *supra* note 50; J. R. Herrera, "Not Even His Name: Is the Denigration of Crazy Horse Custer's Final Revenge?" *Harvard Civil Rights-Civil Liberties Law Review* 29, no. 1 (1994): 175-195.
73. *Id.* (Herrera), at 186-87.
74. *Hornell Brewing Co. v. Brady*, 819 F. Supp. 1227 (E.D.N.Y. 1993).
75. *Hornell Brewing Co. v. Rosebud Sioux Tribal Court*, 133 F.3d 1087, 1093-94 (8th Cir. 1998).
76. See J. McGregor, "Research Ethics for Genetic Research on Groups," *Journal of Law, Medicine & Ethics* 35, no. 3 (2007): 356-370.
77. See National Research Act, 42 USC § 289 and regulations codified at 34 CFR 46 (human subjects protections for federally funded research).
78. See *Summary Meeting Report*, American Indian and Alaska Native Genetics Research Policy Formulation Meeting, February 7-9, 2001, at 5. (The meeting was funded by the National Institute of General Medical Sciences and National Genome Research Institute.)
79. See D. Harry, S. Howard, B. L. Shelton, and the Indigenous Peoples Council on Biocolonialism (IPCB), "Indigenous Peoples, Genes and Genetics: What Indigenous People Should Know about Biocolonialism," IPCB, May 2000, at 19-23; *id*; American Indian Law Center, Inc., *Model Tribal Research Code*, 3rd ed., September 1999, at 1-2.
80. M. B. Bowekaty, "Perspective on Research in American Indian Communities," *Jurimetrics* 42 (Winter 2002): 145-48, at 147-48.
81. See Havasupai Tribe complaint, *supra* note 2.
82. See K. TallBear, "Narratives of Race and Indigeneity in the Genographic Project," *Journal of Law, Medicine & Ethics* 35, no. 3 (2007): 412-424.
83. See M. L. Whelan, "What, If Any, Are the Ethical Obligations of the U.S. Patent Office? A Close Look at the Biological Sampling of Indigenous Groups," *Duke Law and Technology Review*, no. 14 (2006): at 5.
84. See TallBear, *supra* note 82; *Moore v. Regents of University of California*, 793 P.2d 479 (Cal. 1990).
85. *Greenberg v. Miami Children's Hospital*, 264 F. Supp.2d 1064 (S.D. Fla. 2003).
86. See *Johnson v. McIntosh*, 21 U.S. (8 Wheat.) 543 (1823).
87. See TallBear, *supra* note 82.
88. *Na Iwi O Na Kupuna O Mokapu v. Dalton*, 894 F. Supp. 1397 (D. Haw. 1995).
89. 894 F. Supp., at 1403.
90. *Id.*, at 1402-03.
91. *Id.*, at 1403-04.
92. *Id.*, at 1406.
93. *Id.*, at 1409
94. *Id.*, at 1409, n. 9.
95. *Id.*
96. *Id.*, at 1418.
97. *Id.*, at 1408.
98. *Id.*, at 1407.
99. *Id.*, at 1415-17.
100. *Id.*, at 1410-14.
101. *Id.*, at 1411-13.
102. *Id.*, at 1413.
103. *Id.*
104. *Id.*, at 1414.
105. *Bonnichsen v. United States*, 357 F.3d 962 (9th Cir. 2004).
106. 357 F. 3d, at 979-80.
107. *Id.*, at 966, 979.
108. *Id.*, at 979.
109. See generally Clinton, Goldberg, Tsosie, *supra* note 55.
110. See, e.g., R. Tsosie, "Sacred Obligations: Intercultural Justice and the Discourse of Treaty Rights," *University of California at Los Angeles Law Review* 47, no. 6 (2000): 1615-72,.
111. V. Deloria, Jr. and D. R. Wildcat, *Power and Place: Indian Education in America* (Golden, CO: Fulcrum Publishing, 2001).
112. His Holiness the Dalai Lama, *Ethics for the New Millennium* (New York: Riverhead Books, 1999).