2017 David L. Lange Lecture in Intellectual Property

THE PUZZLE OF TRADITIONAL KNOWLEDGE

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ABSTRACT

Drawing on three case studies, this Essay contends that the proper role of law in managing uses of traditional knowledge is highly contextual. In some settings, distributive justice, cultural diversity, and group identity formation would be promoted by according indigenous groups more power to control or to benefit from uses of knowledge developed and sustained by their members, while in other settings, respect for individual autonomy and the promotion of semiotic democracy counsel against providing the groups that power. The Essay then outlines two alternative legal frameworks, either of which could accommodate this complex combination of competing values. The first would incorporate in a multilateral treaty a set of provisions that, by increasing the risk that unauthorized use of traditional knowledge would result in forfeiture of intellectual property rights, would put pressure on private firms to accede to reasonable requests made by the governments of developing countries and by representatives of indigenous groups. The second would augment and harness public discourse concerning the morality of particular uses of traditional knowledge by creating a disclosure obligation, disconnected from intellectual property law, analogous to the labelling requirements commonly imposed on the producers of food, clothing, and drugs.

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INTRODUCTION

To what extent, if any, should the law enable indigenous groups to control or benefit from uses of knowledge those groups have developed? This Essay offers two alternative answers to that notoriously difficult question.

Part I describes three recent controversies in which the question has arisen. These controversies illustrate the diversity of interests and values implicated by struggles over traditional knowledge and identify circumstances that have resulted in satisfactory resolution of those struggles and thus may provide seeds for legal reform.

Part II sketches the laws currently in force throughout the world that determine the relative rights of the parties to such disputes.

Part III summarizes and evaluates the principal arguments that scholars and activists have offered for enhanced legal protection of the kinds of knowledge at issue in such cases. It concludes that, even taking as given the normative premises on which those arguments are founded, none withstands scrutiny.

Part IV contends that a cultural theory of intellectual property could provide the foundation for a more promising defense of enhanced legal protection. Specifically, it argues that, under some circumstances, using the legal system to discourage unauthorized uses of traditional knowledge would help cultivate a more just and attractive culture.

Part V draws on the cultural theory to suggest two legal regimes, either of which might be used to manage struggles over traditional 2018]

knowledge in ways that accommodated the complex competing considerations at stake.

I. REPRESENTATIVE CONTROVERSIES

For the purposes of this Essay, traditional knowledge is defined as understanding or skill developed and preserved by the members of an indigenous group concerning either actual or potential socially beneficial uses of natural resources (such as plants, animals, or components thereof) or cultural practices (such as rituals, narratives, poems, images, designs, clothing, fabrics, music, or dances).¹ More expansive definitions of traditional knowledge can be readily imagined, but they would encompass territory outside the zone of plausible legal intervention and thus can be ignored for the purposes of this Essay.

Controversies over the legal status of traditional knowledge typically arise when companies or individuals in developed countries make use of such knowledge, without permission, in ways that either generate profits that are not shared with the members of the relevant indigenous group or offend members of the group. The groups and interests that have been involved in such controversies in the past are diverse. It would be impossible to catalogue them in a single essay. However, developing a sensible legal regime to handle such controversies requires some sense of the people and issues they affect. Set forth below are summaries of three illustrative recent episodes that thus far have received little attention. Shorter summaries of some better known controversies will be provided in conjunction with the normative arguments considered in Parts III and IV.

¹ This definition is a modified version of the one developed by Stephen Munzer and Kal Raustiala. See Stephen R. Munzer & Kal Raustiala, The Uneasy Case for Intellectual Property Rights in Traditional Knowledge, 27 CARDOZO ARTS & ENT. L.J. 37, 38 (2009). For examples of other definitions in the same vein, see David R. Hansen, Protection of Traditional Knowledge: Trade Barriers and the Public Domain, 58 J. COPYRIGHT SOC'Y 757, 759 (2010–2011); Towards the Establishment of a Regional Framework for the Protection of Traditional Knowledge, Traditional Cultural Expressions and Genetic Resources in the Caribbean Region, WIPO (2009), http://www.wipo.int/edocs/tk/en/wipo_grtk_kin_08/wipo_grtk_kin_08_caribbean_

brochure.pdf [https://perma.cc/C3NW-RXLE]. For reasons that will become apparent, the definition employed here intentionally lumps together kinds of knowledge that many scholars now differentiate. *See, e.g.*, Justin Hughes, *Traditional Knowledge, Cultural Expression, and the Siren's Call of Property*, 49 SAN DIEGO L. REV. 1215, 1216–18 (2013) (examining the differences between the terms "[t]raditional knowledge" and "traditional cultural expression[]").

A. Quassia Amara

Each year, roughly 200 million people suffer from malaria and roughly 500,000 die from it.² Currently, the standard treatment for malaria is artemisinin combination therapy, which is usually effective in treating the disease.³ Unfortunately, for various reasons, the resistance of malaria parasites to artemisinin is increasing.⁴ Partly as a result, scientists and pharmaceutical companies have begun exploring alternative therapies with greater urgency.

One promising source of such alternatives is the set of herbal remedies that have been used for centuries by indigenous groups to combat malaria. A wide variety of plants are employed in such remedies. One recent survey identified 102 species in use in Nigeria alone⁵; another identified 99 in use in a single state in northern Brazil.⁶

Among those plants is *Quassia amara*—sometimes known as bitterroot. Its medicinal power has been appreciated for centuries. Indeed, in 1762 botanist Carl Linnaeus gave the plant its scientific name, allegedly to honor Graman Quassi, who, while a slave in Surinam, identified its effectiveness in combating fever and intestinal parasites.⁷

For a biochemist, determining which of the plants employed in traditional remedies have *some* therapeutic benefits with respect to malaria is relatively straightforward.⁸ Determining which is *most* efficacious—or, more precisely, which contains compounds that could be most efficacious—is more difficult and time-consuming. Some assistance in determining which of the many extant traditional

^{2.} Global Health Observatory (GHO) Data: Malaria, WHO, http://www.who.int/gho/malaria/en/ [https://perma.cc/ZPX3-YD7R].

^{3.} Overview of Malaria Treatment, WHO (Mar. 18, 2017), http://www.who.int/malaria/areas/treatment/overview/en/ [https://perma.cc/A46A-XTFX].

^{4.} For discussion of the causes and implications of this trend, see WILLIAM W. FISHER, III & TALHA SYED, INFECTION: THE HEALTH CRISIS IN THE DEVELOPING WORLD AND WHAT WE SHOULD DO ABOUT IT (forthcoming 2018), https://cyber.harvard.edu/people/tfisher/ Infection.htm [https://perma.cc/545P-58X8].

^{5.} See Joseph O. Adebayo & Antoniana U. Krettli, *Potential Antimalarials from Nigerian Plants: A Review*, 133 J. ETHNOPHARMACOLOGY 289, 292–94 (2011).

^{6.} See William Milliken, Traditional Antimalarial Medicine in Roraima, Brazil, 51 ECON. BOTANY 212, 217 (1997).

^{7.} The contested origins of the name—and the uncertainty pertaining to its connection to Quassi—are summarized in John Uri Lloyd, *Quassia Amara*, 19 W. DRUGGIST 7, 7–8 (1897).

^{8.} See Antoniana U. Krettli, Joseph O. Adebayo & Luisa G. Krettli, *Testing of Natural Products and Synthetic Molecules Aiming at New Antimalarials*, 10 CURRENT DRUG TARGETS 261, 269 (2009).

remedies are worth investigating can be obtained by consulting the current members of the indigenous groups that developed, refined, and maintained them.⁹

French Guiana is an especially attractive place to conduct a study of this sort, partly because the endemic prevalence of malaria there is very high¹⁰ and partly because several indigenous groups in the country have developed traditional plant-based preventive and therapeutic systems for controlling the disease. (Perhaps for those reasons, although the infection rate is high, the death rate in Guiana from malaria is remarkably low—fewer than five cases a year.) Attracted by these conditions, in 2003 a group of researchers associated with the Institut de Recherche pour le Développement (IRD),¹¹ based in Marseille, conducted a study of the "knowledge[,] attitudes and practices" in four carefully selected villages to ascertain how the residents dealt with malaria.¹²

The researchers interviewed a total of 117 adults. Thirty-five identified themselves as Paliku; fourteen self-identified as Galibi; seven were European by background; fourteen were Brazilian; one was Hmong; and forty-six were Creole.¹³ The first two of these clusters are members of indigenous groups. The people commonly known as the Paliku or Palikur have been living in the area just north of the mouth of the Amazon River for centuries.¹⁴ Beginning in the sixteenth century, the Portuguese colonists abused them—enslaving some, killing others, driving still others inland. The French colonists to the

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^{9.} See generally MERLIN WILLCOX, GERARD BODEKER, PHILIPPE RASOANAIVO & JONATHAN ADDAE-KYEREME, TRADITIONAL HERBAL MEDICINES FOR MODERN TIMES: TRADITIONAL MEDICINAL PLANTS AND MALARIA (2004) (exploring traditional medicines).

^{10.} B. Carme & C. Venturin, *Le paludisme dans les Ameriques*, 59 MÉDECINE TROPICALE 298 (1999); WHO, *World Health Statistics 2011: Global Health Indicator Tables and Footnotes* (2011), http://www.who.int/whosis/whostat/2011/en/ [https://perma.cc/PA9J-4RXZ] (providing relevant data in xls format).

^{11.} For information concerning IRD, see INSTITUT DE RECHERCHE POUR LE DÉVELOPPEMENT (Nov. 27, 2017), https://en.ird.fr [https://perma.cc/QKW5-74NW].

^{12.} See M. Vigneron, Xavier Deparis, Eric Deharo & Geneviève Bourdy, Antimalarial Remedies in French Guiana: A Knowledge Attitudes and Practices Study, 98 J. ETHNOPHARMACOLOGY 351, 351–52 (2005). The villages were Saül, Ouanary, Saint-Georges, and Kamuyene. Id. at 353.

^{13.} Id. at 354.

^{14.} For the best source of information on the Palikur, see Artionka Capiberibe, *Palikur: Introduction*, POVOS INDÍGENAS NO BRASIL (Feb. 2012), https://pib.socioambiental.org/en/povo/palikur [https://perma.cc/JYR3-Y2HW]. For an extensive bibliography, see Artionka Capiberibe, *Palikur: Sources of Information*, POVOS INDÍGENAS NO BRASIL (Feb. 2012), https://pib.socioambiental.org/en/povo/palikur/1764 [https://perma. cc/YS7H-SPWK].

north of the Portuguese settlements treated the Paliku people somewhat better, which helps explains why, today, roughly one third of the group's members live in French Guiana instead of Brazil. Traditionally, the Paliku supported themselves by fishing, typically with bow and arrow; hunting of tapir, deer, pig, cutia, and monkeys; and horticulture, primarily of manioc. Today, some have begun to participate in the market economy. The first language of most is Parikwaki, part of the Arawak family of languages.

The Galibi, also known as the Kalina, have lived in the region at least as long.¹⁵ Prior to the arrival of European colonists, the Galibi were numerous and occupied much of the area between the mouths of the Amazon and Orinoco Rivers. Genocide and disease reduced the population sharply, but substantial numbers still reside in French Guiana. Most speak Kali'na, a member of the Cariban family of languages, although some of the youngest generation have ceased to do so.

From their interviews with these various groups, the IRD researchers concluded the following: most residents of the four villages employed a combination of traditional and modern medicines to treat malaria; twenty-seven different plants were used in the traditional medicines; and of those plants, *Quassia amara* (alone or in combination with other plants) was used most often and thought to be the most effective.¹⁶

These findings encouraged the same researchers—and others aware of their work—to try to isolate the compound within *Quassia amara* that had proven so effective. Discovery of the active ingredient occurred in stages. The first wave of research concluded that the key compound was Simalikalactone D.¹⁷ A second wave, however, found that Simalikalactone D was less effective or more toxic than previously

^{15.} No single source provides comprehensive information concerning the Galibi. For background, see Lux Vidal, *Galibi do Oiapoque: Introduction*, POVOS INDÍGENAS NO BRASIL (Jan. 2000), https://pib.socioambiental.org/en/povo/galibi-do-oiapoque [https://perma.cc/JL4D-8EUH]; *People Name: Galibi Karibi of French Guiana*, PEOPLE GROUPS (Dec. 2, 2017), http://www.peoplegroups.org/Explore/groupdetails.aspx?peid=16332 [https://perma.cc/A26U-F7QG]; *Indigenous Communities from French Guiana: Kalina*, NATIVE PLANET, http://www.nativeplanet.org/indigenous/ethnicdiversity/latinamerica/frenchguiana/indigenous_d ata_frenchguiana_kalina.shtml [https://perma.cc/X2XN-TB9Q]; *Kalina People*, WIKIPEDIA (Nov. 30, 2017), https://en.wikipedia.org/wiki/Kalina_people [https://perma.cc/QG64-E86J].

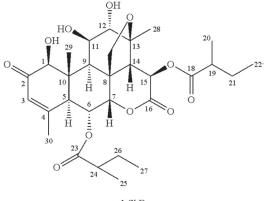
^{16.} Vigneron et al., *supra* note 12, at 357–59.

^{17.} See Stéphane Bertani et al., Simalikalactone D is Responsible for the Antimalarial Properties of an Amazonian Traditional Remedy Made with Quassia Amara L. (Simaroubaceae), 108 J. ETHNOPHARMACOLOGY 155, 156 (2006).

thought and that the decisive ingredient was a close cousin, Simalikalactone E.¹⁸

The latter discovery prompted the researchers to seek patent protection for the compound. A U.S. Patent was issued in 2013, and an EPO Patent followed in 2015.¹⁹ The claims in both are broad. They include:

A molecule corresponding to formula 1 below:





- 1. A medicament comprising the molecule of formula 1 as claimed in claim 1, and a pharmaceutically acceptable carrier.
- 2. The medicament as claimed in claim 2, for reducing the transmission of malaria.²⁰

Why exactly did the researchers seek legal control over the molecule and its use? They subsequently explained their motives as follows:

National research and innovation policies in most countries, including France, have strong expectations concerning knowledge transfer activities by universities and research institutes. Performance on these matters is usually measured by indicators such as the number of patents filed and license agreements signed, and the overall royalties

^{18.} See Nadja Cachet et al., Antimalarial Activity of Simalikalactone E, a New Quassinoid from Quassia Amara L. (Simaroubaceae), 53 ANTIMICROBIAL AGENTS & CHEMOTHERAPY 4393, 4393 (2009).

^{19.} U.S. Patent No. 8,604,220 (filed June 17, 2010); Eur. Patent No. 2,443,126 (filed June 17, 2010). The claims in the two patents are slightly different. The language set forth in the text is derived from the U.S. version.

^{20.} U.S. Patent No. 8,604,220 col. 13 1. 24–27 (filed June 17, 2010).

and contract research collaboration revenues. These indicators are also commonly used by funding agencies as a measure of the overall quality of the applicant. Furthermore, concerning medical innovation, it is generally accepted that strong intellectual property protection is a mandatory warranty in order to obtain a return on the investments necessary to launch new drugs on the market. With this in mind, SkE was patented in 2009 in the hope that a pharmaceutical company could support the expensive toxicological studies and preclinical evaluations necessary for the development of a new antimalarial.²¹

Both in the publications reporting the fruits of their research and in their patent applications, the researchers made clear the extent to which they had relied on the findings of the ethnopharmaceutical investigation in Guiana.²² (Their transparency in this respect was unusual.) However, they made no provision for compensating the individuals they had interviewed, the indigenous groups to which those individuals belonged, the government of Guiana, or the government of France (of which Guiana is formally a part) for the benefit they had obtained from the study. Why not? They later offered several reasons for this omission:

[I]n 2009, in French Guiana, no legal framework required researchers to set up a benefit-sharing contract. In the absence of legal provisions, setting up a benefit-sharing contract, would have necessitated an arbitrary choice of rights holders. This situation would have been source of foreseeable conflicts; especially that *Quassia amara* and associated knowledge are biological and informational resources, which, under French law, fall within the public domain.²³

N. Cachet et al., *supra* note 18, at 4393. Similarly, the recitation of the "Background of the Invention" in U.S. Patent No. 8,604,220 states, "[a]n ethnopharmacological investigation and biological tests had made it possible to identify preparations based on mature leaves of *Quassia amara* as advantageous for treating malaria." U.S. Patent No. 8,604,220 (filed June 17, 2010) (citation omitted).

^{21.} Geneviève Bourdy, Catherine Aubertin, Valérie Jullian, & Eric Deharo, Quassia "Biopiracy" Case and the Nagoya Protocol: A Researcher's Perspective, 206 J. ETHNOPHARMACOLOGY 290, 292 (2017).

^{22.} The first paragraph of the principal publication provides:

This study of the antiplasmodial properties of a new quassinoid from *Quassia amara* L. leaves results from our ongoing work on traditional antimalarial remedies in French Guiana. Through a 'knowledge, attitudes, and practices' survey focused on malaria and its treatments in this French overseas department, we showed that *Q. amara* leaf tea was the most frequently used antimalarial remedy. *Q. amara* belongs to the Simaroubaceae, a family known to contain quassinoids, secondary metabolites characteristic of the Sapindale order, that display a wide range of biological activities, among them antiparasitic activity and cytotoxicity.

^{23.} Bourdy et al., *supra* note 21, at 292.

The combination of the patent grants to IRD and the absence of any provision for the individuals or groups that the researchers had interviewed came to the attention of Thomas Burelli, a legal scholar at the University of Ottawa, and Fondation Daniel Mitterand France Libertés, a nongovernmental organization (NGO) devoted to the defense of human rights. In October 2015, Burelli and France Libertés accused IRD of "biopiraterie."²⁴ IRD's conduct, they claimed, perpetuated colonial practices and was "both immoral and in conflict with intellectual property regulations." That accusation led to considerable public criticism of IRD.²⁵ Among the sharpest critics were Rodolphe Alexandre, President of the Regional Council of French Guiana, and the Organization of Indigenous Nations in Guiana. A statement from the latter denounced IRD's conduct, concluding simply: "l'IRD a abuse des connaissances de la population guyanaise "26

The IRD leadership and researchers resented these attacks and initially resisted demands that they attend in some way to the interests of the people and groups whose knowledge originally helped shape their research. In the end, though, the researchers capitulated. In February 2016, they issued a statement indicating that IRD would work with "authorities" in Guiana to develop a protocol that would guarantee a fair division of the benefits of any commercialization of IRD's patents and ensure that the people of Guiana could obtain any drugs that grew out of the research at an affordable price.²⁷ As of this

^{24.} Frances Libertés & Thomas Burelli, *Des Chercheurs Français S'approprient Des Avoirs Guyanais Ancestraux*, FONDATION DANIELLE MITTERRAND – FRANCE LIBERTÉS (Jan. 25, 2016), https://www.france-libertes.org/fr/des-chercheurs-francais-sapproprient-des-savoirs-guyanais-ancestraux/ [https://perma.cc/M979-VTAM].

^{25.} See, e.g., Jade Lindgaard, Des Chercheurs Français Sur Le Paludisme Accusés De Biopiraterie, MEDIAPART (Jan. 25, 2016), https://www.mediapart.fr/journal/france/250116/deschercheurs-francais-sur-le-paludisme-accuses-de-biopiraterie [https://perma.cc/RT4V-34RP] (criticizing the IRD).

^{26.} Erwann S, *Les Populations Autochtones S'agacent de la Biopiraterie*, KOTIDIEN (Jan. 29, 2016), http://lekotidien.fr/2016/01/29/les-populations-autochtones/ [https://perma.cc/W9U4-LNXE].

^{27.} See L'IRD va proposer aux autorités guyanaises un protocole d'accord conjoint pour le partage des avantages issus du brevet SkE, INSTITUT DE RECHERCHE POUR LE DÉVELOPPEMENT (Feb. 5, 2016), https://www.ird.fr/toute-l-actualite/actualites/communiques-et-dossiers-de-presse/cp-2016/l-ird-va-proposer-aux-autorites-guyanaises-un-protocole-d-accord-conjoint-pour-le-partage-des-avantages-issus-du-brevet-ske/(language)/fre-FR [https://perma.cc/QW8J-4SF4]. The Institute's proposal for a joint memorandum read:

l'IRD proposerait aux autorités guyanaises un protocole d'accord conjoint garantissant:

writing, no details concerning the promised agreement are publicly available.

B. Wandjina Spirit Images

The Mowanjum community is a group of Australian aborigines who live in the Kimberley region, near the town of Derby in the northwest corner of the continent.²⁸ Within the community are three language groups: the Wororra, the Ngarinyin, and the Wunambal. Most members of all three groups are poor.

The Mowanjum believe all life on earth was created by spirits who long ago descended from the skies and undertook journeys across the world. They refer to the period of creation as the "Dreamtime" and call the spirits the Wandjina.

For thousands of years, the Mowanjum have been drawing representations of the Wandjina on the walls and ceilings of caves. The images vary but all have the following features:

Their faces have eyes and nose but never a mouth. Their anthropomorphic forms are frontal and often imposing in scale, sometimes extending up to 5 metres across the walls or ceiling of shelters; however, very small examples also occur. Their heads are surrounded by a semicircular band of solid colour or radiating or dotted lines that give the impression that they are wearing a helmet or headdress. The radiating lines from the head are said to represent the lightning that foreshadows the wet season rains. Wandjina are often shown as a full body, or at least head, shoulders and torso, but some have only the head and shoulders represented. The body lacks anatomical detail and is filled with visually powerful decorative designs such as dotted and striped lines over solid pigment. An oval

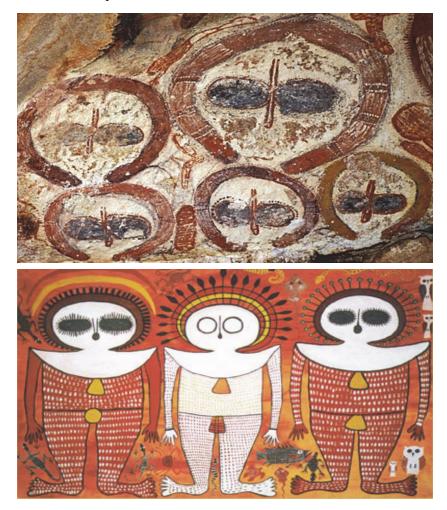
- un partage égalitaire des résultats de la recherche et de toute retombée économique et financière découlant de l'exploitation de ce brevet.
- un engagement à l'information et à la sensibilisation des communautés d'habitants à la démarche scientifique à la base de ce projet de recherche, son évolution et ses enseignements.
- un engagement commun de garantir des conditions logistiques et de prix permettant l'accès des populations concernées à un éventuel nouveau médicament antipaludique qui serait issu de ce brevet.

Id. For examples of publicity surrounding the announcement, see Elisabeth Pain, *French Institute Agrees to Share Patent Benefits After Biopiracy Accusations*, SCIENCE (Feb. 10, 2016, 10:45 AM), http://www.sciencemag.org/news/2016/02/french-institute-agrees-share-patent-benefits-after-biopiracy-accusations [https://perma.cc/ZN3D-F6WZ]; *French Institute Vows to Share Gains After Patent Flak*, SCIDEVNET, http://www.scidev.net/global/cooperation/news/french-institute-gains-after-patent-flak.html [https://perma.cc/Q765-M8Z2].

28. See *Mowanjum*, WINUN NGARI ABORIGINAL CORP., http://winunngari.org.au/ community/mowanjum/[http://perma.cc/T5RN-5RR4].

shape on the chest placed centrally beneath the shoulders is said to represent the 'Wanjin's heart, in others its breastbone, and in yet others, a pearl-shell pendant.' . . . Most significantly, Wandjina are luminous and imposing, their dark eyes gazing out from their white face mesmerise, appearing to rise out from the rock surface.²⁹

Some examples are set forth below³⁰:



^{29.} Ursula Frederick & Sue O'Connor, Wandjina, Graffiti and Heritage: The Power and Politics of Enduring Imagery, 15 HUMANITIES RESEARCH 153, 160 (2009).

^{30.} Los Wandjinas, Las Misteriosas Pinturas Rupestres de Australia, ORGONITAS CANARIAS (Sept. 4, 2014), http://orgonitascanarias.blogspot.com/2014/09/los-wandjinas-lasmisteriosas-pinturas.html [http://perma.cc/G852-FWZG].

To the Mowanjum, these images are not merely pictures of the Wandjina; they embody the Wandjina. Partly as a result, the Mowanjum believe that elders within the group have a responsibility to maintain the images. Periodically (typically annually) they repaint the images, or at least the more important among them.³¹ As a result, layers of paint have gradually accumulated on the cave walls. In the process, the images have evolved.³²

Exactly how long this practice has been maintained is disputed. Some archaeologists suggest that it began around 3800 BC, others assert that the start was more recent. But there seems to be little doubt that the practice is at least 1500 years old, and thus substantially predates the arrival of the British colonists.

Starting in the 1930s, some members of the Mowanjum began drawing Wandjina images on portable media—bark, shells, and so forth. Some of these representations were intended for use in rituals and thus may be understood as supplements to the cave paintings, but others were intended for sale to European consumers. Paintings of Wandjina continue to be produced in modest numbers by Mowanjum artists and sold through the Mowanjum Aboriginal Arts and Culture Center.³³

Until recently, it was rare for persons other than members of the Mowanjum to create representations of Wandjina. That changed in 2006, when an anonymous graffiti artist (or artists) began making drawings of Wandjina on walls, bridges, and other outdoor structures in Perth—roughly 800 miles from the Mowanjum settlements and the associated cave paintings. A few examples of the graffiti are shown below.³⁴

^{31.} VALDA BLUNDELL & DONNY WOOLAGOODJA, KEEPING THE WANJINAS FRESH (2005).

^{32.} Alan Watchman, *Repainting or Periodic-Painting at Australian Aboriginal Sites: Evidence from Rock-Surface Crusts, in* RETOUCH: MAINTENANCE AND CONSERVATION OF ABORIGINAL ROCK IMAGERY 26, 26–30 (Graeme K. Ward ed., 1992).

^{33.} See Artists, MOWANJUM Aboriginal ARTS & CULTURE CTR., http://mowanjumarts.com/portfolio [https://perma.cc/XT4N-942T]; cf. Mowanjum Paintings, Art, https://japingkaaboriginalart.com/collections/mowanjum JAPINGA Aboriginal HOUSE [https://perma.cc/MS8G-437N]; Wandjina Paintings, Art BROOME, https://www.arthousebroome.com.au/on-line-store/Kimberley-Art/kimberley-fine-art/wandjinapaintings [https://perma.cc/RM82-UBCA].

^{34.} Stu Rapley (yelpar), FLICKR, http://www.flickr.com/photos/yelpar/347482246/ [https://perma.cc/82JU-6HQ7]; Mark Roy (electricnerve), FLICKR, https://www.flickr.com/ photos/electricnerve/406563276/ [https://perma.cc/9HXK-UHN2].



Most of the graffiti images, like those above, depicted Wandjina in much the same way that the Mowanjum do. But a few deviated from

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the traditional form. For example, the image reprinted below combines a Wandjina with a black Christ figure.³⁵



The appearance of these images on public spaces in Perth triggered a secondary phenomenon, which came to be known as "Wandjina watching." Residents of Perth began to take photographs of the graffiti images and then post them to websites, usually along with indications of their locations.

Some members of the Mowanjum were untroubled by the graffiti and the online distribution of copies thereof. Most, however, expressed outrage. An example:

As an Aboriginal, I am upset at the way my choice to greet and respect the Wandjina (law) has been taken from me. You aren't supposed to just walk up to Wandjina and take a photo. You aren't supposed to look at him unless the correct rites have been conducted. It's disrespectful.³⁶

^{35.} AUSTL. NAT'L U., http://press-files.anu.edu.au/downloads/press/p14881/images/ Figure10.14.jpg [http://perma.cc/AWL3-3SL6].

^{36.} What are Wandjinas?, CREATIVE SPIRITS, https://www.creativespirits.info/ aboriginalculture/arts/what-are-wandjinas [perma.cc/SH7J-LU5D]; see also Taryne Laffar, Who Paintin' Dis Wandjina? & Director Interview with Taryne Laffar, YOUTUBE (Nov. 8, 2014), https://www.youtube.com/watch?v=PXTuwPDsvDM.

Under increasing pressure, the anonymous graffiti artist agreed to stop making the drawings, and they gradually deteriorated.

In 2010, the controversy was revived when Vesna Tenodi, a gallery owner in Katoomba, Australia, commissioned a sculpture featuring representations of Wandjina, which she then placed outdoors in public view at the edge of her property.³⁷ A photograph of the sculpture appears below.³⁸



The objections of many Mowanjum and their supporters to the public display of the sculpture prompted the Blue Mountains City Council and Commissioner Tuor of the Land and Environment Court to entertain a request that it be removed.³⁹ The testimony of Donny Woolagoodja at one of the hearings on the petition captures many dimensions of the Mowanjum's objections:

^{37.} For thorough discussions of the context of the sculpture, see Tim Elliott, *Kimberley Sacred Wandjina Image Misused*, SYDNEY MORNING HERALD (Mar. 20, 2010), http://www.smh.com.au/entertainment/art-and-design/art-battle-turns-ugly-as-aborigines-condemn-sculptures-sacred-image-20100319-qm1g.html [https://perma.cc/44VW-HNM3]; *Law Report: Wading Into the Wandjina Controversy* (ABC radio broadcast June 29, 2010), http://www.abc.net.au/radionational/programs/lawreport/wading-into-the-wandjina-controversy/3032658 [https://perma.cc/R7WL-Z8S7].

^{38.} Reiner de Ruit, *Wanjina Watchers in the Whispering Stone*, ARTS L. CTR. AUSTL. (2010), https://www.artslaw.com.au/images/uploads/AITB1_-_Katoomba_scupture_Reinier_de_Ruit_2010.jpg [https://perma.cc/C7UU-FQTL] (photograph of sculpture by Benedikt Osvath).

^{39.} See Vanessa Mills, Stony Response to Wandjina Sculpture, ABC KIMBERLEY (Oct. 20,2010), http://www.abc.net.au/local/stories/2010/10/20/3043661.htm[https://perma.cc/82Q3-MKSD].

I am an elder and senior lawman of the Worrorra Aboriginal people of the Western Kimberley region.... I write this as the representative of the Worrorra people. I am authorised to speak on their behalf.

The term 'Wandjina' or 'Wanjina' or 'Ounjina' refers to the spiritual creator and source of Law for the Worrorra Aboriginal people. The 'Wandjina' have been artistically depicted by the Worrorra people for thousands of years in a uniquely distinctive form (for example as images on bark). The paintings of 'Wandjina' in ancient rock art in our country are there because Wandjina have 'left' their images at these sites as paintings. For us, these images are not 'paintings' in the Western sense. For us, they are living, sentient spirits. They visit us in our dreams; they instruct us in our dreams; and we interact with them when we visit their paintings at rock art sites. We reproduce these images in our contemporary art where they are distinguished by their large heads, large black eyes, and typically by halo-like rings that encircle their heads.

The 'Wandjina' have a spiritual or religious significance to the Worrorra people. Images of 'Wandjina' are religious symbols and are depicted by us respectfully and in accordance with our Law.

All Worrora people whether living in the Western Kimberley or elsewhere are offended and distressed by the prominent public display of the sculpture:

- the sculpture is created and displayed by people who are not from our language or cultural group;
- the sculpture is not a genuine or authentic Wandjina;
- the sculpture is associated with the First Applicant whose book "Dreamtime: Set In Stone" argues that Aboriginal people are a "dying race" and suffering from "spiritual atrophy" and that "Aboriginal culture has all but disappeared." She illustrates her book with Wandjina images to support an argument that "Aboriginal people are spiritually... in a no man's land" and are "pitiful creatures". The sculpture is a tangible evidence of her appropriation and diminution of our culture;
- the sculpture is a caricature of the Wandjina spirit and its presence mocks and denigrates the spiritual beliefs of the Worrorra people. It exemplifies the racial and religious intolerance of those responsible for the sculpture and their contempt for our religious and spiritual beliefs;

- the misuse of the Wandjina imagery reflects badly on us as having failed to prevent it and has a negative impact on our relationship with the Aboriginal people of the Katoomba area who are embarrassed by its presence within their community;
- this misuse of our imagery humiliates us in the eyes of other Indigenous people and younger generations of our own people by undermining our attempts to protect and nurture our culture for future generations;
- Ms Tenodi's depiction of the Wandjina imagery incorporates mouths. The Wandjina are never depicted in this way by Aboriginal people. This depiction is particularly offensive to us. The Wanjina we depict in our contemporary art are too powerful to be depicted with mouths—their power descends to Earth through the line seen as a nose; and
- Ms Tenodi is using Wandjina imagery for commercial purposes and is thereby abusing our indigenous culture.⁴⁰

Tenodi's responses to these arguments are best expressed in an interview she provided midway through the litigation process:

There is no copyright on prehistoric imagery, and no-one can prohibit any artist to explore the design, or to express themselves or to be influenced or inspired, and this happens all the time. And I can recognise in contemporary art or sculpture, the work, I can recognise exactly the prehistoric figurine that they're inspired by, it's so obvious, and I would never hold it against them that they draw inspiration from Egyptian tradition, or Greek mythology, or Roman gods. I mean like cave paintings in Europe, Altamira or Lascaux, or the beautiful cave art that belongs to let's say the same time as Australian art. They are listed on UNESCO's World Heritage List, and that makes sense in my mind, because it does belong to the world, and to claim ownership, any individual or group or nation to claim ownership of those is simply ludicrous.⁴¹

^{40.} Protecting the Sacred Wandjina: The Land and Environment Court Goes to the Blue Mountains, ARTS L. CTR. AUSTL. (June 22, 2011), https://www.artslaw.com.au/art-law/entry/protecting-the-sacred-wandjina-the-land-and-environment-court-goes-to-the-b [https://perma.cc/FCJ5-N8RX].

^{41.} Wading into the Wandjina Controversy, ABC RADIO NETWORK (June 29, 2010), http://www.abc.net.au/radionational/programs/lawreport/wading-into-the-wandjina-controversy/3032658#transcript [http://perma.cc/3AZ6-XV89]. In a later interview, Ms. Tenodi elaborated on these arguments. An audio recording of the later interview is available at Vanessa

The City Council was unpersuaded by these analogies, granted the request that the sculpture be removed, and ultimately rejected Tenodi's appeal.⁴² In November 2011, the sculpture was taken away.⁴³

C. Tibetan Rugs

In the nineteenth century, weavers in central Tibet developed a distinctive style of carpet.⁴⁴ Many of these carpets were meant to be used for prayer and other spiritual purposes (such as wrapping the pillars of temples), while others were used in secular contexts, such as padding saddles or as seating mats indoors. The patterns of the rugs typically alluded in some way to the lives of the Buddha or of Buddhist monks. In developing them, the weavers were influenced by aesthetic traditions in East Turkestan, Central Asia, China, and India. The material most often employed to weave the rugs was a distinctive wool, known as Changpel, taken from Tibetan highland sheep. Changpel is unusually thick, strong, and high in lanolin—and thus has a distinctive texture. The most unusual aspect of these carpets was the method by which they were woven, which dramatically affected their appearance. Tom O'Neill explains:

Tibetan hand-knotted carpets are woven on vertical looms that have expandable beams to control the tension of the warp, around which it was continuously wound. This preliminary process, known as 'dressing' the loom, was performed prior to weaving, with the loom laid on the floor, the threads of the warp being straightened after it had been set back up. The warp was traditionally made from handspun wool . . . and the texture of this wool warp was in older Tibetan carpets extremely variable, making it:

... individualistic to the extreme: the unique method of mounting the loom and tensioning the warp led to more

Mills, *Stony Response to Wandjina Sculpture*, ABC: KIMBERLEY (Oct. 20, 2010), http://www.abc.net.au/local/stories/2010/10/20/3043661.htm [http://perma.cc/TRL7-YVT6].

^{42.} Tenodi v Blue Mountains City Council [2011] NSWLEC 1183 (Austl.).

^{43.} Katoomba Kataclysm, or Hands Off Our Wandjina!, IPKAT (Jan. 3, 2012), http://ipkitten.blogspot.com/2012/01/katoomba-kataclysm-or-hands-off-our.html [http://perma. cc/D8WP-DDWP].

^{44.} Exactly when this aesthetic tradition began is not altogether clear. For views on the subject, see JOHN PAGE & SERINA PAGE, THE WOVEN MYSTERY: OLD TIBETAN RUGS 2 (2d ed. 1994) ("That the tradition is old, perhaps a thousand years, few today dispute, but how old is a matter of speculation."); *id.* at 8 ("I have seen no rug made in the so-called Tibetan technique . . . which I personally would date with much confidence to before the mid 19th century.").

irregularities that were peculiar to each weaver's tension...

Most early Tibetan carpets were small, and woven by a single person. An end binding is formed by throwing four or five wefts before the actual knotting of the pile begins. Then a process of knotting began which was, and is today, a technique that remains exclusive to Tibetan carpet weaving.

Generally, the piles of other Oriental hand-knotted carpets are formed by wool threads looped around the warp and weft one at a time and then cut to length. The pile of Tibetan carpets is formed instead around a metal gauge rod which is tied to the warp, and the wool is looped continuously around both the warp and the gauge rod until there is a colour change, when the wool is cut and the new colour tied in. When the gauge rod has been completely covered by a row of loops, it is driven down to the previously knotted rows and then a flat knife is slid across the face of the cylindrical rod, cutting the loops to form the pile. This technique of 'cutting loops' was thought by Denwood and other historians of the Tibetan carpets to be an archaic method which adapted South-East to Central Asian styles of weaving, and was not found anywhere but in Tibet⁴⁵

Most of these carpets were woven in individual households, typically by women.⁴⁶ By the late nineteenth century, some of the weaving seems to have been done in larger workplaces, which were financially supported by feudal landlords.⁴⁷ A few examples of this art form are shown below.⁴⁸

^{45.} Tom O'Neill, *The Lives of the Tibeto-Nepalese Carpet*, 4 J. MATERIAL CULTURE 21, 27–28 (1999) (quoting Thomas Guta, *The Tibetan Carpet, by Philip Denwood*, 6 KAILASH 285, 287 (1978)); *see also* PACIFIC ASIA MUSEUM, WOVEN JEWELS: TIBETAN RUGS FROM SOUTHERN CALIFORNIAN COLLECTIONS 11 (1992).

^{46.} See Ugen Gombo, Tibetan Refugees in the Kathmandu Valley: Adaptation of a Population in Exile 96 (1985) (unpublished Ph.D. dissertation, State University of New York at Stony Brook).

^{47.} See PAGE & PAGE, supra note 44, at 2.

^{48.} PACIFIC ASIA MUSEUM, *supra* note 45, at 35, 53; PAGE & PAGE, *supra* note 44, at 56–57.



"Pillar-style Sleeping Rug" 3'0" x 6'4" 19th/20th century



"Horse Blanket" 6'0" x 3'8" 19th/20th century



"A naturalistic tiger skin on a natural ground" 4'11" x 3'1" pile, warp, and weft: wool Knots: 48 per square inch In the nineteenth century, the British Empire in India facilitated for the first time sales of Tibetan rugs to European consumers. However, the number of carpets that found their way out of Tibet was small. In 1959, the occupation of Tibet by the People's Republic of China prompted the Dalai Lama and approximately 100,000 other Tibetans to flee their country. Among the group were many of the Tibetan weavers. Most settled in Nepal, although a minority settled in the provinces of Dharamsala, Ladakh, or Sikkim in India.

At the time, Nepal was desperately poor, and most of the Tibetan refugees were also impoverished. In 1961, leaders of the Swiss Aid and Technical Assistance (SATA) organization, one of the various agencies trying to help the refugees, decided that an export market for Tibetan rugs might be cultivated, and that exploiting that market could provide the refugees a long-term source of income. Accordingly, SATA funded the creation of weaving workshops in Nepal, hired some of the Tibetan master weavers to create the carpets and provide training to others, and educated European consumers concerning the merits of these carpets. The success of the plan prompted other organizations, such as the World Bank, to lend it their assistance as well. Tibetan and Nepalese entrepreneurs then gradually took their place.⁴⁹

Between 1961 and the 1990s, exports of Tibetan carpets from Nepal to Europe rose steadily, except for a brief lull in 1984. In the process, the design of the carpets evolved to match the changing tastes of European (especially German) consumers. Religious themes were used less often, abstract patterns more often. Traditional Tibetan carpets are small; the exported carpets became larger, facilitating their use as floor coverings. The intricate central areas of the traditional carpets were sometimes replaced with so-called "open fields," containing a single color. Tibetan wool was sometimes blended with wool from New Zealand. And increased quality control made the rugs more homogenous.

From an economic standpoint, the net result of the process initiated by SATA was a remarkable success; by the end of the twentieth century, the export of Tibetan carpets had become the largest source of revenue in Nepal, enabling large numbers of Tibetan

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^{49.} See O'Neill, supra note 45, at 26–27.

weavers to escape poverty.⁵⁰ From a cultural standpoint, the fruits were more mixed. Many observers lamented the atrophy of some aspects of the traditional rugs.⁵¹ To be sure, most carpets sold in Europe and the United States as "Tibetan" continued to be made in Nepal, using the traditional Tibetan methods, either by Tibetans or by Nepalese weavers. But most of the rugs differed sharply in appearance from those that had been common in Tibet before the Chinese Revolution.⁵²

In the twenty-first century, some of these aesthetic trends were reversed. A growing group of consumers, particularly in the United States, expressed interest in more "authentic" Tibetan carpets, and a subset of high-end American and European importers began to provide them. These carpets featured the traditional Buddhist images and themes—for example, "the dragon, snow lion, lotus flower, the Buddhist knot or the phoenix"⁵³—and eschewed weaving techniques that foster homogenization. The result is that, today, a significant subset of the flow of exports looks more like the original Tibetan rugs—and typically sell at a premium. An example appears below⁵⁴:



^{50.} Barbara Crossette, *Tibetan Carpets of Nepal*, N.Y. TIMES (July 4, 1993), http://www.nytimes.com/1993/07/04/travel/tibetan-carpets-of-nepal.html?pagewanted=all [https://perma.cc/7Y7L-NZSA].

51. See, e.g., Oriental Rugs and Rug Weaving in Nepal and Tibet, JACOBSEN RUGS (Jul. 13, 2015), https://jacobsenrugs.com/blog/oriental-rugs-and-rug-weaving-in-nepal-and-tibet [https://perma.cc/4DVU-7DBA] (deploring the "machine-made" quality of Nepalese rugs).

53. *Tibetan Carpets from Nepal*, ARTELINO (Nov. 3, 2010, 01:02 AM) http://www.artelino.eu/en/articles/tibetan-rugs/61-tibetan-carpets-nepal.html [https://perma.cc/Y5WW-68D5].

54. *Dragons and Clouds*, ARTELINO, http://www.artelino.eu/en/traditional-tibetanrugs.html?page=shop.product_details&flypage=flypage.tpl&product_id=132&category_id=6 [https://perma.cc/P5HK-6DH4].

^{52.} See PACIFIC ASIA MUSEUM, supra note 45, at 9 ("The craft survives, but the post-1959 product is a much less imaginative and more commercial-looking shadow of its wonderful predecessors.").

The degree to which the aesthetic shift has benefitted the Tibetan refugees (and their descendants) varies. Some of the newer rugs are designed by American or European artists and are merely manufactured in Nepal. The importers most concerned with authenticity, however, typically employ business practices intended to benefit Tibetans more directly and substantially. They are more likely to rely on Tibetan designers, and the terms on which their workers are employed in Nepal are fairer than average. Last but not least, these importers typically contribute a portion of their profits to educational or cultural institutions that benefit Tibetans. The stores and websites of these importers trumpet these practices. Set forth below, for example, is the pertinent portion of the website of Doris Leslie Blau:

In the factory selected by the Doris Leslie Blau gallery, over half the employees are Tibetan. The original Tibetan Master Weavers, who came from Tibet, have trained the current master weavers. The workers in all hand manufacturing processes: carding, spinning, dying, weaving, shearing, carving, etc., have learned from Tibetan masters. Many factory employees have 30 years of experience

This factory provides living quarters, clean drinking water, childcare and health benefits to its employees. No manufacturing processes use child labor and the company takes steps to improve its local environment

The company has superior abilities and has a proven track record. Management philosophies and practices, including those regarding social and ecological responsibilities, are exemplary in Nepal. Doris Leslie Blau aims to produce the best quality of rugs available in Nepal, with a factory that maintains high standards for their work, employees and their families, and local environment.⁵⁵

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^{55.} Tibetan Rugs, Doris Leslie Blau, https://www.dorisleslieblau.com/articles/tibetan-rugsat-doris-leslie-blau [https://perma.cc/5QED-VLZM]. Another importer's marketing materials say:

My Nepalese friend has traveled to Western countries for attending fairs and visiting his international customers for decades. Germany is the country that he knows best, and where he experienced among others German social structures and working conditions.

This made him establish a children nursery and later a school for the children of the workers. These exist now for decades and are for Nepal exemplary and unique. Currently the carpet manufactory employs three teachers. The costs for the children nursery and the school have to be covered by the income from the carpet sales - something not always easy. Large Western importing companies push for the lowest per square meter prices and could care less about working conditions.

The artelino carpet commissions will support these social activities by paying a fair price. A few dollars can have a big effect in Nepal.

Adherence to these principles seems to contribute to the importers' ability to charge atypically high prices for their carpets.⁵⁶ A portion of that premium redounds to the benefit of Tibetans.

II. THE LAW

Currently, every country in the world establishes and enforces its own rules concerning permissible uses of traditional knowledge. The approaches they have taken vary widely, but most of the national regimes fall into one of four categories. Countries in the first group expressly repudiate legal protection for traditional knowledge. For example, the Copyright Act of Lithuania provides: "Copyright shall not apply to . . . works of folk art."⁵⁷

In the second group of countries, courts have construed existing intellectual property laws to establish some limitations on uses of traditional knowledge. In perhaps the most famous example, Australian courts ruled that the importation and sale of carpets bearing images derived from motifs developed by aboriginal groups violated Australian copyright law.⁵⁸

In the third group, legislators have modified existing intellectual property statutes to reach traditional knowledge. For example, in New Zealand, the trademark statute was amended to forbid the registration of trademarks based on Māori text or imagery where the use or registration of such marks would be offensive to the Māori.⁵⁹ In

Tibetan Carpets from Nepal, supra note 53.

58. *Milpurrurru et al. v Indofurn Pty Ltd* [1994] 54 FCR 240 (Austl.), https://jade.io/article/195477 [https://perma.cc/6MRQ-VM9M].

Needless to say that there is no children labor used in the carpet manufactory of my Nepalese friend.

I want to encourage you to purchase one of these traditional Tibetan carpets. Not for charity reasons (I believe only in projects that are viable for commercial reasons!). But for your own advantage. This is a great, beautiful product that you will not find so easily anywhere else. If you consider that one person works roughly for three months on a carpet of ca. 90 by 180 cm = 3 by 6 feet, the price is definitely more than reasonable. If Nepal should ever make an economic upswing as can be watched currently in China, such prices will be a thing of the past one day anyway. Honestly, I hope it for the people of Nepal. This country holds the position of 13th poorest state in the world.

^{56.} For example, "Dragons and Clouds," the carpet shown in the text following note 54, though modest in size (95 cm x 195 cm) is offered for sale at €480. Many of the rugs offered by Doris Leslie Blau cost more than \$10,000; at least one is listed for \$50,000. See DORIS LESLIE BLAU, https://www.dorisleslieblau.com/tibetan-rugs?category_id=100&page=2 [http://perma.cc/ 5S96-FDDL].

^{57.} Law on Copyright and Related Rights of 2000, ch. II, § 1, art. 5 (Lith.).

^{59.} Māori IP, N.Z. Intell. Prop. Off., https://www.iponz.govt.nz/about-ip/maori-ip/ [https://perma.cc/LBC8-CTBB].

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Cameroon, Lesotho, Mali, Senegal, and Uganda, "folklore" is now by statute expressly included in the ambit of copyright law—and in some of those countries is given extensive protection.⁶⁰ Several countries have also amended their patent statutes to require applicants who relied on traditional knowledge when developing their inventions to disclose such reliance.⁶¹

In the fourth group of countries, lawmakers have created *sui* generis regimes governing traditional knowledge. Examples include

Article 156. Definition of folklore.—"Folklore" means all literary and artistic productions created by authors deemed to be of Senegalese nationality that are passed from generation to generation and constitute one of the basic elements of the traditional cultural heritage of Senegal.

Article 157. Exploitation of folklore and works in the public domain.-1. The exploitation of folklore or of works derived from folklore, and of works that have fallen into the public domain on expiry of the periods provided for in Articles 51 to 55, shall be declared to the collective management society approved for that purpose and shall be subject to payment of a royalty.

2. The amount of the royalty shall be determined by the Minister of Culture. It may not exceed 50 per cent of the rate of remuneration usually paid to authors in accordance with current contracts or practices.

Article 158. Allocation of royalties.—1. The royalties provided for in the previous paragraph shall be distributed as follows:

(a) collection without arrangement or personal input: 50 per cent to the person who carried out the collection, 50 per cent to the approved collective management society; (b) collection with arrangement or adaptation: 75 per cent to the author, 25 per cent to the approved collective management society.

2. Sums paid to the collective management society shall be used for social and cultural purposes.

Article 159. Proceedings.—In the event of illegal exploitation of folklore or of works that have fallen into the public domain, the State Judicial Officer, at the request of the Minister of Culture, shall have the capacity to take legal action. The infringement seizure proceedings provided for in Articles 131 et seq. of the present Law shall apply. Article 160. Penalties.—The illegal exploitation of folklore or of works that have fallen into the public domain shall be punishable by a fine equal to 500,000 CFA francs, without prejudice to the damages that may be allocated to the civil claimant.

Law 2008-09 of January 25, 2008 on Copyright and Neighboring Rights in Senegal, pt. 4, art. 156–60 (Senegal), http://www.wipo.int/edocs/lexdocs/laws/en/sn/sn004en.pdf [https://perma.cc/GWA5-EHCX].

61. For catalogues of such provisions, see DAVID VIVAS-EUGUI, WIPO, BRIDGING THE GAP ON INTELLECTUAL PROPERTY AND GENETIC RESOURCES IN WIPO'S INTERGOVERNMENTAL COMMITTEE (IGC) 31–32 (2012); WIPO, DISCLOSURE REQUIREMENTS TABLE (Oct. 2017), http://www.wipo.int/export/sites/www/tk/en/documents/pdf/genetic_resources_disclosure.pdf [https://perma.cc/2N6A-Y3GN].

^{60.} See, e.g., Law No. 2000/011 of December 19, 2000 on Copyright and Neighboring Rights Law, § 5 (Cameroon), http://www.wipo.int/edocs/lexdocs/laws/en/cm/cm001en.pdf [http://perma.cc/A8PV-2FKD]; Order No. 13 of 1989, Copyright Order, §§ 18–23 (Lesotho), http://www.wipo.int/edocs/lexdocs/laws/en/ls/ls003en.pdf [http://perma.cc/5LVS-FTLG]; Loi no. 08-024 du 23 juillet 2008, Fixant le Régime de la Propriété Littéraire et Artistique en République du Mali, ch. 3, art. 110 (Mali), http://www.wipo.int/edocs/lexdocs/laws/fr/ml/ml015fr.pdf [http://perma.cc/3UJQ-M7LC]. Senegal's regime is one of the most generous in scope:

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the Indigenous Peoples Rights Act of the Philippines and Guatemala's Cultural Heritage Protection Act.⁶²

For the most part, these rules only apply within the countries setting them. The net result is that, globally, the treatment of traditional knowledge varies radically by jurisdiction, and the governments of nations from which traditional knowledge is taken have little or no power to control uses of that knowledge in other nations. In this respect, the law governing traditional knowledge today resembles the law governing patents and copyrights in the midnineteenth century, when each country set the rules applicable in its own territory—and, in shaping those rules, typically favored its own citizens and incorporated locally dominant ideologies.

During the past forty years, advocates of enhanced legal protection for traditional knowledge have frequently sought through regional or multilateral agreements to strengthen and harmonize the rights of indigenous groups and to expand the geographic reach of those rights.⁶³ Some of those efforts have borne fruit. The principal examples are listed in the following chart.

^{62.} Act to Recognize, Protect and Promote the Rights of Indigenous Cultural Communities/Indigenous Peoples, Creating a National Commission on Indigenous Peoples, Establishing Implementing Mechanisms, Appropriating Funds Therefor, and for Other Purposes, Rep. Act 8371 (Oct. 29, 1997) (Phil.); Decreto Numero 26-97 y sus reformas, Ley para la Protección del Patrimonio Cultural de la Nación (Guat.) http://www.wipo.int/wipolex/en/text.jsp?file_id=235791 [https://perma.cc/KD9N-JK2Q]; Indian Arts and Crafts Act of 1990, 25 U.S.C. § 305 (2012).

^{63.} In some respects, these initiatives echo the late-nineteenth century efforts to harmonize (partially) the laws governing copyrights and patents-efforts that generated the Berne Convention and the Paris Convention.

Date adopted	Organization	Agreement
1967	Berne Convention, Stockholm Conference	Berne Convention section 15(4) ⁶⁴
1976	WIPO, UNESCO, Tunisia	Tunis Model Law on Copyright for Developing Countries ⁶⁵
1977; 1999	Organisation Africaine de la Propriété Intellectuelle	Bangui Agreement ⁶⁶
1982	WIPO and UNESCO	Model Provisions for the Protection of Expressions of Folklore ⁶⁷
2001	UNESCO	Universal Declaration on Cultural Diversity ⁶⁸
2007	United Nations	Declaration on the Rights of Indigenous Peoples ⁶⁹

Table 1: Regional and Multilateral Agreements

64. Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, as amended Sept. 28, 1979, WIPO Lex No. TRT/BERNE/001, http://www.wipo.int/wipolex/en/details.jsp?id=12214 [https://perma.cc/BQP7-N2V5].

65. UNESCO & WIPO, TUNIS MODEL LAW ON COPYRIGHT FOR DEVELOPING COUNTRIES (1976), ftp://ftp.wipo.int/pub/library/ebooks/historical-ipbooks/ TunisModelLawOnCopyright/TunisModelLawOnCopyright.pdf [https://perma.cc/MW3S-5RWB].

66. Bangui Agreement Relating to the Creation of an African Intellectual Property Organization, Constituting a Revision of the Agreement Relating to the Creation of an African and Malagasy Office of Industrial Property art. 46, Mar. 2, 1977, WIPO Lex No. TRT/OA002/003 http://www.wipo.int/wipolex/en/other_treaties/details.jsp?treaty_id=227 [https://perma.cc/ XG3H-MEPM]; Agreement Revising the Bangui Agreement of March 2, 1977, on the Creation of an African Intellectual Property Organization, Feb. 24, 1999, WIPO Lex No. TRT/OA002/002, http://www.wipo.int/wipolex/en/other_treaties/text.jsp?doc_id=13288 2&file_id=181151 [https://perma.cc/ZE97-YF4L].

67. UNESCO & WIPO, MODEL PROVISIONS FOR NATIONAL LAWS ON THE PROTECTION OF EXPRESSIONS OF FOLKLORE AGAINST ILLICIT EXPLOITATION AND OTHER PREJUDICIAL ACTIONS (1982), http://www.wipo.int/edocs/lexdocs/laws/en/unesco/unesco001en.pdf [https:// perma.cc/KTT5-KUJA].

68. UNESCO 31 C/Res. 25, UNESCO Universal Declaration on Cultural Diversity, annex I, art. 9 (Nov. 2, 2001), http://unesdoc.unesco.org/images/0012/001246/124687e.pdf#page=67 [https://perma.cc/X5SA-LRNG].

69. U.N. Declaration on the Rights of Indigenous Peoples, U.N. Docs. A/RES/61/295 (Sept. 13, 2007), http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf [https://perma.cc/W2EC-KATN].

2010	African Regional Intellectual Property Organization	Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore ⁷⁰
2010	Convention on Biological Diversity	Nagoya Protocol on Access and Benefit- Sharing ⁷¹

Most of these agreements fell short of the aspirations of their sponsors. Some of them were signed, ratified, or implemented by too few countries. Others failed to specify adequately the kinds of knowledge to which they applied. Others did not clearly identify the groups or public authorities to which the rights they created would attach or how to determine which rights would be assigned to which entities. Finally, many lacked sufficient teeth to ensure compliance by signatory countries.⁷²

However, the most recent of the agreements—the Nagoya Protocol—is neither vague nor toothless and thus merits further attention. The primary objective of the Protocol is to promote "the fair and equitable sharing of the benefits arising from the utilization of *genetic resources*"⁷³—an important goal but one that lies outside the zone of issues addressed in this Essay. The secondary objective of the Protocol is more germane; it seeks to ensure equitable sharing of the benefits of "genetic resources that are held by indigenous and local communities" and "traditional knowledge associated with" those resources.⁷⁴ In brief, the latter dimension of the Protocol works as

^{70.} Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore, Aug. 9, 2010, WIPO Lex No. TRT/AP010/001, http://www.wipo.int/wipolex/en/other_treaties/text.jsp?doc_id=1 50520&file_id=201022 [https://perma.cc/H6LK-J65L].

^{71.} Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity art. 1, Oct. 29, 2010, 1760 U.N.T.S. 79; *see also The Nagoya Protocol on Access and Benefit-Sharing*, CONVENTION ON BIOLOGICAL DIVERSITY, https://www.cbd.int/abs/ [https://perma.cc/764V-34SZ] (explaining the Nagoya Protocol).

^{72.} *See* Hughes, *supra* note 1, at 1227–32.

^{73.} Nagoya Protocol, *supra* note 71, art. 1 (emphasis added).

^{74.} Id. art. 5, 7. As David Smith and his colleagues explain:

In order to achieve this, Parties will provide on the ABS Clearing House (https://absch.cbd.int/) records of the relevant legislation or other regulatory requirements, including where access provisions apply, and they will designate an ABS National Focal Point (NFP) to provide information and a Competent National Authority (CNA) to provide PIC and the necessary permits. When a permit or equivalent is issued, the CNA will publish this (without confidential content) as an

follows: a member country must adopt national legislation to ensure that such resources and knowledge located within its own territory are accessed only "with the prior and informed consent and approval and involvement of these indigenous and local communities, and that mutually agreed terms have been established."⁷⁵ All other countries adhering to the Protocol are obliged to adopt national legislation reinforced by appropriate penalties—ensuring that such resources and knowledge are "utilized" within their own jurisdictions only if the "domestic access and benefit-sharing legislation or regulatory requirements" adopted by the source country have been properly observed.⁷⁶

To illustrate: Namibia, a signatory to the Protocol, recently adopted legislation that, once fully implemented, will require companies seeking access to genetic resources and accompanying traditional knowledge in Namibia to obtain prior informed consent of the groups holding such knowledge.⁷⁷ The European Union has ratified the Protocol and has adopted regulations fulfilling its responsibility to enforce access restrictions in other ratifying countries.⁷⁸ In addition, some of the members of the European Union (such as Germany) have also ratified the Protocol and adopted domestic implementing regulations.⁷⁹ The net effect is that a company that engages in bioprospecting in Namibia without the permission of the relevant

75. Nagoya Protocol, supra note 71, art. 7.

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Internationally Recognized Certificate of Compliance (IRCC) on the ABS Clearing House. Parties will also monitor utilization within their jurisdiction by designating checkpoints to determine whether genetic resources being utilized have been accessed in accordance with PIC and whether MAT have been established, and they will place reports of utilization on the ABS Clearing House as Checkpoint Communiques.

David Smith, Manuela da Silva, Julian Jackson, & Christopher Lyal, *Explanation of the Nagoya Protocol on Access and Benefit Sharing and its Implication for Microbiology*, 163 MICROBIOLOGY 289, 290 (2017).

^{76.} *Id.* art. 16. For a helpful summary of the mechanics of this system, see JEROME S. REICHMAN, WHY THE NAGOYA PROTOCOL TO THE CBD MATTERS TO SCIENCE AND INDUSTRY IN CANADA AND THE UNITED STATES 7–8 (2018), https://www.cigionline.org/sites/default/files/documents/Paper%20no.158web.pdf [http://perma. cc/WMS8-SQ7W].

^{77.} See Absalom Shigwedha, Namibia Passes Bill On Use of Genetic Resources, NAMIBIAN (May 11, 2017), http://allafrica.com/stories/201705110836.html [https://perma.cc/APV5-YXBN].

^{78.} See Regulation 511/2014 of Apr. 16, 2014, art. 1, 2014 O.J. (L 150) 57, 59 (EU); Commission Implementing Regulation 2015/1866 of Oct. 13, 2015, art. 1, 2015 O.J. (L 275) 58, 4 (EU).

^{79.} See Bruce S. Manheim, Jr., Freedom to Utilize Genetic Resources? The Nagoya Protocol Two Years Later, INTELL. PROP. WATCH (Oct. 24, 2016), https://www.ip-watch.org/2016/10/24/freedom-utilize-genetic-resources-nagoya-protocol-two-years-later/ [http://perma.cc/XV3Y-MH4A].

indigenous group would be subject to serious sanctions in Germany (up to 50,000 Euros for each offense) if it sought to commercialize there a compound derived from that bioprospecting.

The coverage of the Protocol is as yet uneven. Even in the signatory countries, it is far from fully operational. As of this writing, 104 nations have ratified the Protocol,⁸⁰ but only a subset of them have adopted local legislation either restricting access to genetic resources and accompanying knowledge or punishing "utilization" in their own jurisdictions of resources and knowledge acquired in violation of access restrictions in the country from which they were taken.⁸¹ The United States has not joined either the Convention on Biological Diversity or the Protocol—and it is not likely to do so in the near future.⁸²

That, in brief, is the current state of the law governing traditional knowledge. In the opinions of many observers and members of indigenous groups, the protections that these regimes, in combination, provide to indigenous groups are inadequate. The questions addressed in the remainder of this Essay are whether those protections should be enlarged and, if so, how.

III. THE PRINCIPAL JUSTIFICATIONS

In the absence of an affirmative justification for extending enhanced legal protection to traditional knowledge, we ought not to do it. The free flow of ideas and information has myriad economic and cultural benefits; we should not sacrifice those benefits without a good reason.

During the extended debate over the appropriate legal status of traditional knowledge, many arguments have been advanced for overriding the presumption against enhanced protection. Most of the colorable arguments are grounded in one of three normative

^{80.} See Parties to the Nagoya Protocol, CONVENTION ON BIOLOGICAL DIVERSITY, https://www.cbd.int/abs/nagoya-protocol/signatories/default.shtml [https://perma.cc/XK3U-8G8S].

^{81.} For current information concerning the status of the implementation initiatives, see *The Access and Benefit-Sharing Clearing House (ABSCH)*, CONVENTION ON BIOLOGICAL DIVERSITY, https://absch.cbd.int [https://perma.cc/6TWD-Y4RE].

^{82.} Nevertheless, many academic and research organizations in the United States have undertaken efforts to comply with the regulations adopted by the member countries of the Protocol. *See* Kevin McCluskey et al., *The U.S. Culture Collection Network Responding to the Requirements of the Nagoya Protocol on Access and Benefit Sharing*, MBIO, July/Aug. 2017, at 1 (2017), http://mbio.asm.org/content/8/4/e00982-17.full [http://perma.cc/SD49-YTUH].

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frameworks: labor-desert theory, considerations of corrective justice, or utilitarianism. These three clusters of arguments are summarized and evaluated below. The primary claim of this analysis is that in all three theoretical sectors, the arguments for legal reform prove weak. However, there remains a fourth, less familiar normative framework under whose auspices some less conventional arguments for strengthened protection for traditional knowledge might be advanced. That perspective receives more extended treatment in Part IV.

A. Labor

In some countries, including the United States, it is customary to justify intellectual property rights at least partly on the ground that they constitute fair rewards for hard work. The philosophic root of this perspective is John Locke's famous contention that, in a state of nature, labor expended in cultivating a tract of land previously "held in common" gives the laborer a natural property right in the tract (subject to certain provisos)—a right that the state, when it comes into being, has an obligation to respect and enforce. Many judges and scholars have taken the position that the same moral principle justifies granting to authors and inventors analogous protection (for limited times) for their respective writings and inventions—subject to some important limitations also grounded in Locke's argument.⁸³

Some advocates of according indigenous groups greater legal rights to their traditional knowledge have sought support from this Lockean argument. They point out that it requires hard work to develop a plant-based remedy for malaria or a novel technique for weaving carpets. If we are willing to give the writer of a novel or the inventor of a better mousetrap exclusive rights to specified uses of their creations, why should we not accord similar entitlements to the groups whose members developed the plant-based remedy or weaving technique?⁸⁴

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^{83.} For manifestations of this approach, see William Fisher, *Theories of Intellectual Property*, *in* NEW ESSAYS IN THE LEGAL AND POLITICAL THEORY OF PROPERTY 168, 170–71 (Stephen R. Munzer ed., 2001).

^{84.} See, e.g., Joseph M. Wekundah, Why Protect Traditional Knowledge, 44 AFR. TECH. POL'Y STUD. NETWORK BIOTECHNOLOGY TR. AFR. 1, 11 (2012) (arguing that, because inventors own their inventions, indigenous groups should own their traditional knowledge as well); cf. Robert P. Merges, Locke for the Masses: Property Rights and the Products of Collective Creativity, 36 HOFSTRA L. REV. 1179, 1179–82 (2008) (exploring possible bases of intellectual property rights in collective labor).

Putting aside the difficulties of using Locke's vision to justify ordinary intellectual property rights,⁸⁵ extending that argument to traditional knowledge is fraught with more severe analytical problems. These have been persuasively catalogued by Steven Munzer, Kai Raustiala, and Justin Hughes.⁸⁶ I will limit myself to a summary of their persuasive critique.

The first problem is that most of the labor in producing traditional knowledge typically was expended long ago by ancestors of the current members of the group, who are now seeking enhanced legal protection. It is far from clear that the natural rights of the original workers, whatever they may be, run to their descendants.

That gap might be bridged by highlighting work done by members of the present generation in extending and modifying the traditional knowledge—gradually altering the Wandjina cave images while repainting them, adjusting the traditional Buddhist carpet designs, and so forth. But many forms of traditional knowledge, particularly those that involve socially beneficial uses of natural resources, do not seem to evolve in this fashion. For example, there is little evidence that current members of the Galibi or Palikur groups have altered the formulations of the antimalarial tea made from *Quassia amara*.

Moreover, the labor involved in adjusting and sustaining a body of knowledge seems substantially more modest—and thus less deserving of reward—than its original development. Our treatment of analogous situations that implicate standard forms of intellectual property confirms this intuition: we sometimes grant copyright protection to the creator of a derivative work or patent protection to the person who improves an invention, but such protection only extends to the modification. We do not give the improver any rights over the original invention.

A more fundamental difficulty associated with relying on labor to justify legal protection for traditional knowledge is that, typically, the efforts of the original developers of the knowledge were undertaken for reasons unrelated to control over the knowledge—and achievement of those goals seems a morally sufficient reward. The original developers of the *Quassia amara* tea were trying to cure the members of their community of malaria—and they seem to have succeeded. The members of the Mowanjum groups of indigenous Australians painted the original versions of the Wandjina to honor and

^{85.} Those difficulties are discussed in Fisher, *supra* note 83, at 184–89.

^{86.} See Hughes, supra note 1, at 1246–51; Munzer & Raustiala, supra note 1, at 37, 63–65.

sustain their spirit ancestors — and they too seem to have accomplished that end. An additional secular reward for their effort could fairly be characterized as a windfall.

Finally, important practical problems attend reliance on labordesert theory in this context. For example, as Robert Nozick has pointed out, it is both important and difficult to formulate a property right that will give a laborer a reward proportional to his or her effort.⁸⁷ Achieving that goal in the context of traditional knowledge would be especially difficult, when the magnitude of the effort must be inferred from its contemporary residue and where the entitlement sought—a perpetual exclusive right—is so expansive.

In combination, these problems prevent labor-desert theory from offering a convincing justification for the presumption against legal protection.

B. Corrective Justice

The second line of argument contends that according indigenous groups enhanced protection for their traditional knowledge is necessary to compensate them (at least partially) for the injustice with which those groups have been treated during the period of colonial conquest and exploitation. One strong statement of this argument (along with some others, to which we will turn below) can be found in the following passage from "Indigenous Knowledge, Anti-Colonialism and Empowerment" by Waziyatawin:

Indigenous knowledge recovery is an anti-colonial project. It is a project that gains its momentum from the anguish of loss of what was and the determined hope for what will be. It springs from the disaster resulting from the centuries of colonialism's efforts to methodically eradicate our ways of seeing, being and interacting with the world. At the dawn of the 21st century, the recovery of Indigenous knowledge is a conscious and systematic effort to revalue that which has been denigrated and revive that which has been destroyed. It is about regaining the ways of being which allowed our peoples to live a spiritually-balanced, sustainable existence within our ancient homelands for thousands of years.⁸⁸

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^{87.} See Robert Nozick, Anarchy, State, and Utopia 174–75 (1974).

^{88.} Waziyatawin, *Indigenous Knowledge, Anti-colonialism and Empowerment*, FED'N FOR HUMAN. & SOC. SCI. (Apr. 30, 2010), http://www.ideas-idees.ca/blog/indigenous-knowledge-anti-colonialism-and-empowerment [https://perma.cc/K4TQ-9XMY].

The contention that the legal system should compel the recipients of ill-gotten gains to compensate the persons from whom they were taken finds expression in a wide variety of contexts. It underlies, for example, the common law cause of action for unjust enrichment, the duty to rescue a person whose peril one had caused, and the obligation recognized by many countries to repatriate works of art wrongly taken from another jurisdiction. A duty to respect the traditional knowledge of an abused indigenous group, it can be argued, fits comfortably within this family of doctrines.⁸⁹

The force of this argument is strongest when enhanced legal protection would, in practice, curb the power of—or extract wealth from—the group most responsible for the exploitation of the indigenous group in question. Perhaps the clearest illustration is the assertion of legal rights by indigenous Australians against the descendants of the British colonists—as, for example, in the claims made by the Mowanjum and their legal representatives against unauthorized use by Caucasian Australians of the Wandjina images. In a 2010 interview, Jenny Wright, the manager of the Mowanjum Arts and Cultural Centre in Derby, expressed eloquently the senses of guilt and responsibility that helped fuel the removal from public property of Vesna Tenodi's sculpture:

I think one part of me would say, Vesna we've taken everything from these people, we've taken their land, we've taken their language, we've destroyed their culture. Are we going to take their religion too? It just seems to me, and I know I'm making a very strong statement here, but I do feel this in my heart, that it just seems to me that that's so grossly unfair, and as an Australian I think you should feel ashamed of yourself, seriously. Appropriation of absolutely everything. Is there nothing left of these people that we won't take?⁹⁰

However, in most controversies over permissible uses of traditional knowledge, the impact of enhanced legal protection will not be so clearly concentrated on a group strongly associated with oppression of the indigenous group in question. For example, the agreement by IRD to provide the members of the Galibi and Palikur a share of the proceeds from any antimalarial drug derived from

^{89.} See Hughes, supra note 1, at 1220.

^{90.} Interview by Damien Carrick with Jenny Wright, Manager of the Mowanjum Arts and Cultural Centre in Derby, Wash. (Jun. 29, 2010), http://www.abc.net.au/radionational/programs/lawreport/wading-into-the-wandjina-controversy/3032658 [https://perma.cc/DJQ9-8M7H].

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Simalikalactone E will ultimately increase the prices paid for that drug by malaria victims throughout the world, many of whom have no connection to the genocide and exploitation practiced by the Portuguese (and, to a lesser extent) the French in Latin America. Indeed, even in the Australian context, the argument sometimes slips. Vesna Tenodi, it turns out, is a Croatian immigrant to Australia; it is thus difficult to assign her responsibility for the mistreatment of the Aborigines.

This difficulty could perhaps be alleviated through generalization. Most of the persons who would be directly or indirectly disadvantaged by enhanced protection for traditional knowledge are citizens or beneficiaries of countries whose disproportionate wealth was derived in part from the exploitation of indigenous groups between roughly 1500 and 1900. But this maneuver, even if persuasive, cannot neutralize another troubling feature of the argument: the overwhelming majority of both the perpetrators of the exploitation of indigenous groups and the victims of that exploitation are now dead. Imposing upon members of the current generation—none of whom has ever been given a morally significant opportunity to opt out of the benefits of the misconduct of their ancestors—a duty to rectify it is more difficult to justify than the doctrines mentioned at the outset of this Part that implement corrective justice on an individual basis.⁹¹

In sum, this perspective, like the labor-desert theory, provides, at best, weak support for overcoming the presumption against strengthened legal rights.

C. Utilitarianism

The theoretical tradition of utilitarianism might seem a poor argument for overcoming the presumption. Utilitarian theorists are generally hostile to legal impediments to the free flow of ideas and information, on the ground that they needlessly interfere with people's ability to identify and satisfy their preferences efficiently. To be sure, utilitarians do recognize one major exception to this stance: intellectual property rights, they acknowledge, may be justified when necessary to stimulate socially beneficial innovation that otherwise would not occur. Much of patent and copyright law is commonly justified on that basis. But the desirability of creating intellectual property rights in order to stimulate innovation seems inapposite in the context of traditional

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^{91.} Cf. William W. Fisher & Talha Syed, Global Justice in Health Care: Developing Drugs for the Developing World, 40 U.C. DAVIS L. REV. 581, 636–37 (2007).

knowledge, where the relevant innovative activity by definition has already occurred.

Nevertheless, advocates of enhanced legal protection have sought to extract from utilitarian theory three arguments in their favor. First, following the lead of an important subgroup of patent law scholars,⁹² they contend that giving indigenous groups greater control over the knowledge developed under their auspices will incentivize them to commercialize that knowledge, which in turn will increase the total social benefits of the information.⁹³ Second, they argue that indigenous groups will make socially optimal efforts to preserve their traditional knowledge only if they are permitted to reap the benefits of the commercialization thereof.⁹⁴ Finally, they suggest that the dismay of people who witness the unfair ways in which indigenous groups are currently being treated constitutes a large negative psychic externality, one which could be eliminated through the extension of greater legal rights to those groups.⁹⁵

These arguments are ingenious, but none fares well upon close examination. Justin Hughes argues persuasively that there is little reason to think that indigenous groups would typically be better positioned to commercialize their knowledge than the companies that often do so without their permission.⁹⁶ The three controversies reviewed in Part I lend support to his contention. Before the arrival of the IRD researchers, the indigenous groups in French Guiana had made no effort to commercialize the antimalarial potential of *Quassia amara*. The Mowanjum have been slow to commercialize the Wandjina

^{92.} See Michael Abramowicz & John F. Duffy, Intellectual Property for Market Experimentation, 83 N.Y.U. L. REV. 337, 405 (2008); F. Scott Kieff, Property Rights and Property Rules for Commercializing Inventions, 85 MINN. L. REV. 697, 710 (2001).

^{93.} See, e.g., Shubha Ghosh, Globalization, Patents, and Traditional Knowledge, 17 COLUM. J. ASIAN L. 73, 78 (2003) ("If property rights aid in developing and disseminating . . . knowledge, then recognizing intellectual property rights in what has already been created is consistent with the promotion of progress."); Peter Drahos, Towards an International Framework for the Protection of Traditional Group Knowledge and Practice 9 (Feb. 4–6, 2004) (unpublished manuscript), https://www.anu.edu.au/fellows/pdrahos/reports/pdfs/2004Drahos_tkframework UNCTAD.pdf [https://perma.cc/5G3V-RYSQ].

^{94.} See COMM'N ON INTELLECTUAL PROP. RIGHTS, INTEGRATING INTELLECTUAL PROPERTY RIGHTS AND DEVELOPMENT POLICY 78 (2002); Hansen, *supra* note 1, at 775.

^{95.} For the foundation of this argument, see Frank Michelman, *Property, Utility, and Fairness: Comments on the Ethical Foundations of 'Just Compensation' Law*, 80 HARV. L. REV. 1165, 1224 (1967) ("If, then, there are circumstances where a decision not to compensate would greatly demoralize men... utility, oddly enough, will favor the more liberal compensation practice.").

^{96.} Hughes, *supra* note 1, at 1243–45.

images. And American and European rug importers have proven at least as capable of commercializing Tibetan rugs as the Tibetan and Nepalese weavers who are carrying on the tradition.

All three controversies also reinforce scholars' doubts concerning the plausibility of the second argument. Documentation of the traditional practices of the Galibi, Palikur, Mowanjum, and Tibetan weavers has been done by Western ethnobotanists, anthropologists, and art historians, not by the members of the groups responsible for those forms of traditional knowledge. There is little reason to think that extending property rights to the current members of the group would augment the already successful efforts to preserve these three bodies of knowledge. Nor is there reason to think that in this respect, the three controversies reviewed in Part I are idiosyncratic.

Finally, the third argument rests upon an untested empirical proposition: that the total dismay of the observers who witness what they see as the unfair denial to indigenous groups of enhanced rights to their knowledge is greater than the total dismay that would be experienced by other people if they witnessed the interposition of what they regarded as unjust legal impediments to public use of that knowledge. Until that claim is substantiated, the argument based upon psychic externalities has no force.

In sum, at this point we must conclude that a convincing case for strengthening legal rights to traditional knowledge cannot be made on utilitarian grounds.

IV. CULTURAL THEORY

The arguments canvassed in the three preceding subsections do not exhaust the efforts that have been made to justify enhanced protection for traditional knowledge. The scholarly literature contains three additional potential justifications: community, distributive justice, and privacy. The first of these themes is well developed by Kristen Carpenter, Sonia Katyal, and Angela Riley. The heart of their argument is that "[p]eoplehood . . . dictates that certain lands, resources, and expressions are entitled to legal protection as cultural property because they are integral to the group identity and cultural survival of indigenous peoples."⁹⁷ The second theme is emphasized by

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^{97.} Kristen A. Carpenter, Sonia K. Katyal & Angela R. Riley, *In Defense of Property*, 118 YALE L.J. 1022, 1028 (2009); *see also* Wekundah, *supra* note 84, at 12 ("Preservation of [traditional knowledge] helps to preserve the self identification of people and can ensure the continuous existence of indigenous and traditional people.").

Madhavi Sunder in her essay, "The Invention of Traditional Knowledge," in which she argues that legal protection for bodies of knowledge developed and constantly modified by indigenous groups can improve the economic position of the global poor.⁹⁸ The third is offered by Hughes (in the essay previously mentioned) as a partial substitute for the justifications of legal protection for traditional knowledge that he persuasively criticizes. Hughes points out that unauthorized uses of some forms of traditional knowledge—specifically, rituals, sanctuaries, or sacred writings that indigenous groups have sought to shield from outsiders—might merit legal condemnation for many of the same reasons that undergird the long-established laws governing trade secrecy, protection of confidential information, breach of confidence, and invasion of privacy.⁹⁹

Each of these arguments is more plausible than the claims, already surveyed, rooted in conceptions of labor, corrective justice, or utilitarianism. However, to date, the popularity and influence of these cultural arguments has been modest. A possible reason is that, unlike the three primary arguments, these claims have not been bound together into a comprehensive normative framework. As a result, when and how much attention should be given to them remains uncertain. This Part offers such a framework and then returns to the arguments at issue.

In previous essays, I have described the framework as "cultural theory." Set forth below is a summary of the approach (distilled from those earlier essays).¹⁰⁰

The foundation of the approach is the proposition that there exists such a thing as human nature, which is hard to discern, but real and stable. Because of their nature, people flourish under some conditions

^{98.} Madhavi Sunder, *The Invention of Traditional Knowledge*, 70 LAW & CONTEMP. PROBS. 97, 103 (2007); *see also* JAMES BOYLE, SHAMANS, SOFTWARE, AND SPLEENS: LAW AND THE CONSTRUCTION OF THE INFORMATION SOCIETY 142 (1996) (describing the argument in favor of more protection of intellectual property in order to improve the economic position of the poor).

^{99.} Hughes, supra note 1, at 1253.

^{100.} For the essays from which the summary in the text is derived, see WILLIAM W. FISHER, III, PROMISES TO KEEP: TECHNOLOGY, LAW, AND THE FUTURE OF ENTERTAINMENT (2004) [hereinafter FISHER, PROMISES TO KEEP]; William W. Fisher, III, *The Implications for Law of User Innovation*, 94 MINN. L. REV. 1417 (2010) [hereinafter Fisher, *User Innovation*]; William W. Fisher, III, *Recalibrating Originality*, 54 HOUS. L. REV. 437 (2016) [hereinafter Fisher, *Recalibrating Originality*]; William W. Fisher, III, *Reconstructing the Fair Use Doctrine*, 101 HARV. L. REV. 1659 (1988) [hereinafter Fisher, *Reconstructing Fair Use*]; Fisher, *supra* note 83; William W. Fisher, III, *When Should We Permit Differential Pricing of Information*?, 55 UCLA L. REV. 1 (2007) [hereinafter Fisher, *Differential Pricing of Information*].

and suffer or atrophy under others. From those observations emerges a normative guideline: social and political institutions, including law, should be organized so as to facilitate human flourishing.

Substantial literatures in the fields of philosophy, psychology, history, and sociology point toward eight conditions that are especially important to human flourishing. The first and most obvious is life itself. Flourishing is possible only if you are alive—somewhat more specifically, if you are able to live a life of normal length.

The second, nearly as obvious, is health. Illness impairs flourishing. Freedom from physical and psychic pain is one of the conditions that contribute to living well.

Third, a substantial degree of autonomy is important to human flourishing. No one, of course, is wholly self-made or self-directed. But a life without any measure of self-determination is a life not fully lived. Of course, autonomy does not mean freedom from social connections; it means, rather, that the bonds and communities through which we define ourselves are at least partly chosen, not inherited or coerced. One of the findings of recent work in social psychology is that the dimension of autonomy that contributes most to well-being is the subjective feeling of self-determination, which is only partially dependent on the objective number of options one has. Another finding is that autonomy not only makes one feel better, but is also adaptive. Specifically, autonomous motivations—in other words, motivations arising out of voluntary choice—increase job performance, particularly when the task at issue is complex and requires creativity.

The fourth condition conducive to flourishing is engagement, in the sense of participating in shaping one's environment. Engagement of this sort can be achieved in at least three settings. The first, emphasized by Karl Marx in his early writings, is the workplace; his vision of "meaningful work" remains insightful. The leaders of the American Revolution (and an important group of contemporary legal scholars convinced of the wisdom of their ideology) instead emphasized politics; they celebrated a particular style of engagement in civic life-altruistic, deliberative, and guided by commitment to the welfare of the polity as a whole, rather than by self-interest or factional interest. A third, equally important potential arena for engagement is culture itself. We live today in a cloud of symbols and images that, like our jobs and our polities, all too often seem out of our control. The result is cultural alienation analogous to alienation in the workplace. Retaking some degree of responsibility and control for the shape of that semiotic environment is another way of achieving self-fulfillment.

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Closely related to engagement is the fifth of the conditions: self-expression. Projecting one's self into or onto the world has long been recognized as constitutive. It is on this dimension that the cultural theory of copyright veers closest to the personality theory of intellectual property.

The sixth of the conditions, highlighted by recent work in psychology, is competence. We feel better and we do better when we have the sense that we are capable of performing the tasks we take on. Competence does not require that we be certain of success, but that we have the requisite talents and skills to succeed.

The seventh is sociability. We flourish through connection with others; we atrophy alone. The vocabulary employed in different disciplines to express this age-old insight varies. A philosopher, such as Martha Nussbaum, might use the term "affiliation." The psychologists Edward Deci and Richard Ryan use the term "relatedness," and place it on a par with autonomy and competence as a fundamental human need. In political theory, the theme finds clearest expression in communitarian theory, which emphasizes the role played by group membership in the formation and maintenance of a person's identity.

Last but not least, human flourishing is facilitated by some degree of privacy. Zones, physical or virtual, that are free from scrutiny and surveillance are conducive to experimentation and intimacy, and are thus crucial to self-fulfillment.

This list should not be regarded as canonical. Although grounded in millennia of reflection and experience, it is still being tested and refined. But it provides a reasonably reliable catalogue of the underpinnings of a good life.

A just society would afford all persons access to a life enriched by these conditions. To be sure, perfect equality of access is not necessary—and indeed may not be possible. But equalization to a degree not yet achieved by any country should be our goal.

Achievement of that objective would require reforming many dimensions of our economic, political, and legal systems. The law of intellectual property is far from the most important. That said, it is by no means inconsequential. In previous essays, I have identified ways in which movement in the direction of a just and attractive culture could be achieved though reform of five dimensions of intellectual property: the doctrines of fair use and originality in copyright law;¹⁰¹ the treatment of user innovation in copyright, patent, and trademark law;¹⁰² rules governing parallel importation that affect the feasibility of differential pricing;¹⁰³ and the dimensions of patent law that affect the availability of life-saving vaccines and medicines.¹⁰⁴ In this Essay, I apply the same approach to traditional knowledge.

The legal rules governing controversies of the sorts examined in Part I could affect several dimensions of the good life and the good society. Controversies like Wandjina Spirit Images make clear that traditional knowledge is sometimes central to the identities of indigenous groups and that unauthorized use of that knowledge by outsiders corrodes those identities. Fidelity to the cultural theory outlined above—and, in particular, the importance of sociability to the good life—should prompt us to be watchful for such situations and to employ the legal system to protect indigenous groups from the pain and disorientation that unauthorized use of their knowledge can cause.

Situations of this sort are most likely to arise when the traditional knowledge in question is religious or artistic. It is unsurprising that most Mowanjum were "offended and distressed" by the public display of representations of Wandjina; those representations violated their traditions and beliefs. But threats to group identity (and associated pain on the part of members of the group) also sometimes result from unauthorized uses of knowledge pertaining to socially beneficial harnessing of natural resources. A possible example is "local and traditional knowledge" concerning sustainable fishing practices and other ways of engaging marine ecological environments.¹⁰⁵

Another way in which cultural theory can illuminate the problem of traditional knowledge concerns egalitarianism. Central to the theory offered here is a variant of distributive justice. All persons should be provided roughly equal access to the preconditions of a good life. Enhanced protection of traditional knowledge could help ameliorate the radical inequality in the world today in the degree to which the members of different groups enjoy such access, specifically by

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^{101.} Fisher, *Recalibrating Originality, supra* note 100, at 437–38; Fisher, *Reconstructing Fair Use, supra* note 100, at 1661.

^{102.} Fisher, User Innovation, supra note 100, at 1474–77.

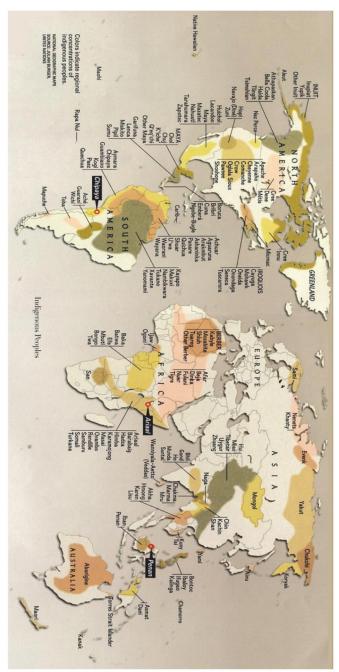
^{103.} Fisher, Differential Pricing of Information, supra note 100, at 16–18.

^{104.} Fisher & Syed, supra note 91, at 583.

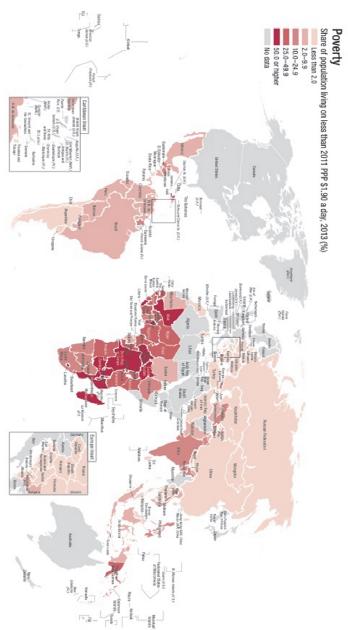
^{105.} See Thomas F. Thornton & Adela Maciejewski Scheer, Collaborative Engagement of Local and Traditional Knowledge and Science in Marine Environments: A Review, 17 ECOLOGY & SOC'Y 8, 8 (2012).

mitigating the economic and social disadvantages from which indigenous groups currently suffer. Those disadvantages derive in part from the relative poverty of people in regions where indigenous groups are overrepresented, particularly Central and South America, sub-Saharan Africa, and eastern Asia. This geographic concentration is most easily seen by comparing the following two maps:¹⁰⁶

^{106.} The source of the former is A Global Map of Indigenous Peoples, PBS, http://www.pbs.org/newshour/extra/app/uploads/2014/11/A-global-map-of-indigenous-peoples.pdf [https://perma.cc/3YUW-9N6H]. The source of the latter is World Development Indicators 2017 Maps, WORLD BANK GROUP, https://data.worldbank.org/products/wdi-maps [https://perma.cc/GJ3P-ZN2F].



Regional Concentrations of Indigenous Groups



Regional Concentrations of Poverty

This global source of inequality is compounded at the national level. Within virtually every country, members of indigenous groups

fare worse than the rest of the population with respect to income, employment, educational attainment and opportunity, access to safe drinking water, vaccination rates, and life expectancy.¹⁰⁷ In some countries, their positions (both relative and absolute) are improving, but in others they are declining.¹⁰⁸

These generalizations are confirmed by case studies of the status of indigenous groups in specific countries. For example, the Australian Bureau of Statistics reports that, "[i]n 2006, the mean (average) equivalised gross household income for Indigenous people was \$460 per week, compared with \$740 for non-Indigenous people."¹⁰⁹ Furthermore, large gaps were evident in all parts of the country, ranging from major cities to "[v]ery [r]emote areas."¹¹⁰ The situation in the United States is similar. Roughly 3 million people living in the United States are Native Americans. On almost all measures pertaining to quality of life, they fare worse than the members of other racial or ethnic groups. For example, the poverty rate among Native Americans living on reservations is 39 percent; among Native American living off reservations, the poverty rate is 26 percent. By comparison, the rate for whites is 9 percent; for African Americans, 25 percent; for Latinos, 23 percent; and for Asian Americans, 13 percent.111

In sum, indigenous groups are economically and socially disadvantaged. To mitigate these disadvantages, one of the few resources upon which these groups might draw is their traditional knowledge, and their ability to do so might be enhanced through better legal protections. How exactly? It is widely assumed that the most effective and efficient mechanism involves benefit sharing, typically achieved through license agreements between indigenous groups and the companies who wish to put their knowledge to commercial use. Some such agreements have worked well, but unfortunately, the relationship between IRD and the Palikur and Kalina in French

110. Id.

^{107.} See Gillette Hall & Harry Patrinos, Indigenous Peoples, Poverty and Development (2010).

^{108.} Id.

^{109.} Population Characteristics, Aboriginal and Torres Strait Islander Australians, 2006, AUSTL. BUREAU STATISTICS (July 28, 2011), http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/B9FFE0FCF1E37147CA2578DB00283CCD?opendocument [https://perma.cc/5SHC-MQPD].

^{111.} HARVARD PROJECT ON AMERICAN INDIAN ECONOMIC DEVELOPMENT, THE STATE OF THE NATIVE NATIONS 115 (2008). *See generally* BRUCE DUTHU, AMERICAN INDIANS AND THE LAW (2008) (using federal law as a lens to analyze the proper place of Indian tribes within the American constitutional framework).

Guiana is more typical. Thus far, those groups have reaped no benefit whatsoever from the benefit-sharing commitment grudgingly made by IRD; whether they will ever do so remains uncertain. The same is true of the deservedly famous commitment made (similarly under pressure) by South Africa's Council for Scientific and Industrial Research to the San people in return for permission to commercialize their knowledge of the appetite-suppressing power of Hoodia, a plant common in the southern countries of Africa.¹¹²

More promising, when feasible, is a strategy under which the indigenous group capitalizes on its knowledge by producing and selling goods or services embodying that knowledge. The recent history of Tibetan carpets provides a good illustration. For the most part, Tibetan and Nepalese weavers do not license the rights to manufacture carpets using their traditional techniques and designs to western companies; instead, as we saw in Part I, they continue to make the carpets themselves and sell them for a premium to European and American consumers. As Madhavi Sunder shows in her study of the impact of geographical indications on traditional handicrafts in India, legal rights can powerfully reinforce the capacity of indigenous groups to pursue this strategy.¹¹³ Not only has this approach proven more reliable than licensing, it has the important ancillary benefit of providing long-term employment for the members of the group, which in turn increases opportunities for the kinds of engagement, control over their workplace, and sense of competence that are at least as important as income to the conception of the good life that lies at the heart of cultural theory.¹¹⁴

A third advantage, from the standpoint of cultural theory, of enhanced protection of traditional knowledge would be augmentation of global cultural diversity—a benefit to all persons, not merely the members of indigenous groups. The distinctiveness and localism of traditional cultural expressions mitigate to some degree the increasing

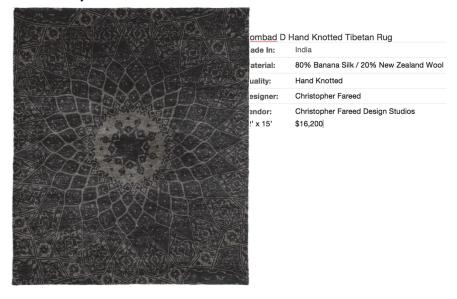
^{112.} Roger Chennells, Strengthening Partnership Between States and Indigenous Peoples: Treaties, Agreements and Other Constructive Arrangements 3–5 (2012), http://www.ohchr.org/ Documents/Issues/IPeoples/Seminars/Treaties/RogerChennells.pdf [https://perma.cc/L9GZ-UJ93].

^{113.} Sunder, supra note 98, at 123.

^{114.} That intellectual property laws can and should be adjusted to enhance the employment opportunities available to poor people, rather than to provide them flows of money, finds strong support in the Intellectual Property Policy recently adopted by South Africa. *See* Dep't of Trade and Indus., Draft Intellectual Property Policy of the Republic of South Africa, Phase I, 2017, at 3, www.dti.gov.za/gazzettes/IP_Policy.pdf [https://perma.cc/S6TH-ZEZU] (stating that intellectual property policy is a core element in generating sustainable and decent jobs).

homogenization of most art forms throughout the globe. Legal impediments to unauthorized use of such expressions, if successful in slowing the pace at which they are swallowed by dominant artistic traditions, can benefit everyone.

On the other side of the ledger is the value of autonomy. Restrictions on uses of traditional knowledge do or could limit the range of options available to nonmembers of indigenous groups to shape and express their identities. Consider, for example, the potential implications of tighter limits on unauthorized uses or adaptations of Tibetan rugs. For many Westerners, identity is expressed in and sustained by the homes we select and shape.¹¹⁵ The centerpiece of the aesthetic of many Western homes is the "living room" rug. Freedom to choose among extant cultural forms—or to modify and blend them—when selecting the focal point of one's living space enhances opportunities for self-creation. To be concrete, autonomy is enhanced by consumers' ability to choose and use products like the two depicted below, both of which combine dimensions of traditional Tibetan rugs with other styles:¹¹⁶



^{115.} See MARGARET JANE RADIN, REINTERPRETING PROPERTY 1 (1993) (exploring personality theory, which argues that ownership is bound up with self-constitution).

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^{116.} For the source of the first, see *Gombad D Hand Knotted Tibetan Rug*, MODERNRUGS.COM, https://www.modernrugs.com/area-rugs/gombad-d-hand-knotted-tibetan-rug_-glr_fareedtibetan1751.html [https://perma.cc/C6G4-5ZVX]. For the source of the second, see *Oka Hand-Knotted Tibetan Wool Rug 6' x 9'*, VIYET, https://viyet.com/lindstrom-rugs-oka-hand-knotted-tibetan-wool-rug-41225-27684.html [https://perma.cc/T72T-5R57].



LINDSTROM RUGS

Oka Hand-Knotted Tibetan Wool Rug 6' x 9'

Based in Los Angeles, Lindström Rugs was started by Erik Lindström, who sought to create a boutique custom rug company with an emphasis on bespoke, hand-knotted and hand-tufted carpets for discerning residential and commercial clients. Intricately hand-knotted from Tibetan wool, this modern rug was carefully woven to resemble the slim layers found in natural geodes and other stones.

Retail \$4860 Listed \$2920

Rug sellers exploit, of course, the desire for self-definition through home decoration,¹¹⁷ but they are able to do so only because the desires are real and durable. Maximizing access to the good life should prompt us, if possible, to preserve opportunities to satisfy those desires.

A better known (and perhaps more appealing) example of the same phenomenon involves recent adaptations of Kente cloth in the United States. Kente, a distinctively colored cloth featuring bold geometric patterns, was developed by the Ewe and Ashanti groups in the part of western Africa currently occupied by Ghana and Togo. Originally, it was worn only by male rulers, as in the following

^{117.} An especially forthright example of this marketing strategy can be found on the website of one retailer offering rugs of these sorts: "For us it isn't just about just selling a rug, but helping a friend find the perfect piece that's just the right touch for your home and personality. We want to hear a resounding 'Yes! This is just what I've been looking for!'" *About Us*, RUG IMPORT, https://www.rugimport.com/pages/about-us [https://perma.cc/LS8U-MAR5].

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photograph of King Osei Tutu II of the Ashanti Kingdom meeting with Queen Beatrix of the Netherlands.¹¹⁸



During the 1980s and 1990s, a growing number of young African Americans of both genders began wearing Kente cloth—initially in ceremonial settings, such as college convocations and graduations, and later in more casual contexts. Some examples are shown on the following page:¹¹⁹

^{118.} Patrick Boehler, *African Crown Jewels Stolen in Norway*, TIME (Oct. 12, 2012), http://newsfeed.time.com/2012/10/12/african-crown-jewels-stolen-in-norway [https://perma.cc/66 X7-8AQ8].

^{119.} James Padilion Jr., *The History and Significance of Kente Cloth in the Black Diaspora*, BLACK PERSP. (May 22, 2017), https://www.aaihs.org/the-history-and-significance-of-kentecloth-in-the-black-diaspora [https://perma.cc/9HTF-6UNM]; Africandimebeautyinside, TUMBLR, http://africandimebeautyinside.tumblr.com/post/22162499844 [https://perma.cc/N8F7-RK3M].





Regina Austin, writing in the early 1990s, explained as follows the cultural significance of this trend: "[M]ore and more blacks are dressing in whole or in part in African garb as an expression of their identity and racial solidarity or their adherence to the ideology of Afrocentricity."¹²⁰ That many of these uses were inconsistent with the

^{120.} Regina Austin, "A Nation of Thieves": Securing Black People's Right To Shop and To Sell in White America, 1994 UTAH L. REV. 147, 162; see also ALGERNON AUSTIN, ACHIEVING BLACKNESS: RACE, BLACK NATIONALISM, AND AFROCENTRISM IN THE TWENTIETH CENTURY

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restrictions traditionally placed upon permissible uses of Kente cloth by the Ewe and Ashanti groups is at least partially justified by the large social and psychic benefits to the appropriators. Enhanced legal impediments to such appropriation would limit the catalogue of symbols and materials from which nonindigenous people could fashion identities.

A related value that tilts in the same direction is semiotic democracy-an increasingly important form of engagement in which people actively participate in the shaping of their cultural environments. A good illustration of the potential connection between this component of the good life and unlicensed uses of traditional knowledge is provided by the history of the tango. In the eighteenth century, many Africans from the Bantu region-in the eastern and central portions of the continent-were captured and brought as slaves to the region of Latin America near the mouth of the Rio Plata. They retained and continued to practice many dance traditions, the diversity of which reflected their many ethnicities. Over time, those dances gradually changed (in part because they became increasingly expressive of anger and resistance) and to some extent melded into a composite form, which became known as candombe. Variants of candombe remained popular among black Uruguayans through national independence and the gradual abolition of slavery. In the late nineteenth century, the former slaves and their descendants began to practice candombe less often, but poor whites in the slums in the outskirts of Montevideo picked it up and combined it with aspects of the polka from central Europe and the habanera from Cuba. This new blend, which came to be known as canyengue, is widely considered the first form of the dance we now know as tango. Canyengue, in turn, faded in the 1930s, but by then more wealthy Uruguayan whites had developed yet another version, known as tango de salon, in which the dancers assumed a more upright posture and minimized their vertical movements. In 1912, that dance became fashionable in London; the following year, it flourished in New York. During the remainder of the twentieth century, the popularity of this type of tango in the United States was sustained by its incorporation in the instructional programs of the Arthur Murray Dance Studios and by its depiction in many mainstream films. Meanwhile, in Uruguay and Argentina, an altered

^{155 (2006) (&}quot;In the Afrocentric era, black Americans adopted [kente cloth] for a wide range of uses.").

form of candombe was revived and remains popular to this day in celebrations of Carnival, and more forms of the tango emerged.¹²¹

Some aspects of this story are tragic, but two are both encouraging and relevant to this Essay. First, the dances generated through this process are beautiful and have given many people great pleasure. Second, the process itself has been highly democratic. Many members of many groups have contributed to successive and divergent modifications of a cultural form first developed by an indigenous group. When considering enhanced legal restrictions on unauthorized uses of traditional knowledge, we should be careful not to erect barriers to similar processes of democratic cultural hybridization.

Does identification of these competing considerations leave us in equipoise? Not necessarily. That struggles over traditional knowledge implicate many competing values does not mean that those values are equally salient in all contexts. In some settings, the potential benefits of shielding community identities, promoting distributive justice, and increasing global cultural diversity seem stronger than the potential benefits of maintaining opportunities for self-definition through cultural appropriation or facilitating semiotic democracy. In others, the reverse seems true. Set forth below is a chart suggesting, roughly, the relative strength of these values in some of the controversies discussed thus far.

^{121.} The sources from which this narrative is distilled are SIMON COLLIER, ARTEMIS COOPER, MARIA SUSANA AZZI & RICHARD MARTIN, TANGO: THE DANCE, THE SONG, THE STORY (1995) (tracing tango's history); ROBERT FARRIS THOMPSON, TANGO: THE ART HISTORY OF LOVE (2005) (exploring tango's evolution and expression through its global representations); Paulo de Carvalho Neto, *The Candombe, a Dramatic Dance from Afro-Uruguayan Folklore*, 6 ETHNOMUSICOLOGY 164 (1962) (examining the candombe's survival and deformation); *Canyengue, Candombe and Tango Orillero: Extinct or Non-existent Tango Styles*?, TANGO VOICE (Mar. 19, 2010), https://tangovoice.wordpress.com/2010/03/19/canyengue-candombe-and-tango-orillero-extinct-or-non-existent-tango-styles [https://perma.cc/BCB2-QE8X] (examining the extent to which historical styles of tango are represented in contemporary social tango dancing).

	Quassia Amara	Wandjina	Tibetan Carpets	Kente cloth	Candombe
Group					
Identity					
Distributive					
Justice					
Cultural					
Diversity					
Autonomy					
Semiotic					
Democracy					

The challenge, thus, is to devise a legal system capable of responding sensitively to the patterns of values affected by different instances of nonpermissive use of traditional knowledge. To that task we now turn.

V. SOLUTIONS

For decades, activists have sought to establish through a new multilateral agreement (or through amendment of an existing agreement) a harmonized global regime that would augment the ability of indigenous groups to control uses of their knowledge. Most proposals of this sort have taken the form either of a property rule, under which all nonpermissive uses of traditional knowledge would be forbidden, or a liability rule, under which users of traditional knowledge would be obliged to pay fees set by a governmental official or tribunal either to the groups from which the knowledge was taken or to the nations in which those groups are located.¹²² The principal disadvantage of both types of reform proposal is that they would fail to accommodate variations in the salience of the values implicated by different controversies. Set forth below are two alternative proposals that might do a better job.

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^{122.} See, e.g., Jerome H. Reichman & Tracy Lewis, Using Liability Rules to Stimulate Local Innovation in Developing Countries: Application to Traditional Knowledge, in INTERNATIONAL PUBLIC GOODS AND TRANSFER OF TECHNOLOGY UNDER A GLOBALIZED INTELLECTUAL PROPERTY REGIME 337 (Keith Maskus & Jerome H. Reichman, eds., 2005).

A. Delegation

To the TRIPS Agreement¹²³ or to another multilateral intellectual property treaty, we might add the following three provisions:

- a) It shall be a defense to a claim of patent infringement that the inventor(s), in developing the protected product or process, relied substantially upon materials or knowledge taken from a member country in violation of that country's laws or from an indigenous group in a member country in violation of the laws of that group.¹²⁴
- b) It shall be a defense to a claim of trademark infringement that the trademark holder, or the original developer of the mark, relied substantially upon materials or knowledge taken from a member country in violation of that country's laws or from an indigenous group in a member country in violation of the laws of that group.
- c) It shall be a defense to a claim of copyright infringement that the work in which copyright is claimed constitutes a reproduction of a work registered within a member country, and that reproduction is not authorized by licenses from the country in question and from the indigenous group in question.

The effect of this reform would be to increase the leverage of countries in determining the terms on which flora, fauna, medicinal knowledge, folklore, and traditional art forms are exploited by others. As indicated above, many countries already have laws that deal with

^{123.} TRIPS: Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994 Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299 (1994).

^{124.} Some years ago, Martha Field and I proposed a reform of this general sort to deal with the problems associated with bioprospecting. *See* MARTHA FIELD & WILLIAM W. FISHER III, LEGAL REFORM IN CENTRAL AMERICA: DISPUTE RESOLUTION AND PROPERTY SYSTEMS 256–57 (2001). Variants of the idea have since appeared in several settings. *See* Charles R. McManis, *Intellectual Property, Genetic Resources and Traditional Knowledge Protection: Thinking Globally, Acting Locally*, 11 CARDOZO J. INT'L & COMP. L. 547, 563–64 (2003). In a forthcoming book, *Drugs, Law, and the Global Health Crisis*, Talha Syed and I consider the option in depth. WILLIAM W. FISHER III & TALHA SYED, INFECTION: THE HEALTH CRISIS IN THE DEVELOPING WORLD AND WHAT WE SHOULD DO ABOUT IT (forthcoming) (tentative draft available at https://cyber.harvard.edu/people/tfisher/Infection.htm).

such matters, but those laws have limited bite because it is so easy to violate them with impunity. Adoption of the three provisions would give the local laws teeth, not by penalizing violations directly, but by exposing violators to the sanction of the forfeiture of their own intellectual property rights.

The countries in which traditional knowledge is currently concentrated could be expected to exercise their enhanced powers in various ways. Some would likely demand greater compensation from individuals and firms using their materials. Others would insist upon attribution. Still others would insist that the production of goods (drugs, clothing, etc.) based upon traditional knowledge be done in the country where that knowledge originated. Finally, some would forbid the use of traditional knowledge altogether. Some of these responses would likely prove more effective than others, and we would then witness additional rounds of legal reform.

The indigenous groups themselves would likely engage in similar experimentation. They would have substantial leverage, because violation of their own laws would expose commercial users of their knowledge to forfeiture of their intellectual property rights. Some indigenous groups would likely use that leverage to extract financial concessions, others to insist on attribution, and still others to demand that derivative products be produced locally. The companies' responses to these demands—and competition among indigenous groups possessing similar bodies of knowledge—would likely prompt the groups to adjust their laws over time.

To be sure, two types of users of traditional knowledge would be unaffected by this proposed system: noncommercial users, such as the graffiti artists in Perth using the Wandjina Spirit Images, and commercial users whose businesses do not depend on intellectual property rights, such as the manufacturers of bow ties and earrings made of Kente cloth. However, permitting users of these sorts to avoid the impact of the proposed regime seems roughly appropriate, because in such cases the balance of cultural values seems more often to tilt against the potential claims of the indigenous groups.

The regime sketched above would differ from the Nagoya Protocol in three respects. First, it does not specify the ways in which countries would control access to and use of the knowledge held by indigenous groups within their jurisdictions. Indeed, it would not require a member country to adopt and access restrictions at all. It is thus designed to accommodate greater variation in the terms of local access control. So, for example, it can easily accommodate regimes like that of Senegal that place "folklore" in the category of *domaine public payant*,¹²⁵ while the Nagoya Protocol cannot.

Second, it gives equal weight to local national legislation and to the laws (whether traditional or new) of the indigenous groups themselves.¹²⁶ A company making use of traditional knowledge must comply with both in order to avoid sanctions. The weight given to the laws of indigenous groups is intended both to convey appropriate levels of respect and to encourage engagement by the current members of such groups in the process of lawmaking and law interpretation—a form of engagement celebrated by the cultural theory.

Third and finally, it relies upon a different mechanism to induce compliance. Instead of requiring member countries to adopt and implement a system of state sanctions to punish "utilization" of traditional knowledge in violation of the laws of the country from which it was taken, the proposed regime would rely upon a firm's competitors, most of whom will have strong incentives to act as "private attorneys general." The deterrent effect of the risk of forfeiting one's intellectual property rights is likely to be more effective than the risk of incurring a fine.

The principal hazard of a system of this sort is that it could increase the already substantial costs of patent litigation (and, to a lesser extent, trademark and copyright litigation) by providing defendants one more potential defense. That risk could be mitigated, however, through the adoption of a fee-shifting arrangement. For example, a country could require defendants who invoke the new defense unsuccessfully to pay the extra costs incurred by the plaintiff. Such costs would include attorneys' fees and increased discovery costs. The costs would be payable even if the defendant prevailed on a different ground in the infringement suit in which the defense were asserted. This would discourage frivolous invocations of the new provision, while retaining the threat it poses to companies that have indeed violated it.

B. Mandatory Disclosure–Modified

Many of the initiatives seeking enhanced legal protection of traditional knowledge have included a requirement that companies that rely on traditional knowledge when developing products or

^{125.} See supra note 60.

^{126.} For examples of such laws, see *Milpurruru v Indofurn Pty Ltd* [1994] 54 FCR 240 (Austl.); TERRI JANKE, WIPO, MINDING CULTURE: CASE STUDIES ON INTELLECTUAL PROPERTY AND TRADITIONAL CULTURAL EXPRESSIONS 88 (2001).

services disclose that reliance. The first such proposal was advanced in 1994 by a group of researchers from Peru.¹²⁷ Since then, similar suggestions have been made in many fora—most notably in the long-standing debates under the auspices of the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore.¹²⁸

Typically, such proposals take the form of suggestions for amendments to application-based intellectual property regimes. In some variants of this general approach, failure to comply with the disclosure requirement in an application for a patent or other intellectual property right would be grounds for denial or invalidation of the right. In others, failure to comply would trigger other sanctions but not imperil rights granted on the basis of the incomplete application.¹²⁹

As we saw in Part II, several disclosure requirements of this general sort have been adopted by individual countries as part of their national intellectual property laws.¹³⁰ A few have been adopted at the regional or multilateral level.¹³¹ Most, however, have been rejected. Recently, for example, a proposal advanced in the Forty-Ninth Session of the WIPO General Assembly,¹³² which would have mandated that a *voluntary* disclosure principle be included in a new treaty on protections for industrial designs, was met with sufficient resistance

^{127.} *See* Brendan Tobin, Alternativas a las Legislaciones de Propiedad Intelectual 9 (Sept. 28–30, 1994) (unpublished manuscript from Reunion Regional Sobre Propiedad Intelectual y Pueblos Indigenas), https://www.academia.edu/1315002 [https://perma.cc/5L2J-E5M9].

^{128.} For a review of a wide variety of such proposals, see generally CARLOS CORREA & JOSHUA D. SARNOFF, ANALYSIS OF OPTIONS FOR IMPLEMENTING DISCLOSURE OF ORIGIN REQUIREMENTS IN INTELLECTUAL PROPERTY APPLICATIONS, UNCTAD (2005); SOUTH CENTRE, MANDATORY DISCLOSURE OF THE SOURCE AND ORIGIN OF BIOLOGICAL RESOURCES AND ASSOCIATED TRADITIONAL KNOWLEDGE UNDER THE TRIPS AGREEMENT (2007).

^{129.} See WIPO, TECHNICAL STUDY ON DISCLOSURE REQUIREMENTS IN PATENT SYSTEMS RELATED TO GENETIC RESOURCES AND TRADITIONAL KNOWLEDGE, 8, 26–27 (2004) (examining these options).

^{130.} See supra notes 57–62 and accompanying text.

^{131.} See, e.g., Swakopmund Protocol, supra note 70, §§ 10, 19.3.

^{132.} For details concerning this session, see generally WIPO General Assembly, 49th Sess., 23rd ordinary sess., WIPO Code WO/GA/49 (Oct. 2–11, 2017) http://www.wipo.int/ meetings/en/details.jsp?meeting_id=43518 [https://perma.cc/CN8Z-XYEA] (listing documents from General Assembly session).

that it contributed to postponement of a diplomatic conference to consider such a treaty.¹³³

As a mechanism for advancing, sensitively, the diverse considerations examined in Part IV of this Essay, the currently dominant version of the mandatory-disclosure principle is imperfect. However, the strategy would be more promising if modified in four respects.

1. Disconnect The Disclosure Obligation From Intellectual Instead of requiring applicants for patents, Property Regimes. trademarks, industrial-design protection, and the like to reveal the degree to which they relied on traditional knowledge in creating the things for which they are seeking protection, the law could require all sellers of products and services to make such disclosures, regardless of whether they seek intellectual property protection. This adjustment would be less radical than it might appear. In a variety of commercial contexts unrelated to applications for intellectual property rights, sellers are already obliged to disclose aspects of their products and services. For example, in the United States, institutions offering residential mortgages must present borrowers with detailed information concerning the nature of the financial obligations they are incurring;¹³⁴ sellers of prescription drugs must include in their packaging and advertisements warnings concerning the risks associated with their products;¹³⁵ sellers of packaged food must reveal the contents thereof;¹³⁶ and sellers of clothes must include labels that indicate, among other things, the materials of which they are made and

^{133.} See Catherine Saez, WIPO: New 2-Year Mandate For Traditional Knowledge Committee; Design Law Treaty Stalls, INTELL. PROP. WATCH (Dec. 10, 2010), https://www.ipwatch.org/2017/10/12/wipo-new-2-year-mandate-traditional-knowledge-committee-design-lawtreaty-stalls/ [https://perma.cc/6MTJ-ENNH].

^{134.} For a comprehensive summary of the state-specific requirements for the disclosure of information to applicants for residential mortgages, see *State Required Disclosure Matrix*—*External Version*, LOANDEPOT WHOLESALE (Nov. 9, 2017), https://portal.ldwholesale.com/portaldocs/yoda/wholesale/State_Specific_Disclosure_Matrix_EXTERNAL.pdf [https://perma.cc/XNL8-QNRU].

^{135.} For a thorough presentation of the rules promulgated by the Food and Drug Administration (FDA) concerning the information that must be contained in the labels placed on prescription drugs, see Mary E. Kremzner & Steven F. Osborne, *An Introduction to the Improved FDA Prescription Drug Labeling*, FDA, https://www.fda.gov/downloads/training/ forhealthprofessionals/ucm090796.pdf [https://perma.cc/T2CQ-UFZ2].

^{136.} The relevant statutes are the Federal Food, Drug, and Cosmetic Act, Pub. L. No. 75-717, 52 Stat. 1040 (1938), the Fair Packaging and Labeling Act, Pub. L. No. 89-755, 80 Stat. 1296 (1966), and the Nutrition Labeling and Education Act of 1989, Pub. L. No. 101-535 104 Stat. 2353 (1990).

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where they were manufactured.¹³⁷ The penalties for violation of these rules can be severe. A general mandatory disclosure obligation for products and services drawn from traditional knowledge would impose a modest additional regulatory burden on only a small subset of companies.

2. Add An Obligation To Disclose The Extent To Which Members Of The Indigenous Group From Which The Knowledge Was Derived Were Involved In Manufacture Of The Product In Question Or The Provision Of The Service In Question. This represents an adaptation of the regulations that, in the United States, currently govern companies that manufacture and sell clothing. As indicated above, such companies must reveal, among other things, where their products were produced.¹³⁸ The proposed rule would require revelation of who manufactured products derived from traditional knowledge.¹³⁹ The objective of such a requirement, of course, is to put pressure on companies to enlist members of indigenous groups in their production systems—which, in turn, will lead to the benefits considered in Part IV.

3. Supplement State-Imposed Sanctions For Violation Of The Obligation With A Private Right Of Action. A disadvantage of

- Imported products must identify the country where the products were processed or manufactured.
- Products made entirely in the U.S. of materials also made in the U.S. must be labeled 'Made in U.S.A.' or an equivalent phrase.
- Products made in the U.S. of imported materials must be labeled to show the processing or manufacturing that takes place in the U.S., as well as the imported component.
- Products manufactured partly in the U.S. and partly abroad must identify both aspects.

139. U.S. law already contains a provision prohibiting false statements that goods have been produced by Native Americans. *See* 25 U.S.C. § 305e(b) (2012) (creating both a public and a private right of action against "a person who, directly or indirectly, offers or displays for sale or sells a good . . . in a manner that falsely suggests it is Indian produced, an Indian product, or the product of a particular Indian or Indian tribe or Indian arts and crafts organization, resident within the United States"). The proposal advanced in the text would raise the bar one notch by requiring truthful statements of the degree to which products were produced by members of indigenous groups.

^{137.} Textile Fiber Products Identification Act (Textile Act), 15 U.S.C. §§ 70–70k (2012); Wool Products Labeling Act of 1939 (Wool Act), 15 U.S.C. §§ 68–68j (2012).

^{138.} See FTC, Threading Your Way Through the Labelling Requirements under the Textile and Wool Acts, FTC (July 2004) https://www.ftc.gov/tips-advice/businesscenter/guidance/threading-your-way-through-labeling-requirements-under-textile#origin [https://perma.cc/K4HK-C2AF]:

Products covered by the Textile and Wool Acts must be labeled to show the country of origin.

disconnecting the disclosure obligation from the intellectual property system is that it would sacrifice the deterrent effect (discussed in Part V.B.I) of fear of loss of intellectual property rights. Punishing violations with fines could be reasonably effective. In the United States, for instance, the principal penalties for violations of the disclosure obligations associated with mortgages, food, drugs, and clothing are fines, and those sanctions seem to work reasonably well. But they would be even more efficacious if reinforced by the threat of civil actions by competitors. Other information-forcing legal regimes for example, trademark law and false-advertising law—incorporate private rights of action.¹⁴⁰ The disclosure duty for traditional knowledge could and should do so as well.

4. Authorize An Administrative Agency To Specify, Through Regulations, The Ambit Of The Disclosure Obligation And The Method Of Compliance. Each of the labelling requirements outlined above is implemented by an administrative agency, which promulgates and periodically revises regulations that give companies detailed guidance in how to comply. The Federal Trade Commission bears this responsibility with respect to clothing labels,¹⁴¹ the Food and Drug Administration does so with respect to prescription drugs and food,¹⁴² and agencies in the state governments do so with respect to residential mortgages. A similar system could and should be used to give greater precision to a mandatory-disclosure obligation with respect to traditional knowledge. Among the questions that would be addressed and resolved through such regulations would be:

[https://perma.cc/T2CQ-UFZ2] (same). For a summary of the FDA's corresponding regulations pertaining to food labels, see *A Food Labeling Guide: Guidance for Industry*, FDA (Jan. 2013), https://www.fda.gov/downloads/Food/GuidanceRegulation/UCM265446.pdf [https://perma.cc/K936-YHXF].

^{140.} See, e.g., POM Wonderful LLC v. Coca-Cola Co., 134 S. Ct. 2228, 2233 (2014).

^{141.} Threading Your Way Through the Labelling Requirements under the Textile and Wool Acts, supra note 138.

^{142.} Requirements on Content and Format of Labeling for Human Prescription Drug and Biological Products, 21 C.F.R. § 201.56 (2017) (setting forth the FDA's regulations concerning the information that must be contained in the label placed on prescription drugs); *see also* FDA Ctr. for Drug Evaluation & Research & Ctr. for Biologics Evaluation & Research, *Guidance for Industry, Labeling for Human Prescription Drug and Biological Products—Implementing the PLR Content and Format Requirements*, FDA (Feb. 2013), https://www.fda.gov/downloads/drugs/guidances/ucm075082.pdf [https://perma.cc/SYK4-WMAL] (explaining the FDA's labeling requirements); FDA Ctr. for Drug Evaluation and Research & Ctr. for Biologics Evaluation and Research, *An Introduction to the Improved FDA Prescription Drug Labeling*, FDA, https://www.fda.gov/downloads/training/forhealthprofessionals/ucm090796.pdf

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- What constitutes a "product or service" subject to the obligation?¹⁴³
- How substantial must have been a company's reliance on traditional knowledge to trigger the obligation? Conversely, at what point does a company's dependence on traditional knowledge become sufficiently attenuated that the obligation is lifted?
- How, exactly, must or may the disclosure be made?¹⁴⁴ For example, must it appear on the product packaging, or would a statement on the company's website suffice? Might companies employ a multipart disclosure—for example a simple mark on the product or its packaging, which referred purchasers to a registry (analogous, perhaps, to the registry for the Lisbon System for the International Registration of Appellations of Origin¹⁴⁵) where a more detailed description of the product's provenance and the company's employment practices could be found?

^{143.} Among the many questions that could be addressed by the agency under this heading are whether the obligation would extend to the authors of works of literature – fiction or nonfiction – that describe or represent the cultural or medical practices of indigenous groups. (In conversation, Frank Michelman suggested as examples: EUGENE GENOVESE, ROLL, JORDAN, ROLL: THE WORLD THE SLAVES MADE (1976) and MARK TWAIN, THE ADVENTURES OF HUCKLEBERRY FINN (1884).) Although it might be possible to construe the terms "products" or "services" sufficiently broadly to reach such things, the resultant threat to academic and literary freedom would be formidable. So the answer should be no. What about works of art—such as Tenodi's sculpture, described in Part I.C.? For much the same reason, the answer would be no. But one of the agency's harder tasks would be to define with some precision the category of "art." *Cf.* 17 U.S.C. §§ 101, 106A (2012) (defining "works of visual art" for the purposes of the Visual Artists' Rights Act).

^{144.} A growing literature, informed by empirical work associated with behavioral law and economics, seeks to identify the characteristics that maximize the effectiveness of disclosures. See, e.g., Christine Jolls, Debiasing Through Law and the First Amendment, 67 STAN. L. REV. 1411, 1419-36 (2015) (discussing the "informedness effects of legally required communications"); George Loewenstein, Cass R. Sunstein & Russell Golman, Disclosure: Psychology Changes Everything, 6 ANN. REV. ECON. 391, 405–12 (2014) (explaining "when and why disclosure is likely to work or backfire, [and] potential improvements of disclosure policies"); Christine Jolls, Product Warnings, Debiasing, and Free Speech: The Case of Tobacco Regulation, 169 J. INSTITUTIONAL & THEORETICAL ECON. 53, 54, 58-59 (2013) (discussing the effects of health warnings required by the Family Smoking Prevention and Tobacco Control Act of 2009). The proposed agency could and should draw on that literature when framing regulations-bearing in mind, however, that the disclosure regime proposed here is unusual in two respects: (a) it seeks to assist and encourage consumers to act upon their "social preferences," rather than nudge them to avoid products and services that might be bad for their health or finances, and (b) it is aimed as much at watchdog groups (who, as we have seen, publicize uses of traditional knowledge they deem unfair) as at individual consumers.

^{145.} See Lisbon, WIPO, http://www.wipo.int/lisbon/en [https://perma.cc/FR23-DC8F].

Some of the modifications outlined above are designed to address and resolve ambiguities or weaknesses that critics of mandatorydisclosure regimes have long stressed. But most of the modifications reflect a fundamental difference between the aspirations that have emerged from this Essay and the goals of the currently dominant type of mandatory-disclosure system. The proposal offered here does not seek to prescribe or enforce any particular standard of fair treatment, such as the benefit-sharing principle at the heart of the Nagoya protocol. It strives instead to bring into public view the kinds of information the public at large would need in order to consider what, with respect to each idiosyncratic instance of the use of traditional knowledge, would constitute fair treatment. In that way, the proposal aspires to provoke public attention to and discussion of such matters and, ultimately, to prompt a commercially significant subset of consumers to act upon their ethical conclusions. Why? Partly because such deliberations are good in themselves, but primarily because, as we saw through our examination of the case studies in Part I, the companies that sell products and services incorporating traditional knowledge are usually responsive to consumers' expressed ethical preferences. The long-term result of adoption of this proposal will thus be to alter the companies' behavior for the better.

Like the system outlined in Part V.A., this proposal contemplates that the nations and indigenous groups from which traditional knowledge is taken would be active participants in the new regime, rather than mute beneficiaries of it. Specifically, such nations and groups can be expected to enhance and inflect the ethical debates spurred by the companies' disclosures with public statements of their own expectations of fair treatment—in much the same way that the Mowanjum representatives did with respect to the Wandjina graffiti and that the Organization of Indigenous Nations in Guiana did with respect to IRD's use of the knowledge developed by the Galibi and Palikur concerning the medicinal value of *quassia amara*.¹⁴⁶ The stances taken by the groups will likely vary. Some might insist upon benefitsharing arrangements, others might demand employment for current members of the group, others might insist upon respectful treatment of

^{146.} This process would be loosely analogous to the increasingly common practice by which companies involved in standard-setting organizations announce their own understandings of "fair, reasonable, and nondiscriminatory" licensing terms. *See* Jorge L. Contreras, *From Private Ordering to Public Law: The Legal Framework Governing Standards-Essential Patents*, 30 HARV. J.L. & TECH. 211 (2017).

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traditional symbols or rituals, others might request only appropriate attribution, and so forth.

Of course, the groups' capacity to demand such concessions would not be unlimited. Only if the expectations of fair treatment they announced resonated with the public's evolving attitudes-and, in particular, with the views of the consumers of the products or services at issue—would companies feel obliged to comply with their demands. Over time, a dialectic would likely emerge: indigenous groups and the nations in which they currently are located would request concessions from the companies making use of their knowledge; watchdog groups, the media, and consumers would respond favorably to some such requests (and thus press the companies to comply) but would respond unfavorably to others; the groups would adjust their demands accordingly; and so forth. The net result would be an episodic public conversation concerning the appropriate scope and application of the values set forth in Part IV and a gradual evolution of commercial practices to track the evolving views of significant subsets of consumers.

Critical to this process, of course, is the willingness of consumers not merely to express support for norms of fair treatment, but to alter their purchasing behavior when those norms are violated. Would they? Considerable reassurance on that score can be gleaned from recent studies of consumers' responses to "Fair Trade" labels when attached to products like coffee or clothing. Such labels certify that the farmers or employees who produced the products were compensated and treated according to standards promulgated by a consortium of organizations dedicated to their protection.¹⁴⁷ Surveys in which consumers are asked whether they would be willing to pay more for (or buy more of) products that meet such standards consistently elicit strong positive responses.¹⁴⁸ The same is true of their willingness to pay

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^{147.} See 10 Principles of Fair Trade, WORLD FAIR TRADE ORG., https://wfto.com/our-pathfair-trade [https://perma.cc/9RAQ-L8E2]. Although most of the companies that seek to profit by publicizing their adoption of fair labor standards use the convenient device of the "Fair Trade" label, a few adopt and pledge obedience to even higher standards. See, e.g., EVERLANE, https://www.everlane.com/about [https://perma.cc/JJP6-RB3N] (explaining Everlane's ethical practices).

^{148.} See, e.g., Shareen Hertel, Lyle Scruggs & C. Patrick Heidkamp, Human Rights and Public Opinion: From Attitudes to Action, 143 POL. SCI. QUARTERLY 443, 443, 448–49 (2009) (describing research indicating that people "are willing to pay more for ethically produced goods" in order to promote the right to a minimum standard of living); Patrick De Pelsmacker, Liesbeth Driesen & Glenn Rayp, Do Consumers Care About Ethics? Willingness to Pay for Fair-Trade Coffee, 39 J. CONSUMER AFF. 363, 375 (2005) (explaining results indicating that a fair-trade label is almost as

premiums for "green" products—that is, those produced in ways that minimize damage to the environment.¹⁴⁹ But skeptics have argued, plausibly, that such responses cannot be trusted, because respondents will be inclined to say what they think the questioners want to hear. Recently, however, several empirical studies have demonstrated that substantial groups of consumers do indeed behave in the predicted fashion when given the chance.¹⁵⁰ That finding strongly suggests that some consumers, if offered products or services visibly associated with unfair treatment of impoverished indigenous groups, would balk which, in turn, would prompt the companies to reform their ways.

But that comforting finding suggests, ironically, a different objection to the proposal offered here. The fact that coffee bearing a

149. See, e.g., Sarah Butler, Ethical Shopping Growing in Popularity, Survey Suggests, GUARDIAN (Aug. 19, 2013), https://www.theguardian.com/business/2013/aug/19/ethical-shopping-growing-popularity-fairtrade [https://perma.cc/EZZ3-KMMY] (finding that ethical shopping is growing in popularity in the United Kingdom); Jessica Lyons Hardcastle, Consumers Will Pay More Money for 'Sustainable' Products, ENVTL. LEADER (Jan. 17, 2017), https://www.environmentalleader.com/2017/01/consumers-will-pay-more-money-for-

sustainable-products/ [https://perma.cc/7G3U-RVP7] ("Thirty three percent of respondents to the survey would pay \$10 more, while 40% would pay at least a \$5 premium."); Mehdi Miremadi, Christopher Musso & Ulrich Weihe, *How Much Will Consumers Pay to Go Green*?, MCKINSEY QUARTERLY (Oct. 2012), https://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/how-much-will-consumers-pay-to-go-green

[https://perma.cc/5BES-9CUE] (finding that many people will pay more to "go green," but only up to a certain point).

150. The most impressive of those studies consisted of a "field test," conducted in twenty-six stores of a U.S. grocery store chain, of consumers' responses to coffee sold with and without "Fair Trade" labels. There were two principal findings. First, "[s]ales of the two most popular bulk coffees sold in stores rose by almost 10% when the coffees carried a Fair Trade label as compared to a generic placebo label." Jens Hainmueller, Michael J. Hiscox & Sandra Sequeira, Consumer Demand for the Fair Trade Label: Evidence from a Multi-Store Field Experiment, 97 REV. ECON. & STAT. 242, 242 (2015). Second, the more upscale the coffee, the greater the willingness to pay for fair labor practices—as shown by the fact that sales for the higher priced Fair-Trade-labeled coffee "remained fairly steady when its price was raised by 8%" while demand for the lowerpriced Fair-Trade-labeled coffee "was more elastic: a 9% price increase in its price led to a 30% decline in sales." Id. For other studies leading to similar conclusions, see generally Daniel W. Elfenbein & Brian McManus, A Greater Price for a Greater Good? Evidence that Consumers Pay More for Charity-Linked Products, 2 AM. ECON. J. ECON. POL. 28 (2010); Ibon Galarraga & Anil Markandya, Economic Techniques to Estimate the Demand for Sustainable Products: A Case Study for Fair Trade and Organic Coffee in the United Kingdom, 4 ECONOMIA AGRARIA Y RECURSOS NATURALES 109 (2004); Mario F. Teisl, Brian Roe & Robert L. Hicks, Can Eco-Labels Tune a Market? Evidence from Dolphin-Safe Labeling, 43 J. ENVTL. ECON. & MGMT. 339, 351-55 (2002).

important to consumers as flavor); *Five Key Findings from Nielsen's Global Survey of Corporate and Social Responsibility*, GRIFFIN & CO., http://griffinco.com/5-key-findings-from-nielsens-global-survey-of-corporate-and-social-responsibility/ [https://perma.cc/VV59-MKKJ] (indicating the majority of people "will pay extra for products and services from companies committed to positive social and environmental impact").

"Fair Trade" label can be sold for more than coffee lacking such a label casts doubt upon the need for a new information-forcing legal rule. If compliance with consumers' social preferences enables companies to raise their prices, why must we adopt a disclosure requirement with respect to traditional knowledge? Why not just rely on the companies' recognition of their self-interest to prompt them to acknowledge voluntarily their indebtedness to traditional knowledge—and then to treat the relevant indigenous group more fairly? As we saw in Part I.C, the upscale sellers of Tibetan carpets have already taken this tack. Perhaps we should wait for companies in other lines of business to learn from their example.

Three considerations, in combination, suggest that it would be unwise to trust companies to recognize and exercise their power to do well by doing good. First, in most circumstances it is easier for companies to conceal both from consumers and from watchdog groups their reliance on traditional knowledge than it is to conceal unfair labor practices. Second, the diversity of interests and values at stake in disputes over traditional knowledge impedes efforts by NGOs to develop a single label and an associated set of "fair practices" to which companies could voluntarily conform and that consumers could then recognize and reward.¹⁵¹ Finally, the ethical questions raised by uses of traditional knowledge are much less familiar to the general public than the analogous issues presented by exploitative labor practices or disrespect for the environment. Given a choice, most companies currently making covert use of traditional knowledge would probably prefer to let sleeping dogs lie than to alert their consumers to their conduct, hoping to profit subsequently from their ability to capitalize on consumers' newly energized social preferences. These generalizations are lent credence by the fact that, even after decades of academic and governmental attention to the puzzle of traditional knowledge, the sellers of Tibetan carpets are highly atypical in their willingness to acknowledge (indeed, trumpet) their fair treatment of the groups they rely upon. The bottom line is that using consumers to pressure companies to behave better is only likely to work if the law compels the companies to disclose information that will catalyze the process.

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^{151.} That diversity substantially explains the failure of the effort by the National Indigenous Arts Advocacy Association in Australia to popularize an "Indigenous Label of Authenticity." *See* Drahos, *supra* note 93, at 32.

CONCLUSION

Two circumstances, in combination, exacerbate the difficulty of developing a sensible legal response to nonpermissive uses of traditional knowledge: many competing values are implicated by such uses, and the relative strength of those values varies sharply by context. The Essay seeks to bring some order to the field, first by distilling from a cultural theory of intellectual property a normative framework for identifying and weighing the values at stake, and then by offering two alternative reform proposals, either of which could do better than the proposals currently on the table at reconciling those goals.