Corrective justice and intellectual property rights in traditional knowledge

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I construct a philosophical and legal corrective justice argument that can better the position of indigenous peoples regarding their traditional knowledge (TK). Indigenous peoples have frequently suffered great wrongs – murder, enslavement, rape, torture, theft, forced relocation – at the hands of outsiders. They have autonomy-based reasons for seeking intellectual property (IP) rights in their TK. There is ample warrant for recognizing these rights as a matter of corrective justice. Even if my argument is not decisive, it is very likely the most parsimonious, and perhaps the strongest argument for IP rights in TK.

I. Laying the groundwork

TK is understanding or skill, which is typically possessed by indigenous peoples and whose existence in some form typically pre-dates colonial contact, that relates to medical remedies, plant and animal products, technologies and cultural expressions. The term ‘cultural expressions’ includes religious rituals, rites of passage, works of art, songs, dances, myths, stories and folklore generally.1 These forms of knowledge and cultural expressions are rarely frozen in time. Usually they evolve over decades and centuries. Few deny that indigenous peoples possess TK, sometimes called descriptive traditional knowledge; yet there is much

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dispute over whether domestic and international law do, or should, protect TK against outsiders who wish to commercialize it or use it for non-commercial purposes.

One may call any TK that is or should be protected by law normative traditional knowledge. TK thus protected would not lie centrally in the class of what lawyers call personal property – that is, physical objects such as plants, animals, religious articles or shamanistic totems. Rather, it would be a form of IP – akin to, but rarely the same as, copyrights, patents, trademarks, trade secrets or some existing *sui generis* IP rights. Thus, normative TK is not a set of rivalrous physical objects which are incapable of being possessed simultaneously by multiple persons in the same way. It is instead the non-rivalrous knowledge – the understanding, skill or cultural expressions – that can be possessed and used by many people at the same time and in the same way. One should separate (1) the non-rivalrousness of TK vis-à-vis outsiders from the perspective of the group and (2) disagreements within the group over control of its TK from the perspective of dissenting members.²

A major current dispute over TK is which arguments, if any, justify IP rights in the knowledge of indigenous peoples. The available arguments are of different kinds. Some arguments adapt the usual justifications for property rights and especially for IP rights. Very different are arguments that sound in human rights, distributive or corrective justice. I consider only the last of these. Corrective justice arguments subdivide into arguments of compensatory justice and arguments of restorative justice. The potential benefits of compensatory justice arguments to indigenous peoples are the moral analogues of money damages at law. The potential benefits of restorative justice arguments to them are the moral analogues of injunctions, restitution and other relief in equity.³

Reparations are another form of corrective justice, although they sometimes have punitive aspects as well. If reparations are solely corrective, they can be either compensatory or restorative or both. Reparations, as understood here, are corrective payments in the form of money, materials or intangible assistance that attempt to make amends for and rectify past

² This distinction recognizes the possibility that an indigenous people could use its norms to make a group decision that its TK is not to be used outside the group. This decision could then override the preferences of some members to commercialize some or all of the TK. The distinction turns on the difference between group autonomy and individual autonomy, which section VI discusses.

³ My use of ‘corrective’, ‘compensatory’ and ‘restorative’ suits my aim in this chapter. Other writers sometimes use these terms differently.
wrongs. Historically some reparations, such as those required of Germany by the Treaty of Versailles,\(^4\) have had a punitive dimension. That dimension is absent here, for I understand reparations as being wholly a matter of corrective justice. So understood, the justifications for reparations are mainly backward-looking. They appeal to past wrongs and seek to remedy them by present and future actions. There is at least one respect, however, in which reparations are forward-looking: the remedial payments should be effective and reasonably efficient. If reparations are justified, we want to have reparations that work. Whereas courts grant legal and equitable relief, reparations usually come from treaties, legislation or other means.

Of the four kinds of argument – property, human rights, distributive justice and corrective justice – the last might seem the least promising to some thinkers. So why do I confine this chapter to it? Part of the answer is straightforward. The available property arguments are wanting.\(^5\) Many people know more about human rights and distributive justice than I ever will. With corrective justice, I have a better chance of making a contribution. Another part of the answer is less straightforward: like many, I welcome a challenge. The premises underlying most property, human rights and distributive justice arguments will appear to some, perhaps to many, to rest on strong assumptions that might well favor IP rights in TK. By comparison, the premises underlying corrective justice arguments are weaker and sparer. It is a more bracing task to see whether a philosophically cogent and legally significant conclusion – that in principle indigenous peoples should have some IP rights in their TK – can be derived from comparatively meager assumptions.

The term ‘in principle’ underscores that my argument proceeds at a general and, at times, abstract level. Deciding which IP rights in TK, if any, indigenous peoples should have at a particularized level requires judgment and detailed knowledge that lie beyond the scope of this chapter. To illustrate, providing IP rights that have no requirement of ‘fixation’ for copyright-like protection or no need for publication to establish ‘prior art’ that thwarts outsiders’ obtaining patents would necessitate highly particularized analysis of specific situations. Similar analysis would be needed to show that IP rights in TK ought to be of indefinite duration.

\(^4\) [1919] United Kingdom Treaty Series 4 (Cmd. 153) (signed 28 June 1919, entered into force 10 January 1920), esp. art. 231, which assigned to Germany alone the duty to pay reparations because of ‘the responsibility of Germany and her allies for causing all the loss and damage’ suffered by the Allied and Associated Governments and their nationals ‘as a consequence of the war imposed upon them by the aggression of Germany and her allies’. Only on 3 October 2010 did Germany make its final reparations payment under the Treaty of Versailles.

\(^5\) Munzer and Raustiala, ‘Uneasy Case’, so argue.
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in a specific context, for indefinite duration imposes costs on others by keeping indigenous works and inventions out of the public domain. Also, weaker IP protection for TK demands that an authority responsible for decreeing a remedy take into account, especially when the wrongs occurred long ago, the settled expectations, autonomy interests and vested legal rights of non-indigenous persons in specific situations. If, moreover, establishing a causal link between ancient wrongs and contemporary harm in a specific context requires counterfactual reasoning, the authority should examine this reasoning with care. Although my general argument contends that indigenous peoples should play a role in crafting a remedy for past wrongs, they do not have a veto. Their position on which remedy is best does not always and everywhere override all other considerations. Thus, even if in a specific case an indigenous people prefers certain IP rights in TK as all or part of the remedy, whichever authority ultimately decrees the remedy may, at a particularized level, use discretion on whether the indigenous-preferred remedy is the best, all things considered.

II. The argument

There may be many arguments of corrective justice for IP rights in TK, but I have only one. It takes the following course.

Four background conditions lay out the initial steps of the argument. For IP rights in TK to be available on grounds of corrective justice: (1) some wrongs must have been committed against an indigenous group, some or all of its members, their successors, or both; (2) the wrongdoers or their successors are identifiable as a group, individual members of a group, some other entity, or some combination of these; (3) the wrongs unjustifiably caused harm to an indigenous people or some of its members, or both; and (4) those harmed are identifiable as an indigenous group or as individual members of an indigenous group, or both.

The foregoing conditions are the initial steps in making a case for some corrective relief. Yet they do not take into account the possibility that the

6 A second argument, not pursued here, might rest on considerations of fair play and free riding. The core intuition, expressed roughly, is that it is unfair for Western, or Westernized, nations, firms or individuals to ride free on the TK developed by indigenous peoples. This intuition, however, raises tricky questions of whether free riding that benefits outsiders is unfair even if indigenous peoples suffer no harm. In addition, there are many conceptions of both fair play and free riding that require careful discrimination. In a vast literature, see, for example, G. Cullity, 'Moral Free Riding' Philosophy & Public Affairs 24 (1995) 3–34; S. D. Parsons, 'Fair-Play Obligations: A Critical Note on Free Riding' Political Studies 53 (2005) 641–9.
wrongdoers might have some excuse, or that IP rights in TK are not suitable relief for the wrongs inflicted and harm caused. Thus, it must also be the case that (5) no excuse is available such that the wrongdoers or their successors lack a moral duty to rectify their wrongs and undo the harm caused. Finally, (6) recognizing IP rights in TK in principle would be part of an effective and reasonably efficient means of compensating or restoring justice to the indigenous people or its members who have been harmed. The adverb 'reasonably' indicates that the means do not have to be economically optimal, but they cannot be seriously inefficient.

Some theorists of corrective justice would bridle at step (6). Those heavily influenced by Aristotle's account of corrective justice might well insist on a precise correlativity between the wrongdoer and the victim. 7 In Aristotle's analysis, to correct a wrong done by A to B it is necessary for A to disgorge A's gains, which are equal to B's loss resulting from the wrongdoing to B, in order to put B in the same position B occupied before the wrong was done. In the words of an acute contemporary interpreter, 'The remedy consists in simultaneously taking away the defendant's excess and making good the plaintiff's deficiency. Justice is thereby achieved for both parties through a single operation in which the plaintiff recovers precisely what the defendant is made to surrender.' 8 Corrective justice so understood differs not only from distributive justice, but also from 'contemporary consequentialist and reductionist understandings of law'. 9 There is, Weinrib contends, no room for an appeal to efficiency in thinking about the corrective remedy.

I do not follow this Aristotelian line, because it is too rigid to deal with wrongs done by many sorts of wrongdoers to many sorts of victims. Some, indeed, may doubt whether an Aristotelian account works well even in contract, tort and unjust enrichment cases involving one plaintiff and one defendant. Perhaps even then the defendant's gain is sometimes greater or lesser than the harm suffered by the plaintiff, or the remedy should have some deterrent, distributive or loss-spreading effects. 10 Still, in typical situations involving indigenous groups harmed over many generations in many different ways by multiple individuals, outsiders of various sorts,

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9 Ibid., 356.
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corporations and nation states, it would be Procrustean to try to make the remedy due indigenous groups exactly equal to the gains of wrongdoers under an idealized correlatively-structured system of corrective justice. Given the remedial problems thrown up by these complicated situations, one must make room for some constraints of efficiency. If this is rough corrective justice, so be it.

Although the boundaries of corrective justice are disputed, my argument is one of corrective justice in a broad way, for it rests fundamentally on reasons for undoing past wrongs. Any distributive effects are incidental to, not an intended goal of, the remedy. Under my broad understanding, corrective justice can in principle ground a baseline entitlement such as IP rights in TK. The essential thing is that the remedy compensate for or otherwise rectify a past wrong.

Accordingly, I hitch my star to the six-step argument stated. In Section IV, I fill out this argument in the Chixoy Dam Reparations case. Before that, I must dispose of an objection.

III. A fool’s errand thrice over?

Some might object that, for three reasons, it is foolish to recognize IP rights in TK. In the first place, the commercial value of such rights would vary too much across indigenous groups. Relatedly, the overall value of most TK is a function of its uses by indigenous peoples in their local environment, which is often greater than its commercial value to outsiders. Most indigenous groups would receive too little were they to receive only the commercial value of their TK. Second, if one crafted IP rights in TK in accordance with indigenous law or custom, the rights would vary too much in content. This variation would increase the transaction costs, especially the information costs, borne by others who wish to buy the rights or obtain licenses under them from indigenous groups. Third, in almost all cases a mismatch exists between the wrongs done to an indigenous people and any remedy in the form of IP rights in TK.

I disagree. In regard to the first reason given, an indigenous group might not be seeking a financial remedy. Instead, it might want to prevent others from using their TK without attribution, or even with attribution if the group regards the TK as sacred or central to its identity or sense of identity. It might want in particular to prevent outsiders from obtaining patents or copyrights based on the group’s TK. For these purposes the group would ask for injunctive or declaratory relief. Even if the indigenous group were seeking a financial remedy, it might regard IP rights in its TK as only partial compensation for or restitution of what is owed them because of past wrongs. Just compensation is not always the same as fair
market value. The former, but not the latter, takes into account the value of autonomous choice lost by or denied to the group, the group's possibility of capturing some of the gains from trade, and the subjective premium the group places on its TK.

As to the second reason, different rebuttals apply. Sometimes it is justifiable to put up with a modest amount of inefficiency to promote corrective justice. Plus, one could craft the relief so as to reduce the transaction costs to third parties. For example, instead of using indigenous law or custom, one might try to formulate a uniform international law of IP rights for TK. Or at least one might attempt to do something helpful though less grand, such as adopting regional treaties or unifying the domestic law of each nation that is home to one or more indigenous groups.

The third reason might appear to create the most trouble for a corrective justice argument. Suppose that great wrongs, such as murder, enslavement and forced resettlement, were done by outsiders to members of an indigenous group. Why should the group or its members be able to elect IP rights in their TK as a remedy, especially if the wrongs done only indirectly and only slightly harmed the group's TK? Does it not seem more plausible to give the group or its members land and access to housing, health care and education rather than IP rights in TK? Although questions do not amount to an argument, in my experience a negative answer to the first question and an affirmative answer to the second strike some scholars as intuitively plausible. Surely, I have heard some say, you cannot mean that indigenous peoples, if they are able to establish liability, are entitled to whatever remedy suits their fancy. The mismatch would be even more egregious if the group or its members were to elect as their remedy hate-speech codes, affirmative action in hiring, non-sexual full-body massages, a huge supply of whiskey, or ping pong balls.

This third reason is unpersuasive in so far as it is directed at my general argument. If the wrongs committed against the indigenous group were grievous, and if it is possible to identify the wrongdoers or their successors, then it does not lie in the mouths of either the wrongdoers or their successors to say which remedy the indigenous group and its members are entitled to. A salient part of autonomy for indigenous groups rests on their own decisions about what is in their best interest. If they elect IP rights in TK on the basis of accurate information and with due appreciation of the consequences, then it is not evident that outsiders who committed the wrongs or profited from them have standing to tell the indigenous group and its members which remedy they are to have.

Further, the mismatch argument assumes that a close parallel exists between remedies in ordinary civil litigation and remedies for harm done...
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to indigenous groups and their members, yet the analogy is not nearly as close as might be supposed. In garden-variety civil litigation, it makes sense to fit the remedy carefully to the wrong committed. Yet in claims advanced by indigenous groups we should, in fashioning a remedy, take fittingness into account, but also view the remedy as a way of denouncing and atoning for past wrongs. This way proclaims, erects, underscores and provides a new standard that effectively announces that such behavior by wrongdoers will not be tolerated. This standard protects indigenous groups now and in the future. It also provides a way for wrongdoers and victims to reconcile.

It is, then, important to tease apart what one might call the legal-science remedial element and the political-symbolic element. The former element concerns which remedy best suits the wrongs done to indigenous groups. Here my position is that the fit between wrong and remedy insisted upon in ordinary civil litigation is not apt for the wrongs typically committed against indigenous groups and their members. The latter element concerns why indigenous groups often insist on IP rights in TK. The insistence comes from the fact that their grievances arise from their experience at the hands of outsiders, and from the claim that their culture will be taken seriously only if the TK it engenders is identified as theirs and in some sense belongs to them as property. This insistence is also bound up with indigenous perspectives on land. Burned in their memory is the fact that outsiders have almost always regarded the land on which they have lived for countless generations as somehow not held in the ‘right’ way. Their possession was said to be insufficiently intensive, too nomadic, too impermanent, too unproductive, and above all collective-but-not-corporate to count as ownership. Now deprived of their historical uses of the land, they see outsiders directing similar arguments against ownership of their TK. To recognize IP rights in their TK would not correct all misdeeds, past and present, but along with land reform it would restore something they regard as theirs.

Of course, indigenous groups and their members have no moral entitlement to have whatever remedy suits their fancy. Any entity, such as a court or legislature, that authorizes the remedy should have some control over its nature. It should not authorize remedies that might harm indigenous groups or their members, such as a huge supply of whiskey, or prove largely worthless to them, such as a cache of ping pong balls, or would be frivolous, such as massages. To that extent I would in principle allow some paternalism by the remedial entity. At a particularized level, I would

11 An unpublished work in progress by Samuel L. Bray helped me to frame the point in this way.
not rule out hate-speech codes or affirmative action in hiring without knowing a good deal more about the context. If the harm inflicted on an indigenous group was transgenerational, the remedial entity should make sure that the benefits of the remedy are prospectively transgenerational as well. \textsuperscript{12}

IV. Easy cases

One sort of easy case from the very start involves IP rights in TK that are both justifiable and already legally recognized, together with existing identifiable wrongdoers and victims. The IP might be TK that satisfies the usual conditions for a valid copyright, trademark, trade secret, \textit{sui generis} right or, less frequently, patent. To illustrate, in \textit{Milpurruru v. Indofurn Party Ltd},\textsuperscript{13} living aboriginal artists produced images of their traditional creation myths. A Vietnamese rug manufacturer reproduced these images on its carpets and exported the carpets to Australia. The aboriginal artists had given no permission for either the use of the images or the importation of the carpets. They sued for copyright infringement and violation of the Australian Trade Practices Act 1974. The court ruled in the artists’ favor and awarded them pecuniary damages, with the stipulation that the money was to be distributed to the owners recognized by aboriginal law. This case is easy because one has wrongs, an identifiable wrongdoer, financial harm unjustifiably caused by an identifiable firm, identifiable indigenous persons who suffered the harm, a moral duty to compensate because the wrongdoer had no excuse for its actions, and the remedy was effective and reasonably efficient.

This sort of case is too easy to be terribly helpful. Because it begins with IP rights in TK that are already justifiable and legally recognized, it cannot by itself justify IP rights in TK in situations where the very justifiability of such rights is at stake. The standard philosophical arguments for property rights in general and IP rights in particular do not support a robust package of IP rights in TK.\textsuperscript{14} At best, they support only a modest set of IP rights. Their modesty stems from the fact that they are of limited duration, depend mainly on the fringes of current IP protection for patents, copyrights, trademarks and trade secrets, and shelter only bits of \textit{sui generis} IP rights created for indigenous peoples by various statutes and treaties. These rights are worth something. In particular they support ‘defensive’ uses of TK – e.g. invalidating or blocking the enforcement of outsiders’

\textsuperscript{12} Section III provisionally rejects the mismatch argument. Section VI provides reasons based on group autonomy and self-governance for permanently rejecting it.

\textsuperscript{13} 30 IPR 209 (1995) (Australia).

\textsuperscript{14} Munzer and Raustiala, ‘Uneasy Case’.
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Putative IP rights, such as a patent, where the outsiders employed TK to come up with the patented invention. These rights, however, are a good deal less powerful than those typically sought by indigenous peoples and TK advocates.

All the same, wrongs can take many forms besides the violation of justifiable existing IP rights in TK. In fact, most harms inflicted on indigenous peoples involve murder, enslavement, forced migration, pushing people off land they have occupied over generations and removing natural resources and artifacts. There are more than enough really serious harms to go around. So now the question becomes whether one can work these harms into an argument for IP rights in TK. Factors that make an argument of corrective justice easier to construct in principle are a relatively short span of time between the harms caused and the relief sought, identifiable wrongdoers, and identifiable victims and heirs of victims. A useful example, which will also flesh out the rather skeletal argument of Section II, is the Chixoy Dam Reparations case dating from events in the 1980s in Guatemala.

The modernization of Guatemala required a stable source of electric power. The Rio Negro Valley was an attractive place to build a dam, which would be a prime source of hydroelectric power for the nation. As often happens with power dam projects, people were living in the valley, and their homes and other structures would be inundated once the dam was built and water began to fill up behind it. During this period a repressive military dictatorship ruled Guatemala and wanted the dam. The World Bank and the Inter-American Development Bank (IADB) were willing to fund its construction. The Maya-Achi, an indigenous Mayan group, were the main occupants of the valley. They did not want to leave their ancestral lands. The Guatemalan government began a campaign of terror. It removed 3,000 people by force. It paid little compensation and relocated the Mayan peoples to other parts of the country without an effective resettlement policy. Some 6,000 Maya-Achi villagers lost their lands and livelihoods. Some villagers lost more: in a series of massacres from March 1980 through September 1982, Guatemalan Civil Defense Patrols, known by the Spanish-based acronym PACs, kidnapped,
tortured or killed some hundreds of Maya-Achi, including women and children, especially from the village of Xococ.17

Leaving the issue of criminal punishment to one side, and granting that most relief should involve monetary payments and effective resettlement, one can construct a straightforward argument in principle for corrective justice in the form of IP rights in TK. Horrible wrongs were committed. Many of the wrongdoers are identifiable: the Guatemalan government, its senior ministers and the leaders of its PACs, and the World Bank and the IADB for their complicity in allowing the project to go forward without just compensation for landholdings, dwellings, personal property and livelihoods lost in the Rio Negro Valley. The government had justification for building the dam. It had no justification for committing the wrongs – the violence and inadequate compensation – that harmed the Maya-Achi. Both this indigenous Mayan group and often individual Maya-Achi and their heirs can be identified. The actions of the wrongdoers were inexcusable, and they have a moral duty to compensate and restore justice to the Mayan victims.

So far this argument is incomplete. It remains to show that IP rights in TK would, at least in principle, be part of an effective and reasonably efficient means to compensate and restore justice. With equanimity one can grant that money damages, appropriate resettlement of the Maya-Achi in other parts of Guatemala, and confessions and apologies by institutions and individuals for the wrongs they committed or were complicit in are the main forms of corrective relief. The case for including TK in the package is stronger than it would otherwise be for three reasons. First, the regional biodiversity of the Rio Negro Valley was the source of some Maya-Achi TK that it is difficult or impossible to recreate in other parts of Guatemala. Second, a major component of Maya-Achi TK is marimba music, which among other things transmits memories and articulates cultural identity.18 Massacre and forced relocation pushed this music off its normal course of development and imbued it with the trauma of the 1980s.19 Third, in

19 Navarrete Pellicer reports that the marimbistas, who were associated with traditional local Catholicism and Catholic Action catechists, suffered under the coup led by General Efrain Rios Montt (an evangelical Protestant) (ibid., pp. 20–4). Indigenous gatherings with marimba music were shut down in 1981. Marimbistas, ‘the most visible symbol of Catholic custom’, were ‘vulnerable’ and ‘targeted by rival musicians’. The ‘murder of musicians reinforced the message’ (ibid., p. 24). As a result of the violence in Guatemala, the marimba tradition has sometimes been lost and more often regenerated (ibid., p. 167). The ‘resurgence of interest in marimba music’ after the violence of the mid-1960s and the early 1980s ‘can be seen as a statement of identity’ (ibid., p. 166). See also pp. 176–213.
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Guatemala as in most developing countries, indigenous TK not wiped out or rendered worthless by forced resettlement receives spotty and inadequate legal protection.\textsuperscript{20} So even if the Mayan Indians of the Rio Negro Valley receive only a small portion of what is due them as a matter of corrective justice in the form of IP rights in their TK, there is scant ground at the level of my general argument for withholding from them that small portion.\textsuperscript{21}

A less easy case involves indigenous groups some of whose members are dead. A plausible suggestion is to say that the heirs of dead victims should receive corrective relief. There are some technical legal problems with this suggestion. If heirs are defined by an intestacy statute, bear in mind that such statutes have different provisions depending on the jurisdiction, and some legal systems have no intestacy statute. If heirs are defined by victims’ wills, the beneficiaries would be what the common law calls the devisees and legatees named or described in the wills. Variation is possible here, too, because different jurisdictions have different rules about who can be named. For instance, one jurisdiction might allow a man to disinherit his wife and leave his assets to his mistress, and another jurisdiction might prevent or limit his doing so. There are also issues pertaining to what is heritable. Land and personal property are usually heritable, but some causes of action, such as a defamation lawsuit filed by a woman prior to her death but with no final judgment at the time of her death, often are not heritable. In the present situation, the question is whether an indigenous person’s claim for relief would be heritable. Pecuniary damages and other remedies will be less effective if such claims are not heritable.

\textsuperscript{20} As much is evident in the plight of the San of southern Africa, the value of whose knowledge of uses of plants, such as those of the \textit{Hoodia} genus, has been undercut and inadequately protected because of war, forced migration, resettlement and government indifference: S. R. Munzer and P. Chen Simon, ‘Territory, Plants, and Land-Use Rights among the San of Southern Africa: A Case Study of Regional Biodiversity, Traditional Knowledge, and Intellectual Property’ \textit{William & Mary Bill of Rights Journal} 17 (2009) 831-94.

\textsuperscript{21} ‘Breakthrough Accord Could Bring Reparations for Guatemala Massacre Survivors’, \textit{NowPublic}, 3 December 2008, available at nowpublic.com/world/breakthrough-accord-could-bring-reparations-guatemala-massacre-survivors (last accessed 17 November 2010), reports progress on reparations but says nothing about IP rights in TK being part of any reparations. Barbara Rose Johnston has advised me that a multimillion dollar reparations plan was almost entirely in place in spring 2010, but as of 14 April 2011 several government ministries had not agreed on the exact wording of a document that would give it legal force as an \textit{acuerdo}. The plan addresses socio-economic and socio-cultural harm from displacement, inadequate compensation and other injuries. It does not address reparations for the massacres themselves.
In short, these are technical legal problems that are now in want of legal solutions. One size does not fit all. A uniform statute detailing whether anyone inherits the deceased victim’s claim, and, if so, which person or persons do so, seems attractive on the surface. Yet different cultures have different views about inheritance, and decisions on inheritance should be sensitive to such views. If relief to indigenous groups or their members is provided on an ad hoc basis, the relief plan can specify who, if anyone, inherits the right to compensation or other remedies.

V. Hard cases: transgenerational harms and the non-identity problem

The previous case becomes less easy still if we increase the time and the number of generations between the deceased indigenous victims and their remote descendants. It is problematic to call them ‘heirs’ in a legal sense after, say, five or ten generations. So many intervening events, including events affected by the original wrongs, have occurred, that identifying a person’s heirs is even harder than identifying that person’s descendants. Indeed, with time it also becomes harder to identify descendants of the original indigenous victim. That is one reason why trying to pay descendants of the Etruscans for harm inflicted on Etruscan ancestors by the Roman Empire would be such an odd enterprise. Another reason is identifying which Etruscans suffered wrongful injuries inflicted by the Romans. These difficulties are lessened, though not extinguished, if the injuries are more recent, such as the harms visited upon Native Americans and black slaves in what is now the United States. One way of avoiding such difficulties, in the case of indigenous peoples, is to pick out how they suffer continuing wrongs that grow out of much older wrongs inflicted on their ancestors.22

Related to problems with the temporal and generational distance between deceased victims and their remote descendants are further well-known difficulties with inheritance-based claims because of the non-identity problem. Stephen Kershnar, for example, contends that such claims do not succeed. He offers various reasons to support this contention. Among them are doubts about the existence and amount of the claims, concerns about offsets (sums representing benefits that must be subtracted from compensation), and figuring out who owes compensation. But above all, he worries about the existence and identifiability of those who are supposedly entitled to receive inheritance-based compensation.23

Kershnar's argument based on the non-identity problem is straightforward: to justify compensation one must compare the actual world in which present-day African Americans exist to a relevantly similar possible world in which they also exist, but no enslavement and its harms existed. However, slavery involved many wrongful acts that affected the freedom and mobility of slaves. It also played a role in the occurrence and timing of sexual intercourse between particular male and female slaves and thus the birth of ancestors of current African Americans. On metaphysical, probabilistic and reproductive-biological grounds, there is no relevant possible world in which both black enslavement did not occur and present-day African Americans exist. Therefore, the claims for reparations cannot arise, and even if they did, there would be no way to determine how much compensation is in order for them. Kershnar concludes: 'Slavery itself has probably not resulted in a compensable injury to the descendants of slaves.'

Moreover, according to Kershnar, even if descendants of slaves inherited their ancestors' claims to compensation, each such claim is subject to further division upon passing to the next generation. It is extremely difficult to calculate the amount of the inherited fractionated claims, and it is even more difficult to take offsetting benefits into account. By parity of reasoning, Kershnar would presumably contend that harms done a century or two ago to members of indigenous groups do not give rise to rights for their descendants today. Neither do their current descendants have measurable inherited fractionated claims today.

Kershnar's treatment of the non-identity problem is overly simple. George Sher suggests that the situation is more tractable than the difficulties just discussed would suggest. These difficulties might seem to indicate that transgenerational compensation is incoherent, or nearly so. But Sher explores a two-pronged line of argument which offers a possible...

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24 Ibid., 251. D. Parfit, Reasons and Persons (Oxford: Clarendon Press, 1984), ch. 16, formulates the non-identity problem and discusses whether the fact of non-identity makes a moral difference. C. W. Morris, 'Existential Limits to the Rectification of Past Wrongs' American Philosophical Quarterly 21 (1984) 175–82, and others draw out the difficulties that the problem poses for rectification over generations. D. Butt, Rectifying International Injustice: Principles of Compensation and Restitution Between Nations (Oxford University Press, 2009), contains much of interest on these issues. However, it leads itself only indirectly to the specific problems addressed here, because, as his subtitle indicates, it deals with compensation and restitution between nations, whereas my concern embraces many other sorts of wrongdoers and victims.


26 G. Sher, 'Transgenerational Compensation' Philosophy & Public Affairs 33 (2005) 181–200. His article does not cite and is not a reply to Kershnar. B. Boxill, 'A Lockean Argument for Black Reparations' Journal of Ethics 7 (2003), 63–91, offers an argument somewhat similar to Sher’s.
way out: 'that (1) the unrectified wrongs of the previous generations are systematically correlated with certain wrongs done *within* the current generation, and (2) what look like claims to be compensated for the earlier wrongs are in fact claims to be compensated for the associated recent wrongs — wrongs which, having been done within the current generation, do not give rise to the non-identity problem'.

He recognizes that the argument he explores is problematic, and even to the extent that it works it is 'a technical [philosophical] solution to a technical [philosophical] problem'.

One problem to which Sher gives insufficient attention is that correlation is not the same as causation, and that one needs proof that unrectified past wrongs are causes of wrongs and harms inflicted on members of the current generations. Another problem is that his argument yields only remedies for current wrongs and thus seems irrelevant to remedies for past wrongs in cases in which who-you-are is the result of those past wrongs. Still, Sher leaves the proponent of reparations or other relief for members of indigenous groups with something to go on.

There is a second way out of Kershnar's treatment of the non-identity problem. He and Sher both concentrate on individual members of groups. One can concentrate instead on groups themselves. The remote-descendant/non-identity critique is faulty or incomplete, because an indigenous people is a unitary group or collectivity over time. Those who are responsible for TK form a group of n generations who have largely the same language and similar, if evolving, moral and social practices and ways of life over centuries. One can think, then, of an indigenous group — not the individuals in the group — as the entity that has a claim of TK and is entitled to a remedy. The identity conditions of transtemporal groups include lineage and cultural continuity, and a particular indigenous group transcends its current membership. It is the identity of the group rather than the non-identity of current individual members of the group, that matters from the standpoint of corrective relief in the form of IP rights for TK. Because the group is a transtemporal entity, the remedies can rectify both past wrongs and current wrongs caused by them. Any remedy passed down from the group to individuals must be to individuals *qua* members of the group.

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30 This argument adapts Munzer and Raustiala, ‘Uneasy Case’, 64.
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corrective justice because things can go better for the group in the sense of having greater capacity to tie its members together as an enduring community and to pursue common goals. For this reason, the second way out is superior to the first.

VI. Hard cases: autonomy, self-governance and remedies for violations of diffuse interests and rights

Interests and rights are diffuse if they are indivisible, collective and belong to indefinite classes of persons. A class of indigenous persons is indefinite if intermarriage and migration make it difficult or impossible to pick out all and only those individuals who belong to the class. The interests of indigenous peoples in their TK, as well as in their cultural identity and their survival as distinct groups, are usually diffuse. Their rights qua members of a particular indigenous group are usually diffuse, too. Some countries in Latin America and elsewhere make room for diffuse interests and rights. Brazil is a notable example. Other countries make little, if any, room for such interests and rights.

The relevance of diffuse interests and rights to my analysis is as follows. Suppose that the first five steps in my argument are met. That leaves the final step: that recognizing IP rights in TK would in principle be part of an effective and reasonably efficient means of compensating or restoring justice to an indigenous people. Relief that is wholly untargeted is neither effective nor reasonably efficient for this purpose. For example, the Ghanaian Copyright Act 2005 vests 'rights of folklore . . . in the President for the people of the Republic', who holds them 'on behalf of and in trust for the people of the Republic'. This way of treating indigenous folklore is a staggeringly bad idea. Even if neither the president nor the government is corrupt, proceeds from folklore rights will go to all of the people of Ghana rather than just to the various indigenous groups that created the folklore. In most countries, members of indigenous groups are a small fraction of the total population. Hence, the share of indigenous groups in the royalties and other income from their folklore is likely to be miniscule. They are not receiving effective compensation or restorative relief for past harm done to them.

31 Kershnar, 'The Inheritance-Based Claim', begs the question by confining claims of justice to conscious entities (256).
33 Copyright Law, PNDCL No. 690, ss. 4, 17 (17 May 2005) (Ghana).
Pooling together all indigenous groups in a country is not much better, for most countries that have indigenous peoples have many different groups of them. A well-known Peruvian statute governing the collective knowledge of biological resources illustrates the problem.\(^{34}\) It provides that if 'the collective knowledge has passed into the public domain within the previous 20 years', a percentage of the gross sales of goods developed from this knowledge goes into the Fund for the Development of Indigenous Peoples.\(^{35}\) Peru has numerous indigenous groups. If a particular group has developed TK from biological diversity native to their area, as often happens in the Andes, then the group will not receive compensation or enjoy restorative relief commensurate with the value of its own TK. There are limited circumstances in which the Peruvian pooling strategy is defensible. If indigenous groups are numerous and the value of the TK of each group is roughly the same, then it will be both fair and cost-effective to pool rather than keep separate accounts for each group. Otherwise, a given Peruvian indigenous group will not receive corrective relief for its TK. Or if Peruvian indigenous groups agree to share the financial benefits of their TK – under, say, the flag of pan-Indianism and on either a per capita or some other mutually agreed basis – then pooling would be permissible, for each group has waived the corrective relief for its own TK.

If a pooling strategy is at most a second-best means of corrective relief for past wrongs, it makes sense to explore a more targeted form of relief. One way to do so is through a combination of treaties and domestic legislation that protect the rights of indigenous peoples. The domestic legislation would implement treaty obligations by devising a framework for recognizing and enforcing indigenous rights. The enforcement provisions would allow indigenous groups to bring suit under the treaty once they had exhausted their domestic remedies. They would also empower judges to act creatively in fashioning remedies. Of course, equity already recognizes a range of remedies beyond injunctions, restitution and declaratory judgments: accounting for profits, adjustments of various kinds, agency of necessity, constructive trusts, *culpa in contrahendo*, discharges of various kinds, equitable liens, fiduciary duties, *negotiorum gestio* (management of the affairs of another), *quantum meruit*, rescission, offsets, unconscientiability, unjust enrichments of various kinds and the


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unwinding of contracts. As will become apparent, some courts have shown more remedial resourcefulness than even this long list would suggest.

Perhaps the best real-world illustrations rest on various international and regional conventions or treaties pertaining to human rights, such as the American Convention on Human Rights (the ‘Convention’) and litigation under it. For my purposes, two problems beset these illustrations. One is that these conventions often use some assumptions pertaining to property of which my argument may not partake. For instance, Article 21 of the Convention protects the right of everyone to use and enjoy property. It also provides that no one may be deprived of property except upon payment of ‘just compensation’. Article 21 does not define ‘property’. Were it defined or interpreted to include IP rights in TK, I could not use the Convention. I cannot use an argument for corrective justice that depends on the very point at issue – namely, whether IP rights in TK are justifiable as a matter of corrective justice.

The other problem is that frequently the best real-world illustrations rest on conventions and treaties pertaining to human rights. Often these agreements do not make clear what is the basis for putative human rights. If the basis is an argument of corrective justice, that’s fine. But if it is even in part an argument of some other kind, I cannot employ it without begging the question. Consequently, to give this stretch of my argument practical verisimilitude, I will construct an example that uses a hypothetical treaty and domestic law which do not rest on non-corrective-justice human rights justifications. I will also devise a hypothetical example that shows how language in treaties might lead to judicial remedies that are solely corrective in nature. This trapeze work is not, however, quite as difficult as might first appear, for the constitutions of many nations protect property rights with no explicit inclusion of IP rights in TK.

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38 See, for example, Constitution of Angola, art. 10; Constitution of Botswana, s. 8(1); Constitution of the Republic of Namibia, art. 16; South African Constitution, s. 25; US Constitution, amendments V, XIV s. 1.
Imagine, then, that there exists a Global Treaty on the Rights of Indigenous Peoples (the ‘Treaty’) which all members of the United Nations have signed. The Treaty includes the following provisions among many others:

1. All signatories have an obligation to respect the rights of indigenous peoples and individuals qua members of an indigenous people.

2. Indigenous peoples and their members have property rights to their ancestral lands. These rights are commensurate with their past and evolving uses of the land, including but not limited to: (a) seasonal and non-seasonal wandering and migration; (b) obtaining water; (c) hunting and fishing; (d) harvesting wild plants for food, animal feed, building materials, clothing, dyes and medicines; (e) building temporary and permanent dwellings and other structures; (f) constructing temporary and permanent villages, towns and cities; (g) establishing pastoral, agricultural, aquacultural and animal husbandry operations; and (h) setting up and maintaining graves and burial grounds.

3. Indigenous peoples and their members have property rights to the possession, use and enjoyment of things obtained or removed from their ancestral lands or raised on them, including but not limited to water, fish, game, plants, soil, minerals, timber, crops and domesticated animals, together with products made from these things.

4. Indigenous peoples and their members have property rights to the tangible cultural embodiments made on their ancestral lands or from the things and products in provision 3, including but not limited to petroglyphs, wood carvings, dyed and woven fabrics, earthenware, statues, shamanistic totems and religious artifacts.

5. All signatories shall implement the Treaty through their national constitutions, statutes, administrative rules and judicial systems. Under them administrative agencies and courts shall have the power and the obligation to enforce provisions of the Treaty domestically. Unreasonable delay in enforcement shall be a violation of the Treaty.

6. If an indigenous people or a member or members thereof have exhausted their domestic remedies and regard any relief granted to be insufficient under the Treaty, they may appeal to the Global Court on the Rights of Indigenous Peoples (the ‘Court’) established by the Treaty.

7. The Court shall have the power and the obligation to investigate, make findings of fact and determine the rights of an indigenous people and its members in the particular dispute with the signatory State which is the subject of the appeal.

8. If the Court determines that the signatory State has denied or failed to enforce certain rights of an indigenous people or its members under the Treaty, the Court shall have broad legal and equitable powers to enforce these rights as corrective justice requires.
Before analyzing a hypothetical case under this imagined Treaty, I offer several comments. The Treaty draws inspiration from some human rights documents but is narrower because, as set forth here, it deals only with property rights. None of the property rights listed is an IP right in TK. Even the tangible cultural property rights in Section 4 are not IP rights in TK, because the various cultural objects are rivalrous, whereas IP rights in TK are non-rivalrous. Furthermore, the Treaty does not use the term 'human rights' and partakes of no theory of human rights. It explicitly invokes only corrective justice and enunciates some property rights. However, it implicitly assumes that murder, torture, enslavement, involuntary servitude, wrongful imprisonment and forced migration without adequate resettlement are independent wrongs for which corrective justice might provide partial relief in the form of property rights. In this implicit respect the Treaty is no different in principle from the laws of some countries that, for example, award monetary compensation to persons wrongfully imprisoned as a result of police or prosecutorial misconduct. Nonetheless, some enforcement provisions of the Treaty – the obligation of signatory States to enforce the Treaty domestically, possible appeals to the Court and the broad enforcement powers of the Court – echo the Convention and the Inter-American Court of Human Rights.

One can illustrate how my Treaty would work at ground level by modifying the facts of a well-known recent case. I modify Mayagna (Sumo) Awas Tingni Community v. Nicaragua,39 as follows. The Mayagna Awas Tingni Community (the ‘Community’) is an indigenous group of approximately 630 individuals who once lived on the Wawa River in the Nicaraguan municipality of Waspán. The Community claimed that the Nicaraguan government had interfered with and failed to protect its traditional lands and its right to fell trees on those lands. They obtained no relief from the government and appealed to the Global Court. The Court investigated and found that Nicaragua had breached its obligations under the Treaty. Specifically, it had breached provisions 1, 2 (c)–(f), 3, 4 and 5. Because of the breaches, about thirty years ago the Community had to relocate some 100 miles away from the Wawa River to an uninhabited area of the country. This area had no trees. In addition,

there was no nearby river, and the members of the Community had no practical access to the fish of the Wawa, which made up a significant part of their diet. The folklore of the Mayagna Awas Tingni once centered on the many varieties of fish in the Wawa: songs praised them as a gift from the gods, and pottery made from the multicolored clayey banks of the Wawa artfully depicted the assorted fish. After three decades, only a few older members of the Community remembered the songs and knew how to paint the fish on the pottery, and they were so dispirited by life in their new location that they all but ceased to sing and make the traditional pottery.

In the substantive part of the Court's opinion, the only tricky point concerns the grounds for saying that Nicaragua breached provision 4 of the Treaty. Plainly, pottery counts as 'earthenware'. Yet no evidence exists that the government or anyone else stole or destroyed pottery made by the Community. The argument, then, has to be that the displacement of the Community to a remote location with no similar river or clayey soil effectively prevented its potters from making the kind of earthenware that they had done before. This argument might seem broken-backed, for provision 4 seems to address earthenware that already exists, not earthenware that might be made in the future. However, the present/future distinction does not destroy the argument. It shows only that the argument has to be counterfactual: if Nicaragua had not breached provisions 1, 2(c)-(f), 3 and 5, then the Community would have created additional earthenware pots, and hence it would subvert the intended effect of provision 4 if Nicaragua were allowed to limit its liability to such pottery as existed thirty years ago. Consequently, Nicaragua violated provision 4 of the Treaty, too.

In the remedial part of the actual case, the Inter-American Court of Human Rights held that Nicaragua must invest US$50,000 for the benefit of the Community, pay US$30,000 to reimburse the Community for its expenses, and set up a legislative and administrative infrastructure that can demarcate the Community's traditional lands and give it title to these lands. Until the demarcation and titling are complete, Nicaragua, its agents, and third parties acting with Nicaragua's acquiescence or tolerance must not interfere with the Community's use and enjoyment of its lands or compromise the value of them. Moreover, Nicaragua must

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40 The actual case involved only land and timber rights. My modifications include the distant relocation, the plenitude of fish in the Wawa, the tangible cultural objects and the folklore.
41 Ibid., para. 173(3), (6) and (7) (awarding dollar amounts 'in equity').
42 Ibid., para. 173(4).
submit reports of its progress on compliance with the decision to the Inter-American Court every six months until the State has fully carried out its responsibilities under the judgment.\(^{43}\) From a continent away, it is impossible to assess the reasonableness of the monetary amounts ordered by the Inter-American Court even for the ancestral land and timber claims. One could, of course, always modify the facts so that these dollar amounts would be in order.

In my hypothetical case, though, it would appear that the money damages would have to be greater. They would also have to cover the lost value of the fishing rights under provision 2(c), the rights to fish caught and clay extracted under provision 3 and the tangible cultural property rights under provision 4 of the Treaty. For present purposes, however, the main point of interest is whether my hypothetical Court, under my imagined Treaty, could justify protecting any IP rights in TK. Here I see two possibilities for an affirmative answer: a straightforward possibility and a subtle, theoretically interesting one.

The straightforward possibility would be that if the eventual dollar amounts are just compensatory and restorative relief for all violations of the Treaty, in principle Nicaragua could pay a lower amount in monetary damages and make up the difference by recognizing IP rights in the Community’s TK. The legal and philosophical underpinning for this result is the right of an indigenous group, elaborated in Section III of this chapter, to have some say in electing a remedy for the wrongs done to it and its members. One could then recraft the Court’s order to embrace judicial protection of IP rights in TK and the administrative infrastructure to back them up. Although the actual Mayagna (Sumo) Awas Tingni case was decided under a treaty, similar results are available under the legislation of many Latin American countries. Brazil, Costa Rica, Colombia, Guatemala and Paraguay, among others, have kindred provisions for enforcing the diffuse interests and rights of indigenous peoples and consumer groups.\(^{44}\) This possibility is boring, because group autonomy enters the picture only in the election of remedy by the Community.

The subtle, theoretically interesting possibility would be to construct an argument, based on my imagined Treaty, for IP rights in TK. The argument turns on the impact of Nicaragua’s manifold breaches of the Treaty. These breaches were responsible for the Mayagna (Sumo) Awas Tingni relocating to a different area of the country one hundred miles away that had no nearby river, fish or clayey soil. This relocation was in turn responsible for the loss of the ability and interest in singing traditional

\(^{43}\) Ibid., para. 173(8) and (9).  \(^{44}\) Pellegrini Grinover, ‘Brazil’, 64–5, 67.
songs on the part of virtually all members of the Community. Suppose that we now supplement the hypothetical case with the further facts that during the last thirty years Western interest in Central American folklore has increased substantially and that Westerners have typically been willing to pay for access to this folklore. Had the Community remained in Waspan on the Wawa River, its members would have been in a position to exploit financially this increased interest. The Community and its members could, for example, have earned money from permitting others to record their traditional songs. The governmental breaches of the Treaty and the consequences of the relocation made it extremely difficult, if not impossible, for the Community and its members to profit financially from their traditional songs. The deprivation of this opportunity could in principle warrant relief in the form of property rights, including IP rights in TK. Corrective justice requires that Nicaragua compensate the Community for its economic loss or provide it with other appropriate relief. This possibility is interesting because, as I will show, the loss of autonomy is central to the harm and the restoration of autonomy is central to the remedy.

Exploring the supplemented hypothetical case helps to show why IP rights in TK are in principle a plausible component of a remedy based on corrective justice. Prior to Nicaragua’s breaches of the Treaty, the Mayagna (Sumo) Awas Tingni had only descriptive, not normative, TK. Hence these breaches were not violations of any IP rights in TK ex ante. Still, the eventual diminution or loss of the Community’s TK was a harm (damnnum), even if it was not at the beginning a legally cognizable injury (injuria). The lost or diminished TK was generated by members of the Community.

Also, the TK partly constituted their identity or sense of identity, and it was an expression of their group autonomy. By ‘autonomy’ I mean, in the case of individual human beings, the psychological capacity to be self-governing. To be self-governing is to determine, guide and control one’s behavior and character over time based on reasons. In my view, the autonomy of an indigenous group depends on the autonomy of the individuals, past and present, who comprise it. For two reasons the possession of autonomy does not entail the possession of self-governance.

but neglect to exercise that capacity. Second, an individual or a group might desire to exercise autonomy, and struggle to do so, but might not succeed owing to external factors beyond his, her or its control.

Group autonomy, then, involves the self-governing behavior and character of members of an indigenous group over time. My account does not suppose that all members behave in the same way. Their behavior is often complementary, distinctive or sometimes even conflicting. For instance, their descriptive TK might involve different artistic styles and include parodies of works made by other members of the group. Because human beings are embodied entities, not spirits, they require the use of material resources to express their culture. Wrongs done by outsiders can hinder—and sometimes diminish or even extinguish—their group autonomy and self-governance.

In my hypothetical example, the Nicaraguan breaches were ultimately responsible for the loss of the ability and interest of almost all members of the Mayagna (Sumo) Awas Tingni Community in singing their traditional songs. This loss is a diminution of the group’s autonomy and self-governance. A remedy that restores or enhances its autonomy and self-governance *ex post* is a normatively appropriate response to that loss. To give the Community some IP rights in their TK is not merely autonomy-restoring or autonomy-enhancing: It is part of what Nicaragua owes to the Community, because the earlier harm ultimately resulted in an ongoing present autonomy-inhibiting disadvantage to the Community. The same point holds *mutatis mutandis* for self-governance.

We can now see more clearly why the mismatch argument considered and provisionally rejected in Section III ought to be permanently rejected at the level of principle. Massages, whiskey and ping-pong balls are frivolous remedies that have no relation to the harm suffered by the Community. By contrast, IP rights in TK belong on the menu of possible remedies precisely because they are tied to the diminished or lost autonomy and self-governance suffered by the Community as a result of Nicaragua’s breaches of the Treaty.

Granting IP rights in TK might seem most appropriate in cases where members of an indigenous group would have commercialized, or continued to commercialize their TK, but for the harm inflicted on the group and its members that impaired their autonomy and self-governance. Yet it does not follow that absent commercialization, IP rights in TK are inappropriate. It follows only that, at the level of the particularized crafting of relief, these rights might seem less appropriate than in cases where commercialization occurred or would have occurred but for the harm done. After all, part of the basis for IP rights in TK is to denounce the behavior of wrongdoers and establish a new standard for dealing with the wrongs they
inflicted, not merely to come up with the most fitting remedy under the rules for ordinary civil litigation.

A minor objection to the foregoing argument rests on offsetting. By moving from the Wawa River to a different area of Nicaragua, the Mayagna (Sumo) A was Tingni gained an opportunity to create different TK. In place of songs about fish, members of the Community could make up new songs about the animals and terrain in their new location. Thus, it is contended, the value of the new songs should offset the value of the traditional songs that would have continued to be sung but for the relocation.

I answer that this objection is largely beside the point. The point of my argument is to give a corrective justice foundation for IP rights in TK at the level of principle, not to supply a practical mechanism for valuing those rights. Furthermore, the objection is callous. I recognize that legal remedies for breach of contract take into account costs saved by the non-breaching party, or require the non-breaching party to mitigate economic loss in order to recover damages. But the wrongs done to indigenous groups and their members go far beyond run-of-the-mill breaches of contract. It is counterintuitive to say that present-day African Americans descended from slaves must offset whatever value their long-dead ancestors had in descriptive TK, shortly before or just after the Middle Passage, by the value of black contributions to jazz. It is almost as counterintuitive to say that present-day members of the Community should have the strength of their IP rights in TK reduced by the proportionate value of new TK they have created, or could have created, as a result of their relocation.

I have heard some object that my argument proves too much. This more serious objection rests on examples such as the following.

(1) A US-based pharmaceutical company has a large plant located in Indonesia. As a result of anti-American political protest in Indonesia, a mob utterly destroys the plant. The economic loss is $500 million. The Indonesian government refuses to compensate the company. Because the company is on the verge of bankruptcy, Congress enacts a law that extends for ten years patent rights that the company holds on its most successful drugs. The value of the patent-term extension is $500 million. But, the objection runs, it is ridiculous to extend patent terms to make up for extraterritorial losses suffered by the company. And yet, the objector concludes, my argument would seem to endorse the extension, because IP rights are made the basis of corrective relief.

(2) A tribe in Venezuela ranges over a large area, including a swampy coastal plain which members of the tribe use for fishing and trapping. No TK results from this use. A Dutch firm, with permission from the
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Venezuelan government, discovers oil in a coastal area abutting the coastal plain used by the tribe. In extracting the oil and loading it into a tanker, the Dutch firm negligently causes a serious oil spill that contaminates the tribe’s coastal plain. The tribe suffers an economic loss of $40 million ($10 million for lost fish and game and $30 million needed to clean up the oil spill and remediate the coastal plain). The firm offers to pay the tribe $40 million, but the tribe seeks $35 million in cash and certain IP rights in its TK that, to the tribe, are worth $5 million. My objector contends that monetary damages should be the tribe’s sole form of relief; no IP rights in TK are appropriate. Nevertheless, the objection concludes, my argument would seem to allow the tribe to select IP rights in its TK as part of the remedy.

(3) An indigenous group in Botswana lives in a part of the country that contains a species of snail found only in that small part of the globe. Members of the group ignore the snail. They do not eat it, draw pictures of it, sing songs about it, or use it for medicinal or any other purposes. Westerners on a government-approved trek through this part of Botswana come upon the snail. One of their company is a researcher in anaesthesiology. He notices that the snails, when disturbed, secrete a clear liquid, and he takes samples of the liquid back to his native France. He isolates from the liquid a molecule that causes skeletal muscles to go limp far more effectively than curare or any other natural or synthetic drug in the French pharmacopeia. He obtains patents on the molecule from the US, Japanese and European patent offices. When the indigenous group in Botswana learns of the patents, its members are furious, and they sue for IP rights in the molecule. Now, the objection continues, it is perfectly ridiculous for the group to have any IP rights in the molecule. The group neither isolated the molecule, nor discovered a use for it, nor even paid any attention to this species of snail. And yet, my objector says, my argument would favor recognizing IP rights in the snail and the active ingredient in the secreted liquid.

At root, this second objection, invoking as it does the three hypothetical cases, is an effort to construct a *reductio ad absurdum*: if one accepts my argument, the objection runs, then one should favor IP rights in TK in cases (1) through (3). Yet it would be the height of folly to do so. Therefore, the objection concludes, one should reject my argument.

I disagree. Case (1) is readily distinguishable. Suppose that ‘par’ is the average level of protection, across all legal systems, accorded to IP. Descriptive TK receives no IP protection. Normative TK generally receives rather weak and qualified IP protection. Indigenous groups,

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then, receive IP protection that is below par. By contrast, pharmaceutical companies receive IP protection that is above par. It makes little sense for Congress to give the company in case (1) ad hoc patent extensions on its most profitable drugs. Monetary damages suffice to remedy the company’s loss of its destroyed Indonesian plant. The below-par/par/above-par rebuttal demonstrates that my argument does not lead to the conclusion that the objector claims. Also, I am aware that, for some, this example would not qualify as an illustration of corrective justice at all. For the wrongdoers were the violent mob that destroyed the plant and maybe, at a stretch, the Indonesian government, if it was complicit in the mob’s action. Neither supplied a remedy. Congress provided the remedy, but it was not the wrongdoer. One need not accept this reasoning, for it seems an open question whether corrective justice includes a remedy crafted by a third party.

Case (2) is also distinguishable. The Venezuelan tribe has a tradition of using the swampy coastal plain for fishing and trapping. Yet *ex hypothesi* no understanding, skill or folklore that would qualify as ‘knowledge’ in the relevant sense results from this use. Here we have ‘T’ but no ‘K’. Consequently, no relevant TK exists for which IP rights are an appropriate remedy. The argument I laid out raised the possibility of IP rights in TK as a way to reverse an earlier diminution or loss of autonomy and self-governance so that we come as close as possible to restoring what the tribe lost. A remedy that restores or enhances autonomy and self-governance is the nearest equivalent that might make the tribe whole. Case (2) is not a parallel, because what will come nearest to making the Venezuelan tribe whole are damages to cover the fish and game it would have caught but now cannot, plus damages to pay for the clean-up and remediation of the land. The objector is correct to say that IP rights in TK are inappropriate, but wrong to say that my argument would justify any such rights for the tribe.

Case (3) is likewise distinguishable. The indigenous group in Botswana might well have some descriptive and normative TK. With respect to the relevant species of snail, however, it has no tradition and no knowledge in any relevant sense. Here we have neither ‘T’ nor ‘K’. The Westerners who took note of the snails were on an approved trek. The laws of some countries forbid the removal of plants and animals from the host country. The anaesthesiologist did not do so; he took only samples of the liquid secreted by the snails. Furthermore, he was the one to isolate the active ingredient, discover a use for it, file patent applications and eventually obtain patents on the molecule. None of his actions or those of his fellow trekkers interfered with the autonomy or self-governance of the indigenous group. Once again, the objector is correct to say that IP rights in TK
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are not appropriate for the group, but wrong to say that my argument would justify any such rights for the group.

A third and final objection appeals to cases in which no gross harms – murder, enslavement, etc. – exist, but outsiders make use of descriptive TK without the informed consent or even the knowledge of the indigenous group. In these cases, the objection claims, there is no interference with the autonomy or self-governance of the group or any of its members.

This claim is false and the objection fails. Here the interference with autonomy and self-governance lies in the inability of the group and its members to control the disclosure and representation of their TK. Research shows that indigenous peoples are keenly interested in marking out their cultural identity and controlling representations of their TK. Impinging on their control thus limits the autonomy and self-governance of groups and their members. Now, it would be a lame defense for a peeping tom who photographed a woman emerging naked from the shower in her hotel room and posted the pictures on the internet to plead that, because she was unaware of the photographing and posting, she suffered no harm. The harm is the interference with the woman’s autonomy and self-governance to decide whether she wishes to be photographed nude and to have the pictures put on the web. By parity of reasoning, the indigenous group and its members were unable to exercise control over their TK. Although the harm done them is much less grave than murdering or enslaving them, it is a harm nonetheless and justifies pro tanto IP rights in TK.

The law has a phrase – *damnum absque injuria* – which translates as ‘harm without injury’ – that is, harm to a person or group that does not amount to a legally cognizable injury for which damages or other relief may be granted. A central argument of this chapter is more nearly in *damno aliquando injuria inferri potest* – or, ‘sometimes one can infer an injury from a harm’. More precisely, sometimes one can construct an argument that takes us from a harm to a legally cognizable injury for which compensation or restorative relief is due as a matter of corrective justice. No doubt the argument has an implicit premise that a reason exists as to why relief is fitting in principle: namely, that the harm interferes with autonomy and self-governance, and compensatory or restorative relief in the form of IP rights in TK counteracts and atones for this harm. This premise is weaker and sparer than the assumptions that underlie property, human rights and distributive justice arguments for IP rights in TK.

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VII. Prospect

My argument for IP rights in TK based on corrective justice, despite its philosophical and legal merits, might not be decisive on a practical level. At some point, one has to think about what indigenous peoples need and want. Their needs are not always and everywhere the same, and neither are their wants. Nevertheless, to paint with a broad brush, they generally need land, health care, education and access to natural resources more than they need IP rights to their TK. If I put myself in an imaginary conversation with an indigenous leader who has just seen his or her group conferred, as a matter of corrective justice, with IP rights in TK, he or she might say, 'I have huge problems involving a place for my people to live, access to timber and water, and the prevention of disease — and you have brought me some “rights” which I don’t quite understand and seem to me of modest worth!' To some my argument of corrective justice might seem puny in its attempt to support IP rights in TK when indigenous peoples have so many other problems demanding their attention.

And yet hope lies in two quite different practical considerations. The first rests on the possibility of a mutual trade-off. As a practical matter, both indigenous peoples and outsiders must make trade-offs regarding IP rights in TK if these rights are to be of significant help in rectifying past wrongs. Indigenous peoples must choose whether to live traditional lives by making only traditional uses of their TK, or to exploit the commercial potential of their TK so as to gain income that will enable them to live partly traditional and partly non-traditional lives. Outsiders, by contrast, must choose whether to use their economic and political power to maximize their own interests (and advance the interests of indigenous peoples if, and only if, doing so adventitiously maximizes the outsiders’ interests), or to make some concessions regarding IP rights in TK to the modest detriment of their own interests. If indigenous peoples and outsiders both make the respective first choices described, IP rights in TK will be worth little. Yet if they both make the respective second choices described, these IP rights will be more valuable.

The second consideration pertains to the strength of the available package of IP rights. Were one confined to property arguments for IP rights in TK, the package would be of modest strength. But under a sound corrective justice argument, the package could be robust, and the compensatory and restorative relief could be substantial. One cannot actualize this possibility if an indigenous people takes all or most of its relief in the form of land, natural resources, health care, education and monetary damages. Still, one could make this possibility a reality if an indigenous people also seeks and obtains a remedy that aggressively advances the
strength of its IP rights in TK. Now the package of rights could be robust. It might even include, for example, indefinite duration, no requirement of fixation for copyright, and no need for publication of prior art to block outsiders' patents. Whether an authority should decree such a robust package of rights at a particularized level would require intensive fact-finding and sound judgment. Nonetheless, this package of rights is, I think, the powerful set of IP rights that many TK advocates seek.