

## CANNIBALIZING EPISTEMES: WILL MODERN LAW PROTECT TRADITIONAL CULTURAL EXPRESSIONS?

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(in: Christoph Graber, *Traditional Cultural Expressions in a Digital Environment* 2008)

### 1. Traditional Knowledge: Social Issue Framing

True miracles are ascribed to the Neem Tree (*Azadirachta indica*). Particularly in India, where the tree is worshipped as being holy. Extracts from its leaves are used to fight against fourteen different types of fungus and against bacteria found in burn tissue, as well as against typhoid pathogens. The extract is used to prevent viral infections, and is implemented against small pox, chicken pox, hepatitis B and herpes. All parts of the tree are used in ayurvedic medicine.<sup>1</sup> Bio-pesticides and bio-fungicides are also extracted from the Neem Tree. The Turmeric powder (*Curcuma longa*) is a spice of similar versatility. It is used in Indian medicine to combat infectious diseases and to heal wounds, but also as a spice and dye. What these two natural products have in common is that they were both objects of economic interest, exploited by transnational networks. While the US company W.R. Grace & Co. acquired a whole series of patents in connection with the production of a stabilizing *Azadirachta* solution for fighting fungi, researchers at the University of Mississippi Medical Centre patented the use of turmeric in the USA for purposes of healing wounds.<sup>2</sup> Both attempts to attain knowledge using transnational networks faced severe resistance from indigenous groups. In both cases, activists from various NGOs appealed against the patents granted; both appeals were successful. After the Indian Council of Scientific and Industrial Research applied for the turmeric case to be re-considered, the patent was revoked (US Patent No 5.401.504). The reason given for

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\* We would like to thank Isabel Hensel for helpful suggestions.

<sup>1</sup> Heinrich Schmutterer, *The Neem Tree Azadirachta Indica A. Juss. and Other Meliaceous Plants: Sources of Unique Natural Products for Integrated Pest Management, Medicine, Industry and Other Purposes*, Weinheim: VCH, 1995.

<sup>2</sup> For details on both cases, see Murray Lee Eiland, "Patenting Traditional Medicine" (2007) *Journal of the Patent and Trademark Office Society* 89, pp. 45-84; Anja v. Hahn, *Traditionelles Wissen indigener und lokaler Gemeinschaften zwischen geistigen Eigentumsrechten und der public domain*, Beiträge zum ausländischen öffentlichen Recht und Völkerrecht, Vol. 170, Berlin: Springer, 2004, at p. 270 (Turmeric) and at p. 279 (Neem Tree). See also Rekha Ramani, "Market Realities v. Indigenous Equities" (2001) *Brooklyn Journal of International Law* 26, pp. 1147-1176, at footnote 5 – regarding the patent of Turmeric. The literature concerning the patent of the Neem Tree is extensive, particularly instructive: Shalini Randeria, "Rechtspluralismus und überlappende Souveränitäten: Globalisierung und der listige Staat' in Indien" (2006) *Soziale Welt* 57, pp. 229-258, at p. 237; Emily Marden, "The Neem Tree Patent: International Conflict over the Commodification of Life" (1999) *Boston College International & Comparative Law Review* 22, pp. 279-295, at p. 283; Vandana Shiva and Radha Holla-Bhar, "Piracy by Patent: The Case of the Neem Tree" in Jerry Mander and Edward Goldsmith (eds.), *The Case of the Global Economy: And For a Turn Toward the Local*, San Francisco: Sierra Club Books, 1996, pp. 146-159, at p. 148.

revocation was that the invention was no longer a novelty.<sup>3</sup> The conflict situation in the Neem patent case, brought before the European Patent Office (EPO), was similar. After the appeal by the environmental activists, under the guidance of Vandana Shiva and Magda Alvoet, had been filed, the European patent No 0436257 was revoked by the EPO as well according to Article 52(1) of the European Patent Treaty (EPT)<sup>4</sup> as it no longer qualified as a novelty according to the information submitted orally or in writing on its technical status.<sup>5</sup>

Both cases represent a brave and honourable but very problematic attempt to combat the exploitation of traditional knowledge<sup>6</sup> through exploration methods, which are used by modern economics, science, technology, medicine and culture in peripheral societies by bringing the conflicts before the legal forums of the industrialized world.

The real problem behind these litigation strategies lies in their issue framing. What are the categories in which politics and law in the centres of modernity perceive the problem of traditional knowledge in peripheral societies? It is these categories that ultimately decide upon the ransom conditions, the content and execution of sanctions against the exploitation of traditional knowledge. Public interest lawyers necessarily depend upon the issue framing given by the courts before which they stand, or by the administrative bodies to which they appeal, and from the legal norms whose interpretation they are debating. Although this dependency gives them the opportunity to connect to existing legal regulations and also opens scenarios for incremental legal innovations, it does bind them too closely to the conceptual system of the special legal field they are dealing with and precludes them effectively from exploring the real dimensions of the conflict and from finding solutions tailored to these problems. The issue framing in the Neem Tree case was particularly bizarre. Did the successful attack on the novelty of the patent at all contribute to conceive the problem of traditional knowledge adequately? No. The plaintiffs only succeeded in proving that traditional knowledge pertaining to the healing powers of the tree had already been recorded in religious sources.<sup>7</sup> Expressing the *quaestio iuris* of the Neem Tree exclusively in intellectual property (IP) speak is to defy the purpose of the actual conflict, because the IP-specific “novelty” of the knowledge is not the problem requiring regulation. Instead, the problem for regulation is how to protect the generation of traditional knowledge as such. Which issue framing then should be used to record conflicts that result from the utilization of traditional knowledge by modern society in science, technology, medicine, media, art and economics, and into which *quaestio iuris* are they to be translated adequately?

The question of how to qualify traditional knowledge as a legal issue confronts experts of international law with the acute problem of fragmentation of international

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<sup>3</sup> Reexamination Certificate B1, 3500, 21 April 1998, cancelling claims in US Patent No 5. 401. 504; Graham Dutfield, “TRIPS-Related Aspects of Traditional Knowledge” (2001) Case Western Reserve Journal of International Law 33, pp. 233-275.

<sup>4</sup> Implementing Regulations to the Convention on the Grant of European Patents (European Patent Convention) of 5 October 1973, as last amended by the Act revising Article 63 EPC of 17 December 1991 and by Decision of the Administrative Council of the European Patent Organisation of 21 December 1978, of 13 December 1994, of 20 October 1995, of 5 December 1996, of 10 December 1998, and of 27 October 2005, as well as the preliminary applicable regulations of the Act revising the Convention on the Grant of European Patents of 29 November 2000.

<sup>5</sup> EPO, Decision revoking the European Patent, 13 February 2001, Application No 90250319.2-2117, Patent No 0436257; the objection to this decision was decided negatively on 8 March 2005 (Az. T 0416/01 – 3.3.2).

<sup>6</sup> In the following text, the concept of traditional knowledge due to the holistic context of the production of knowledge thereby refers also to each form of traditional culture.

<sup>7</sup> Such distinctively formulated by the EPO deciding the request against the revocation of the patent, see *supra* note 5, at p. 21: “In conclusion, the main request fails for lack of inventive step (Article 56 EPC)”.

law.<sup>8</sup> There are several international organizations that have registered the problem of traditional knowledge under the influence of public protest and have initiated legal regulations – but they registered the problem with their own tunnelvision only. Therefore, the starting point is precisely this issue of fragmentation of law:

“Indeed, the attempts to create [traditional knowledge] protection rules on the global level reveal substantial fragmentation. After the early success of a joint effort of the World Intellectual Property Organization (WIPO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) to elaborate a *sui generis* model for IP-type protection of traditional knowledge (UNESCO-WIPO Model Provisions, 1982), the international community has shown no coherence in its approaches to traditional knowledge. The multiplicity of regional, national and civil society endeavours to protect different aspects of traditional knowledge complicates the picture and deepens the fragmentation”.<sup>9</sup>

However, where protection of traditional knowledge is at the mercy of normative collisions resulting from legal fragmentation, issue framing becomes even more exigent. The heated debate on legal fragmentation that was first formalized in the report issued by the International Law Commission (ILC) working group, demonstrates that unifying the existing legal provisions or setting up court hierarchies does not avoid collisions of this nature. The debate shifted attention from the juridical to the political dimension, from norm conflicts to policy conflicts between international regimes.<sup>10</sup> Various international organizations – the World Trade Organization (WTO), the United Nations Food and Agriculture Organization (FAO), WIPO, etc. – collide with their respective institutionally ingrained problem definitions and their respective strategies for solution. Today, traditional knowledge has been drawn into the maelstrom of the policy conflicts and is wedged between an aggressively propagated global expansion of intellectual property rights on the one hand, and the maintenance of cultural diversity and biodiversity on the other.<sup>11</sup>

A strange *effet pervers*<sup>12</sup> of the global juridification of traditional knowledge is revealed: not only transnational enterprises exploit traditional knowledge to feed their profit strategies, but also transnational regulatory regimes do the same to feed their regulatory strategies. Of course, they do not abuse traditional knowledge for private purposes, nevertheless they instrumentalize the knowledge of peripheral societies, for the good of a transnational *ordre public* – despite taking sides for developing world countries. Palpable regulatory regimes set up by the national legislative following initialisation through global regimes evidence this trend. India has attempted to balance two conflicting political goals, under the influence of global politics, in Article 36(5) of the Biological Diversity Act 2002: incentives of intellectual property and biological

<sup>8</sup> For the fragmentation of the international law on traditional knowledge, see Martin A. Girsberger, “*Legal Protection of Traditional Cultural Expressions (TCEs): A Policy Perspective*” in this volume.

<sup>9</sup> NCCR, International Symposium “Traditional Cultural Expressions in a Digital Environment”, Lucerne, “*Conference Programme*”, June 2007, available at <http://www.nccr-trade.org/ip-7/international-symposium-traditional-cultural-expressions-in-a-digital-environment-htm>.

<sup>10</sup> Martti Koskeniemi, Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, Report of the Study Group of the International Law Commission: Draft conclusions of the work of the Study Group, ILC, 58<sup>th</sup> Session, A/CN.4/L.682, 13 April 2006; see also the (inferential) Report of the Study Group of the International Law Commission. Draft Conclusions of the Work of the Study Group: Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, ILC, 58<sup>th</sup> Session, A/CN.4/L.702, 18 July 2006.

<sup>11</sup> Instead of all, see Commission on Intellectual Property Rights, *Integrating Intellectual Property Rights and Development Policy*, London: Commission on Intellectual Property Rights, September 2002.

<sup>12</sup> Raymond Boudon, *Effets pervers et ordre social*, Paris: Presse Universitaire Française, 1977.

diversity.<sup>13</sup> But what a peculiar detour biodiversity is as a means of protecting traditional knowledge by pursuing policies of sustainability in order to preserve the diversity of biological species! The instrumentalization of traditional knowledge for biological and economic purposes at the same time does not fit the peculiar nature of traditional knowledge, as was effectively demonstrated in Thailand – this time for medical purposes. The Thai legislative subsumes all norms that are designed to facilitate traditional knowledge as “protection and promotion of traditional Thai medicinal intelligence”.<sup>14</sup> And even if traditional knowledge preservation is “inherently” proclaimed as a policy goal, such as in Brazil and the African Model Legislation, they understand it to be a knowledge stock of high “socio-economic value”, which should be transcribed, documented, stored and utilized in digital databases. Thus, they tend to miss the goal of protecting the processes that lead to the generation of knowledge.<sup>15</sup> Finally, the instrumentalization of traditional knowledge becomes obvious when protective IP regimes for traditional knowledge pronounce the explicit goal of adapting indigenous groups to modern markets:

“We contend that carefully designed IPRs in traditional knowledge could help developing countries become full players in global agricultural markets while equally rewarding indigenous people for their contributions to international well-being”.<sup>16</sup>

In relation to such a subordination to the idiosyncratic regulatory logic of international organizations, it makes a substantial difference to detach the fragmentation of traditional knowledge law from its overly tight connection to regime policies and to re-trace it to fundamental conflicts within modernity. As Martti Koskenniemi notes in the ILC working group’s report on fragmentation, regime collisions are an expression of profound contradictions in global society.

“In a sociological sense, they may even be said to express different social rationalities: a clash between them would appear as a clash of rationalities – for example, environmental rationality against trade rationality, human rights rationality against the rationality of diplomatic intercourse. Thus described, fragmentation of international law would articulate a rather fundamental aspect of globalized social reality itself – the replacement of territoriality as the principle of social differentiation by (non-territorial) functionality”.<sup>17</sup>

It then becomes clear that regime collisions do not merely result from policy conflicts, but also from conflicts between different societal systems.<sup>18</sup> In the various attempts at regulating the traditional knowledge problem at a global level, partial rationalities of global society collide with each other: economic, scientific, medical, cultural and religious principles are in conflict about access to traditional knowledge. Greatly simplified, this means: when using traditional knowledge, economic, scientific, artistic, media related

<sup>13</sup> The Article reads as follows: “The Central Government shall endeavour to respect and protect the knowledge of local people relating to biological diversity, as recommended by the National Biodiversity Authority through such measures, which may include registration of such knowledge at the local, State or national levels, and other measures for protection, including *sui generis* system”. Hereunto, see Thomas Cottier and Marion Panizzon, “*Legal Perspectives on Traditional Knowledge: The Case for Intellectual Property Protection*” (2004) *Journal of International Economic Law* 7, pp. 371-399, at p. 380.

<sup>14</sup> See WIPO, Comparative Summary of Existing *Sui Generis* Measures and Law for the Protection of Traditional Knowledge, WIPO/GRTKF/IC/5/INF/4, 20 June 2003.

<sup>15</sup> Regarding the legal situation in Brazil and the African Model Act, see *ibid.*

<sup>16</sup> Cottier and Panizzon, *supra* note 13, at p. 372.

<sup>17</sup> Koskenniemi, *supra* note 10, at para. 133, footnote 168; Martti Koskenniemi and Päivi Leino, “*Fragmentation of International Law? Postmodern Anxieties*” (2002) *Leiden Journal of International Law* 15, pp. 553-579; Andreas Fischer-Lescano and Gunther Teubner, *Regime-Kollisionen: Zur Fragmentierung des globalen Rechts*, Frankfurt: Suhrkamp, 2006.

<sup>18</sup> Saskia Sassen, *Territory-Authority-Rights – From Medieval to Global Assemblages*, Princeton, NJ: Princeton University Press, 2006.

and medical utilization interests collide with claims of integrity and diversity of cultures, religions and ways of life. As a consequence, related regulatory projects, react to these conflicts in very different ways. Is reconciling these interests using hierarchical decisions or negotiations between regimes possible?

Seen from this perspective, traditional knowledge rightly qualifies as a problem of colliding rationalities in modern society. However, it is necessary to go a considerable step further, beyond the current discussions on legal fragmentation. Colliding rationalities does not adequately describe the problem of traditional knowledge, as it does justice to simple rather than to *double fragmentation in global society*. Although it makes clear how stocks of traditional knowledge are subjected to diverging demands from functional regimes worldwide, it does not take into account the second level of fragmentation – the cultural polycentrism, the conflict between various world cultures.<sup>19</sup> However, the traditional knowledge conflict arose precisely from this double fragmentation of functional global systems on the one side and regional cultures in global society on the other.<sup>20</sup> By re-rooting the conflicts alone, it becomes possible to give the search for legal norms sociological directions that deal with the conflict more adequately. Political issue framing and the legal qualification of traditional knowledge problems cannot ignore this double polycentricity, instead, should accept it as given, reflect it in its consequences and build up their regulatory projects on this basis.

Of course, it requires strong self-discipline to escape from the singing sirens: “clash of cultures” (Samuel Huntington) in international relations, “Jihad vs. McWorld” (Benjamin Barber) in political science; “multiple modernities” (Schmuel Eisenstadt) in sociology; and “uniqueness of legal cultures” (Pierre Legrand) in jurisprudence.<sup>21</sup> They all insinuate that in today’s global society different regional cultures that are shut off hermetically from each other, clash. As influential as such concepts of a cultural conflict between modern and traditional societies have become, their assumptions of cultures as totalities or “compact”, exclusive units “tout court”, which have to fight to secure their boundaries, are questionable. Instead, it is essential to analyse, how in particular highly specialized hyperstructures of global society have become capable of sabotaging the integration mechanisms of regional cultures from the inside.<sup>22</sup>

The decisive factor is the distinction between global and regional cultural principles of society: functional differentiation of “modern” knowledge stocks *versus* the social embedding of traditional knowledge. This distinction gives the conflicts of traditional knowledge their idiosyncratic colouring. Not the modern society as such, as a capitalist society, as an organizational society or as a knowledge society is involved, but individual, highly specialized action centres, emerged from internal differentiation – functional systems, formal organizations, networks, epistemic communities – each of which is participating in the disintegration of knowledge production in regional cultures in their own special way. If these modern institutions, that are specialized in one function each, meet with diffuse structures in segmented or stratified societies, they have no choice but

<sup>19</sup> Surya P. Sinha, “Legal Polycentricity” in Hanne Petersen and Henrik Zahle (eds.), *Legal Polycentricity: Consequences of Pluralism in Law*, Aldershot: Dartmouth, 1995, pp. 31-69.

<sup>20</sup> Rudolf Stichweh, “Strukturbildung in der Weltgesellschaft – Die Eigenstrukturen der Weltgesellschaft und die Regionalkulturen der Welt” in Thomas Schwinn (ed.), *Die Vielfalt und Einheit der Moderne. Kultur- und strukturvergleichende Analysen*, Wiesbaden: VS Verlag für Sozialwissenschaften, 2006, pp. 239-257; this approach is used by Christoph Beat Graber, “Safeguarding Traditional Cultural Expressions: A Human Rights Perspective” in this volume

<sup>21</sup> *Ibid.* Pierre Legrand and Roderick Munday, *Comparative Legal Studies: Traditions and Transitions*, Cambridge: Cambridge University Press, 2003; Benjamin R. Barber, *Jihad vs. McWorld: How the Planet is Both Falling Apart and Coming Together and What This Means for Democracy*, New York: Random House, 1995.

<sup>22</sup> Stichweh, *supra* note 20.

to tear traditional knowledge generation out of its context in which it has been embedded and transform it into their own metabolisms.

“To divorce ‘science’ from ‘religion’ and to tear away the ‘cosmological’ or spiritual gloss from an allegedly ‘practical’ core will undermine many forms of traditional knowledge”.<sup>23</sup>

Monocontextual regimes utilize “integrated” traditional cultural connections for their specialized goals by detaching them from the reproductional connection on which traditional knowledge relies for its further development. In short: the multi-directional traditional institutions are undermined by the uni-directionality of modern hyperstructures.

The way in which scientific and economic processes of global society attempt to brutally cut off “holistic”, particularly religious, relations inherent in traditional knowledge forms and use them in favour of their own specialized rationalities is exemplified by the Ayahuasca liana (*Banisteriopsis caapi*).<sup>24</sup> This plant, a native of the Amazon delta, is processed by the shamans of indigenous peoples to produce the psychoactive drink “Ayahuasca”. This drink is (in Brazil as in Santo Daime) an integral part of various myths and rituals of Amazonian spirituality.<sup>25</sup> It is used to heal illnesses (in particular rheumatism, bronchial diseases and traumatization)<sup>26</sup> and in religious ceremonies to facilitate encounters with the gods and the universe. The intoxication experienced after drinking Ayahuasca is seen as a return to the origins of everything. Because the drink is also used to set up contact with the ghosts of the dead, the Ayahuasca liana is frequently referred to as *liana de los muertos* (liana of the dead).<sup>27</sup> Ignoring these integral connections, the botanic patent US 5751 P that was registered in favour of Loren S. Miller on June 17, 1986, aimed at optimising the economic possibilities for utilization of the plant. The Ayahuasca liana patented by Miller, called “da Vine”, can be distinguished from previously discovered lianas in particular by its colour and petals. Miller intended to utilize the patent specifically for medicinal purposes.<sup>28</sup> After the patent became known to a South-American non-governmental organization (NGO), a network of NGOs applied for it to be re-investigated.<sup>29</sup> As in the Neem Tree case, the application was granted and the patent annulled, as it had not met the prerequisite to qualify as novelty.<sup>30</sup> By contrast to the Neem Tree case, however, this decision was appealed by the

<sup>23</sup> Rosemary J. Coombe, “Protecting Cultural Industries to Promote Cultural Diversity: Dilemmas for International Policy-Making Posed by the Recognition of Traditional Knowledge” in Keith Maskus and Jerome Reichman (eds.), *International Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime*, Cambridge: Cambridge University Press, 2005, pp. 559-614, at p. 606.

<sup>24</sup> See also Michael F. Brown, *Who Owns Native Culture?* Cambridge, MA: Harvard University Press, 2004, at p. 107.

<sup>25</sup> Beatriz Caiuby Labate and Wladimir Sena Araujo, *O Uso Ritual da Ayahuasca*, Campinas: Mercado de Letras, 2004; Carsten Balzer, *Wege zum Heil: Die Barquinha. Eine ethnologische Studie zu Transformation und Heilung in den Ayahuasca-Ritualen einer brasilianischen Religion*, Mettingen: Brasilienkunde-Verlag, 2003; Benny Shannon, *Antipodes of the Mind: Charting the Phenomenology of the Ayahuasca Experience*, Oxford: Oxford University Press, 2002; Arturo Burga Freitas, *Ayahuasca: Mitos, leyendas y relatos de la amazonia peruana*, Lima: Tipo-Offset, 1980, at p. 55.

<sup>26</sup> See the contributions in Jacques Mabit, *Memoria del Segundo Foro Interamericano Sobre Espiritualidad Indígena*, Lima: CICEI, 2001.

<sup>27</sup> Rosa Giove, *La Liana de los Muertos al Rescate de la Vida*, Tarapoto: Takiwasi, 2002.

<sup>28</sup> According to the patent specification: “The subject plant is being investigated for its medicinal value in cancer treatment and psycho-therapy. It is useful in treating post-encephalytic Parkinsonism and angina pectoris. It also has antiseptic, bactericidal properties and has both amoebicidal and antihelmentic action. It is an attractive house plant which seasonally blooms”. See the summary, Description of US 5751P.

<sup>29</sup> Request for Reexamination of US Plant Patent No 5751, 30 March 1999.

<sup>30</sup> Leanne M. Fecteau, “The Ayahuasca Patent Revocation: Raising Questions About Current US Patent Policy” (2001) *Boston College Third World Law Journal* 21, pp. 69-105; Glenn Wiser, “US Patent and Trademark Office reinstates Ayahuasca Patent” (2001) *Center for International Environmental Law Publications* 25 June, pp. 1-14; Maggi Kohls, “Blackbeard or Albert Schweizer: Reconciling Biopiracy” (2007) *Chicago-Kent Journal of Intellectual Property* 6, pp. 108-137.

US Patent and Trademark Office (PTO). In 2001, the PTO decided in favour of the patent owner, who had been able to prove that the plant patented was sufficiently distinguishable from the previously known types.<sup>31</sup> Even though the patent protection for “da Vine” expired in 2006, after its 20-year protection period, this case manifests how little legal argumentation directed at the “novelty” of the discovery actually accomplishes.<sup>32</sup> The authorities are frequently satisfied with proof that already minimal modifications to traditionally used plants (petal colour, leaf shape) are sufficient to satisfy the requirement of novelty. Should this easily manipulable requirement be the decisive factor, when different patterns of interpretation, views of people and of the world, as well as fundamental forms of differentiation in global society stand in conflict with one another?

The requirement for the discovery to be “new” as a *quaestio juris* in cases of general incommensurability appears to be wholly insufficient. Because the conflicts on biodiversity and transnational knowledge accumulation represent the politicized form of a basic conflict between peripheral cultures and functionally differentiated world centers:<sup>33</sup>

“We cannot concentrate on “bio-diversity” and knowledge alone, as much more than that is at stake. Indeed, our whole perception of the world, our cultures, our homes, our spirituality as indigenous peoples is put into question. All of these factors are connected to each other”.<sup>34</sup>

“Bio-piracy” is therefore a suitable description for the utilization of traditional knowledge by modern society after all, to the extent that we stay aware that the embedding of cultural life is not only endangered by the economic profit principle, but also by the globalized science’s urge to expand, or of the healthcare system or the cultural industry.<sup>35</sup> “Cannibalizing epistemes” in its double meaning may be even more appropriate as a metaphor – cannibalization of knowledge, cannibalization through knowledge. It is always about the maximization of the inherent rationality of hyperstructures inside global society in its enhanced need for information – of functional systems, formal organizations, of networks and epistemic communities – tearing stocks of knowledge of regional cultures out of their vital context and inexorably drawing them into their wake. This becomes particularly evident by the way in which globalized science treats traditional knowledge.<sup>36</sup> The scientifically legitimate claim that knowledge belongs in the public domain necessarily destroys structures of communal ownership of knowledge in regional cultures. The principle of general access to knowledge violates spheres of confidentiality motivated by religion. Scientifically specialized methods of

<sup>31</sup> For details, see Hahn, *supra* note 2, at p. 275 and Wiser, *supra* note 30.

<sup>32</sup> Valerie J. Phillips, “Half-Human Creatures, Plants & Indigenous Peoples: Musings on Ramifications of Western Notions of Intellectual Property and the Newman-Rifkin Attempt to Patent a Theoretical Half-Human Creature” (2005) Santa Clara Computer and High Technology Law Journal 21, pp. 383-451, at pp. 402.

<sup>33</sup> Marcelo Neves, *Verfassung und Positivität des Rechts in der peripheren Moderne*, Berlin: Duncker and Humblot, 1992.

<sup>34</sup> “No debemos focalizar sólo en la ‘biodiversidad’ y el conocimiento, porque estamos hablando sobre mucho más que eso. En realidad estamos hablando sobre toda nuestra concepción del mundo, nuestras culturas, nuestras tierras, nuestra espiritualidad como pueblos indígenas. Todo esto está vinculado. Debemos contemplar el panorama completo” (Stella Tamang, Federación de las Nacionalidades, Nepal, en el Seminario/Consulta Asiático, cited in Grupo Internacional de Trabajo sobre Asuntos Indígenas (IWGIA), “Los Pueblos Indígenas Reivindican su Integridad Intelectual” (1995) Asuntos Indígenas, at pp. 14-15).

<sup>35</sup> For a critique of the concept of bioprospecting, see Vandana Shiva, “Bioprospecting as Sophisticated Biopiracy” (2007) Journal of Women in Culture and Society 32, pp. 307-313.

<sup>36</sup> See e.g. Articles 1(1) and 12(3) of the International Treaty on Plant Genetic Resources for Food and Agriculture. Regarding Daes’ criticism of well-meaning projects protecting traditional knowledge by a global database and thus subdue it to the principles of modern sciences, see Erica-Irene Daes, “Intellectual Property and Indigenous Peoples” (2001) American Society of International Law Proceedings 95, pp. 143-150, at p. 144.

controlled verifiability necessitate the deletion of dependence on religion, culture and habitat, which, however, are necessary for traditional knowledge to survive in the first place.

## 2. Dealing with Collisions of Social Forms of Differentiation

Given these carefully calibrated invasions by global modernity in regional cultures, it does not make much sense to deal with the culture conflict as such, using broad political and legal counter-strategies. The direction in which action has to be taken is not general resistance against modernisation in the name of traditional societies, but rather in its turn a carefully calibrated restriction of global society hyperstructures. It is necessary to start with the individual expansive institutions of modernity and demand that they regulate themselves by exerting pressure on them from the outside. Other methods will not work. Political and legal counter-reactions to epistemic cannibalization have to build up external pressure to compel the expansive sub-systems of modern society to regulate themselves. The formula is: externally enforced self-restriction of the destructive expansion into socially embedded stocks of knowledge. The hyperstructures of globalized, modern society need to be coerced into respecting the indisposability of regional cultures.<sup>37</sup>

The sociological theory of basic rights developed by Niklas Luhmann will be categorically useful in regard to issue framing. It has shown that destructive aspects of functional differentiation have been successfully counteracted by social counter-movements in other contexts, in which those counter-movements coerced expansive social systems to self-restriction. Additionally, however, the theory needs to be adjusted to apply to different types of conflict between functionally differentiated “globalness” and knowledge embedded in regional cultures. Seen from a sociological perspective, basic rights are not judicially protected rights of individuals against State power that lawyers usually see. They are the social counter-institutions that exist inside individual sub-systems and restrict their expansion from within. From the point of view of systems theory, the historic role of basic rights is not exhausted by protecting individual legal positions, but primarily consists in securing the autonomy of social spheres against tendencies to usurp them.<sup>38</sup> In reaction to the emergence of autonomous spheres of action in modern society, basic rights have historically emerged, especially in response to the matrix of autonomized politics. As soon as expansionist tendencies became evident in the political system that threatened the integrity of other autonomous areas of society, turbulent social conflict ensued. The positions attained in the course of these conflicts have been formulated as basic rights and institutionalised in politics as counterinstitutions. Such expansionist tendencies have manifested themselves historically in very different constellations; in the past, mainly in politics; today, mainly in economics, science, technology and other sectors of society. Strengthening the

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<sup>37</sup> With regard to the difficulties, subsuming traditional self-conceptions in modern categories, especially in judicial categories, see Coombe, *supra* note 23, at p. 611.

<sup>38</sup> Regarding the system theoretical approach to basic rights as institution, see Niklas Luhmann, *Grundrechte als Institution: Ein Beitrag zur politischen Soziologie*, Berlin: Duncker and Humblot, 1965. See also Gert Verschraegen, “Human Rights and Modern Society: A Sociological Analysis from the Perspective of Systems Theory” (2002) *Journal of Law and Society* 29, pp. 258-281. Regarding his elaborations in various societal contexts, see Gunther Teubner, “Die anonyme Matrix: Menschenrechtsverletzungen durch ‘private’ transnationale Akteure” (2006) *Der Staat* 45, pp. 161-187. Karl-Heinz Ladeur, “Helmut Ridders Konzeption der Meinungs- und Pressefreiheit in der Demokratie” (1999) *Kritische Justiz* 32, pp. 281-300; Christoph Graber and Gunther Teubner, “Art and Money: Constitutional Rights in the Private Sphere” (1998) *Oxford Journal of Legal Studies* 18, pp. 61-74.

autonomy of spheres of action as a countermovement against usurping tendencies constitutes the general, reactive mechanism that works in the conventional, vertical dimension of political basic rights as well as in the contemporary horizontal dimension in which basic rights are deemed to have a “third-party effect” on other expansive subsystems. If the core task of political basic rights was to protect the autonomy of spheres of action from political instrumentalization, then securing the chance for the so-called non-rational action logic to articulate against the matrix of the dominant social trends towards rationalization has become the central task of “social basic rights”.<sup>39</sup>

Bio-piracy is a good example of today’s expansionist tendencies in diverse subsystems elsewhere, namely on the problematic border between globalized modern-day society and traditional regional culture. The primary issue is actually a problem of the horizontal effect of basic rights.

“In the fields of cultural protection and biopiracy, however, the key actors are not states but private entities, such as universities, museums, and business corporations”.<sup>40</sup>

Thus, a further generalization with regard to the basic rights theory becomes necessary; this time in the other direction. If the matrix of functional differentiation not only threatens the integrity of areas of autonomy within modern society, but also the integrity of traditional knowledge in regional cultures, then it would correlate with the institutionalized logic explained here to expect that external conflicts, protests, organized resistance and social movements of modern-day hyperstructures all coerce the institutionalisation of basic rights so as to internally restrict their inherent urge to expand. And institutional imagination is required to realize the coerced self-restriction of functional systems, organizations, networks and epistemic communities in effective policies and legal norms.

Consequently, leading principles that are to be unfolded in the context of a modified theory of basic rights, need to aim for the development of hybrid legal forms within modern law that represent a peculiar compromise between regional cultural identities and modern-day legal mechanisms of protection. If the protection of basic rights is indeed to work in this way, the compromise has to find a way past modern institutions’ sensitivity to regional-cultural specialities on the one side and the operativity of modern law on the other. Simply taking sides with the cultural integrity is not enough. In order to be effective, it has to be fitted into modernity’s normative programs, particularly into their sanctions of basic rights’ violation, into their prohibitions, and provisions defining invalidity, punishments and compensation. This is indeed something very different to the subsumption under the policies of IP law criticized above.<sup>41</sup>

## 2.1. The Re-entry of “Extrinsic” into “Intrinsic”

Self-regulation under external pressure implies that modern legal institutions ought to be encouraged to reconstruct the interests of indigenous cultures within their own context in order to protect their basic rights. Does this then mean that protecting traditional knowledge has to be facilitated using modern law that refers to customary law, with the aid of collision rules? In the past, policy-makers influenced by anthropology

<sup>39</sup> For continuative analyses, see Graf-Peter Calliess, “*Reflexive Transnational Law: The Privatisation of Civil Law and the Civilisation of Private Law*” (2002) *Zeitschrift für Rechtssoziologie* 24, pp. 185-217; Peer Zumbansen, “*The Privatization of Corporate Law? Corporate Governance Codes and Commercial Self-Regulation*” (2002) *Juridicum* 3, pp. 32-40; Ralph Christensen and Andreas Fischer-Lescano, *Das Ganze des Rechts. Vom hierarchischen zum reflexiven Verständnis deutscher und europäischer Grundrechte*, Berlin: Duncker and Humblot, 2007.

<sup>40</sup> Daes, *supra* note 36, at p. 148.

<sup>41</sup> See Tade Matthias Spranger, “*Indigene Völker, ‘Biopiraterie’ und internationales Patentrecht*” (2001) *Gewerblicher Rechtsschutz und Urheberrecht* 2, pp. 89-92, at p. 91.

have actually supported this option,<sup>42</sup> which expresses the relation between global modernity and regional cultures as a question of basic rights but confronts the law with the fundamental problem of whether extrinsic values can even be reconstructed to be intrinsic.

Is this not fatally reminiscent of the questionable traditions of colonial law? British colonial powers did not simply impose their own laws, but widely incorporated the “indigenous laws” of the colonial population they administered into their official law.<sup>43</sup> They suspended existing customary law only if it turned out to be incompatible with fundamental British legal principles. The limiting factor was the “repugnancy principle”: indigenous law was held not to apply if it was “repugnant to natural justice, equity and good conscience”.<sup>44</sup> However, this was not a wise delegation of norm producing power to the indigenous population, but rather the absolute opposite. Critical anthropologists have succeeded in exposing the secret mechanisms of power behind this apparently gentle law. In arduous and detailed research they have proved that the so-called customary law as such did not exist at all. The whole thing was a scam. Pure fiction, created by the British colonial administration and their submissive anthropologists!<sup>45</sup> The trick was hidden in exactly this lie: indigenous or customary laws were not “rules that trace back to the habits, customs, and practices of the people”<sup>46</sup>, as had been assumed by traditional anthropologists, but were “constructs of the European expansion and capitalist transformations” and therefore nothing more than a “myth of the colonial era”.<sup>47</sup> British lawyers picked out those elements that suited their purpose from a multitude of very different cultural sediments, and put together a collage they labelled “existing indigenous law”, in order to be able to stamp it with the official seal of colonial power.

What does this highly selective incorporation of “indigenous culture” by a colonial administration teach us? There is no way around it. This is the hard reality we have to accept. If the goal is to limit the expansion of modern-day institutions using basic rights, there is no way around reconstructing extrinsic factors using intrinsic definitions, in order to erect internal barriers in the appropriate positions. Otherwise, external protest and resistance in the name of regional cultures will rebound off them without any effect at all. The chance lies in increasing the reconstruction in its responsiveness, in its sensitivity toward traditional cultures, which is all that counts. These are always “reconstructions”, as indigenous law does not “actually” exist. It is a sheer construct of its modern inventors. Modern law picks out the elements of factual usages and customs of the regional cultures that it needs, drawing them together into a collage that it presents as “customary law”, that is, as normative ownership positions and obligations to act, that are supposed to be created by the regional culture. Modern law’s reading of regional cultures is thus based on a single huge misunderstanding – possibly a creative misunderstanding. It is only creative, however, where it does not project new discoveries out of the blue and where it succeeds to trace and transform actually existing foreign cultural material into modern law. To vary Polanyis’ famous distinction: the legal misunderstanding is creative to the extent that it builds its explicit, modern, legal knowledge on the basis of implicit traditional social knowledge. Despite all discords, the

<sup>42</sup> Daes, *supra* note 36; Anthony Taubman, “Saving the Village: Conserving Jurisprudential Diversity in the International Protection of Traditional Knowledge” in Maskus and Reichman, *supra* note 23, pp. 521-564; Coombe, *supra* note 23.

<sup>43</sup> Sally Engle Merry, “Legal Pluralism” (1988) *Law and Society Review* 22, pp. 869-896.

<sup>44</sup> *Ibid.* at p. 870.

<sup>45</sup> Francis Snyder, *Capitalism and Legal Change: An African Transformation*, New York: Academic Press, 1981.

<sup>46</sup> Anthony Allott, *Essays in African Law*, London: Butterworths, 1960, at p. 62.

<sup>47</sup> Merry, *supra* note 43, at p. 875.

misunderstanding remains an understanding! As the Portuguese legal sociologist Boaventura de Sousa Santos, who is staging a post-modern theory of legal pluralism, says: "Law. A Map of Misreading".<sup>48</sup>

The law of global modernity systematically misunderstands certain communications within regional cultures as legal acts, capable of creating legal norms, and indeed has to misunderstand them if they are to become effective barriers to the expansion of modernity. Notably not only as legal acts through which law judges with the help of norms produced elsewhere, but as legal acts that produce norms themselves. Using this real fiction, law creates a new legal production mechanism in the institution of "indigenous law" that is capable of counteracting modern expansionist tendencies by implementing prohibitions and other legal sanctions. This is where the opportunities lie for a global system to protect basic rights for indigenous peoples to develop responsiveness. The attempt at understanding how these people see themselves appears to be the only promising chance, in order to reconstruct this understanding as restrictions in the respective language of the fragmented systems. The way in which the producers of traditional knowledge perceive themselves – "the principle of indigenous self-determination" – should be the normative center of gravitation.<sup>49</sup> It is therefore not about an abstract protection of traditional knowledge as such, but about protecting the cultural conditions in which traditional knowledge is produced.

## 2.2. Trans-individual Basic Rights

A basic rights theory established on sociological principles also ought to be able to confront one of the most difficult problems posed by securing the self-perception of indigenous cultures using basic rights, with a fair chance of success: Who is the beneficiary of the basic right? Modern law says, of course, the individual author of the knowledge. However, this individualist perception of basic rights is opposed to the communal or collective character of traditional knowledge. This conflict became dramatically evident in Australian judicial proceedings in which the relationship of indigenous groups with their land in terms of modern categories of "ownership" was formulated.<sup>50</sup> However, a basic rights theory founded on sociological principles attributes basic rights to impersonal communication processes as well as to individuals and thereby categorically approaches a perception that regional cultures have of themselves. It should not be sufficient to declare "communities, associations, cooperatives, families, lineages" (in other words: groups or collectives) to be legal entities,<sup>51</sup> as a peculiar intercultural compromise, as in this case, traditional knowledge itself and not its authors – neither as individuals nor as a collective – would be the addressees of institutionally understood basic rights. The instructions for global law should be to de-individualize basic rights more radically and recognize indigenous communication processes as basic rights'

<sup>48</sup> Boaventura de Sousa Santos, *Toward a New Legal Common Sense: Law, Globalization and Emancipation*, Evanston, IL: Northwestern University Press, 2003, at p. 417.

<sup>49</sup> Coombe, *supra* note 23, Taubman, *supra* note 42, at p. 46, Daes, *supra* note 36, at p. 146.

<sup>50</sup> Daniel J. Gervais, "Spiritual but not Intellectual? The Protection of Sacred Intangible Traditional Knowledge" (2003) *Cardozo Journal of International and Comparative Law* 11, pp. 467-495; Daniel J. Gervais, "Traditional Knowledge and Intellectual Property: A TRIPS-Compatible Approach" (2005) *Michigan State Law Review*, pp. 137-166; Taubman, *supra* note 42.

<sup>51</sup> Cottier and Panizzon, *supra* note 13, at p. 388; Will Kymlicka, *Multicultural Citizenship: A liberal theory of minority rights*, Oxford: 1996; Rodolfo Stavenhagen, "Cultural Rights: A Social Science Perspective" in Eide Asbjørn, Catarina Krause, and Allan Rosas (eds.), *Economic, Social and Cultural Rights*, The Hague: Kluwer Law International, 2001, pp. 85-109; David R. Downes, "How Intellectual Property Could be a Tool to Protect Traditional Knowledge" (2000) *Columbia Journal of Environmental Law* 25, pp. 253-282, at p. 255; Gervais, *supra* note 50, at p. 481. For a critique of this approach, see Elizabeth Burns Coleman, "The Disneyland of Cultural Rights to Intellectual Property: Anthropological and Philosophical Perspectives" in this volume.

addressees in their own right and to design suitable procedures to guarantee their legal protection.<sup>52</sup> In addition to individual and collective rights, indigenous “cultural rights” would then be recognized as a third, “hybrid” form of rights. Declaring cultural processes to be legal “entities” facilitates the identification of traditional knowledge in foreign cultures for a basic rights theory.<sup>53</sup> This would be law *sui generis*, worthy of the name.

### 3. Traditional Knowledge as an Institutional Addressee of Basic Rights

The trans-individual dimension of traditional knowledge protection does not aim at helping either individuals or collectives to assert their intellectual property rights, it rather intends to legally incite a self-regulation by imposing targeted prohibitions, restrictions on patents and similar access restrictions. In other words: the devil, transnational cannibalization of common knowledge<sup>54</sup>, cannot be driven out by the Beelzebub of national-individual patent rights (see section 1 above), and cannot be combated by simply transforming the conflict into an issue of unified global patent law (see section 2 above). In fact, rather complex protective measures are required, which in turn make it necessary to establish procedural devices in the context of transnational traditional knowledge law (as will be shown below).

#### 3.1. Coordinating National Patent Law?

Neem Tree, Turmeric and Ayahuasca – these are three examples of traditional knowledge patenting, that use litigation in national patent law. The question of whether the discovery was actually new was central to the conflicts. A whole series of distinctions use this requirement as a starting point: written/oral proof,<sup>55</sup> criteria for determining the “inventive step”, in connection with which people “with ordinary skills” can be referred to (according to a suggestion of the Asian group)<sup>56</sup> or a closer definition of public policy that could be opposed to a national patent.<sup>57</sup> At last – and again it is about the achievement of a solution in regard to the novelty criteria in the patent law – experiments focusing on the installation of national databases, in which traditional knowledge is mapped. Thus, protection against private appropriations by national patents as evidence against the novelty of discoveries, the protection of “morality” and a sensible dissemination and the utilization of traditional knowledge by the global public shall be rendered possible.<sup>58</sup>

<sup>52</sup> The Canadian constitutional law – by its collective and institutional understanding – may make advances to this concept of basic rights. Article 35(1) of the Canadian Constitutional Act of 1982 reads as follows: “The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed”.

<sup>53</sup> Christoph Beat Graber, “Safeguarding Traditional Cultural Expressions: A Human Rights Perspective” in this volume; Christoph Beat Graber and Martin Girsberger, “Traditional Knowledge at the International Level: Current Approaches and Proposals for a Bigger Picture That Includes Cultural Diversity” in Jörg Schmid, Festgabe für Paul Richli zum 60. Geburtstag, Zurich: Schulthess, 2006, pp. 243-282.

<sup>54</sup> Sebastian Bödeker, Oliver Moldenhauer and Benedikt Rubbel, *Wissensallmende: Gegen die Privatisierung des Wissens der Welt durch “geistige Eigentumsrechte”*, Hamburg: VSA-Verlag, 2004.

<sup>55</sup> Siddhartha Prakash, *Trade and Development Case Studies, Country Studies: India, Local Species – Turmeric, Neem and Basmati*, Geneva: World Trade Organization, 1998, at p. 83.

<sup>56</sup> WIPO, Technical Proposals on Databases and Registries of Traditional Knowledge and Biological/Genetic Resources, Document submitted by the Asian Group, WIPO/GRTKF/IC/4/14, 6 December 2006, at Annex.

<sup>57</sup> Hahn, *supra* note 2, at p. 297.

<sup>58</sup> The examples of India and Peru are classical, see BUKO – Kampagne gegen Biopiraterie, *Grüne Beute: Biopiraterie und Widerstand*, Frankfurt: Trotzdem-Verlag, 2005, at p. 139. Still forced up by the World Bank project of a global database for traditional knowledge, see Daes, *supra* note 36, at p. 144. The Google-project itself is confronted with criticism of biopiracy: “Google was presented with an award as part of the Coalition Against Biopiracy’s Captain Hook Awards for Biopiracy in Curitiba, Brazil, this week. The organizers allege that Google’s collaboration with genomic

The Ayahuasca Liana patent case shows particularly well how short-lived euphoria can be if conflicts are carried out in the setting of national patent law: the campaign against the patent was successful at first, but ultimately unsuitable because it supported the trend to treat the problem by exclusively using the logic of patent law. This enabled the manipulation of the novelty requirement and was totally insensitive towards the indigenous culture. The problem behind relying on national patent law is revealed by the Ayahuasca Liana case, where “da Vine” was only patentable because of its slightly modified petal and leaf shape. But also approaches relying on the restrictions inherent in national patent law are not sufficiently radical either. The NGOs arguments in the Ayahuasca case focussed on the concepts of public policy and common decency.<sup>59</sup> At first, such arguments appear to be suitable for reconstructing indigenous logic in the abstract parameters of western doctrine. Indeed, some precedents in western law can be described as “culturally rooted relativism that may apply to morality and ordre public exceptions to IP rights”.<sup>60</sup> According to this, patent offices would need to gain certain knowledge of foreign cultures, much in the same way as family courts do. Nevertheless, this route does not lead to the desired level of protection. As understandable it is that current conflicts on traditional knowledge patenting have to revert to the doctrines of national patenting systems, as obvious it is that this protection strategy can only be a temporary solution. The legal consequence of generally excluding traditional knowledge from patenting, is that traditional knowledge is assigned to the public domain and is made generally accessible.<sup>61</sup> However, this solution thus reveals a complementary problem:<sup>62</sup> Not only the patent registration, but also the non-patentability by reason of it belonging to the public domain can also harm the integrity of traditional knowledge for the epistemic trap of patent-legal thinking lies in the false dichotomy of IP or public domain. Both can destroy the productivity of traditional knowledge, whether through the market (IP), or through the public domain. In order to avoid a pyrrhic victory, basic protection from usurpation by the public domain appears to be necessary for the cultural context that produces traditional knowledge.

### 3.2. Restriction through Globally Defining Indigenous IP Rights?

Suggestions to secure the protection of traditional knowledge in the communal domain area by using harmonized minimum standards and general principles of law are more radical. Concepts which aim to “develop new IP tools to protect traditional knowledge not protected by existing traditional knowledge tools”<sup>63</sup> go the farthest in trying to develop characteristics that do justice to inherent indigenous logic by using traditional knowledge-analytical epistemology. This results in wide-ranging gradations. While sacral elements should generally be inaccessible, concerning other forms of knowledge a “quasi-public domain” is imaginable.

By the efforts of the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC) the attempts to solve the question of traditional knowledge in the context of unified global patent law have

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research institute J. Craig Venter – to create a searchable online database of all the genes on the planet – is a clear example of biopiracy”. See Andrew Donoghue, “Google Accused of Biopiracy” ZDNet News, 30 March 2006.

<sup>59</sup> Hahn, *supra* note 2, at p. 297.

<sup>60</sup> Taubman, *supra* note 42, at p. 541.

<sup>61</sup> For details, see William van Caenegem, “The Public Domain: *Scientia Nullius*” (2002) European Intellectual Property Journal 24, pp. 324-330.

<sup>62</sup> Taubman, *supra* note 42, at p. 544.

<sup>63</sup> WIPO, Intellectual Property Needs and Expectations of Traditional Knowledge Holders, WIPO Report on Fact-finding Missions on Intellectual Property and Traditional Knowledge (1998-1999), Geneva: WIPO, at p. 226.

become considerably dynamic. For a number of years now, the WIPO has been working on a project to substitute current discussions on the liberalization of national patent law systems, which are tailored to WTO law, in particular to the Trade-related Aspects of Intellectual Property Rights (TRIPS) Agreement, by substantive global patent law. In the core process, a complex of three contracts will be negotiated: (i) the Patent Law Treaty (PLT),<sup>64</sup> adopted in Geneva in June 2000. The PLT harmonizes national procedural provisions, in particular the formal administrative procedures that lead to a patent; (ii) The Patent Cooperation Treaty (PCT), adopted in Washington in 1970. The PCT primarily introduces a centralized patent listing system; (iii) a Draft Substantive Patent Law Treaty (SPLT), which is supposed to unify worldwide patent law and has been discussed in its initial draft version by the WIPO Standing Committee on the Law of Patents (SCP) in May 2002.<sup>65</sup>

The work of the IGC has not been concluded so far. The differences in opinion between developing world countries on the one hand and the USA, Canada and Australia on the other are too great.<sup>66</sup> Negotiations up to now have merely resulted in a preliminary draft of provisions,<sup>67</sup> which is, however, hardly more than an agonized coercion of rationalities into co-existence. The main problem is that substantial legal unification of traditional knowledge and traditional knowledge-related provisions do not adequately address indigenous cultural diversity, being either too abstract or too specific to one particular culture, and therefore not suitable for the application in other cultures:

“Any attempt to devise uniform guidelines for the recognition and protection of indigenous peoples’ knowledge runs the risk of collapsing this rich jurisprudential diversity into a single ‘model’ that will not fit the values, conceptions or laws of any indigenous society”.<sup>68</sup>

Although the IGC recognizes this problem, it has not stopped it from applying patterns of differentiation to peripheral societies, patterns, which have not even been uniformly accepted by the centers of global society. The WIPO draft generally distinguishes between TCE and traditional knowledge, thereby casually brushing over traditional holistic patterns:<sup>69</sup>

“There are two distinct sets of draft objectives and principles, the first dealing with traditional cultural expressions (“expressions of folklore”) and the second with traditional knowledge as such. This responds to the choice made in many cases to address distinctly the specific policy and legal questions raised by these two areas. The draft materials are prepared, though, in the understanding that for many communities these are closely related, even integral, aspects of respect for and protection of their cultural and intellectual heritage”.<sup>70</sup>

<sup>64</sup> WIPO Doc. PT/DC/47.

<sup>65</sup> For an instructive synopsis in regard to the complex of WIPO patent law, see Carlos Correa and Sisule Musungu, “The WIPO Patent Agenda: The Risk for Developing Countries”, South Center Working Papers 12/2002.

<sup>66</sup> See e.g. WIPO, Decisions of the Tenth Session of the IGC, 30 November-8 December 2006, WIPO/GRTKF/IC/10, 8 December 2006.

<sup>67</sup> WIPO, Revised Draft Provisions for the Protection of Traditional Cultural Expressions/Expressions of Folklore: Policy Objectives and Core Principles, WIPO/GRTKF/IC/9/4, 9 January 2006 and WIPO, Revised Draft Provisions for the Protection of Traditional Knowledge: Policy Objectives and Core Principles, WIPO/GRTKF/IC/9/5, 9 January 2006.

<sup>68</sup> Four Directions Council, *Forests, Indigenous Peoples and Biodiversity*, Submission to the Secretariat for the Convention on Biological Diversity, Lethbridge, Canada: Four Directions Council, 2006.

<sup>69</sup> See in this sense, Joint Statement of the Indigenous Peoples Council on Biocolonialism (IPCB), Call of the Earth/Llamado de la Tierra (COE), and International Indian Treaty Council (IITC), WIPO/GRTKF/IC/10, 4 December 2006, at para. 2: “We find it necessary to state that we find the separation of TCEs and traditional knowledge rather artificial and contrary to the holistic nature of Indigenous peoples’ cultural heritage”.

<sup>70</sup> ECOSOC, Information Received from the United Nations System: World Intellectual Property Organization, E/C.19/2006/6/Add. 13, 21 March 2006, at para. 10.

In addition, the form in which local rights are generated and the respective decisional processes are abstracted from local customs into substantive universal law, and ultimately paternalized by moral decisions of the center (in contrast to those of the periphery).

### 3.3. Regulation through Colliding Norms

Instead of a substantive global approach, it appears to be more appropriate to link up with and recognize existing practices, and acknowledge in the context of a conflict-of-law approach, “that traditional knowledge must be acquired and used in conformity with the customary laws of the peoples concerned”.<sup>71</sup>

But what are the “customary rights of the affected peoples”? Alternatively, how can modern law reformulate the holistic framework requirements of traditional knowledge internally, without reproducing colonialist patterns?

An abundance of international legal texts and global regimes is committed to answering these questions. Experts from the respective areas apply the logic of each field and, in doing so, enhance the contradictions in global society in a specific, functionally fragmented manner. The following organizations currently deal with traditional knowledge: the United Nations Economic Social and Economic Committee (ECOSCO), United Nations Convention to Combat Desertification (UNCCD), the United Nations Conference on Environment and Development (UNCED), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), the United Nations Development Fund for Women (UNIFEM), UN Working Group on Indigenous Populations and Indigenous Peoples (UNWIGIP), the World Health Organization (WHO), the International Labour Organization (ILO), FAO, WTO, the World Bank. Many international agreements explicitly address the issue of traditional knowledge: the Convention on Indigenous Peoples Living in Tribes in Independent States,<sup>72</sup> the Draft United Nations Declaration on the Rights of Indigenous Peoples,<sup>73</sup> the Inter-American Draft Declaration on the Rights of Indigenous Peoples,<sup>74</sup> the Convention on Biological Diversity (CBD),<sup>75</sup> the United Nations Convention to Combat Desertification in Countries Strongly Affected by Drought and/or Desertification, particularly in Africa;<sup>76</sup> the International Agreement (initiated in the context of the FAO) on Plant Genetic Resources for Nutritional and Agricultural Purposes,<sup>77</sup> and the UNESCO Intangible Heritage Convention.<sup>78</sup> The Convention on the Protection of New Plant Types (UPOV)<sup>79</sup> in relation to seeds is also worth mentioning. Countless international organizations are committed to observing the rights of indigenous peoples, such as the European Bank for

<sup>71</sup> Four Directions Council, *supra* note 68.

<sup>72</sup> ILO-Convention (No 169), adopted in Geneva on 7 June 1989 by the General Conference of the International Labour Organisation at its 76<sup>th</sup> Session, entered into force on 5 September 1991. See Kerrin Schillhorn, *Kulturelle Rechte indigener Völker und Umweltvölkerrecht – Verhältnis und Vereinbarkeit*, Berlin: Duncker and Humblot, 2000, at p. 50.

<sup>73</sup> United Nations Commissioner for Human Rights, Draft United Nations Declaration on the Rights of Indigenous Peoples.

<sup>74</sup> Proposed American Declaration on the Rights of Indigenous Peoples (approved by the Inter-American Commission on Human Rights on 26 February 1997, at its 1333<sup>rd</sup> session, 95<sup>th</sup> Regular Session), OEA/Ser/L/V/II.95 Doc.6 (1997).

<sup>75</sup> Adopted by the United Nations Conference on Environment and Development (UNCED), concluded in Rio de Janeiro on 5 June 1992.

<sup>76</sup> Concluded in Paris on 17 June 1994.

<sup>77</sup> Concluded in Rome on 3 November 2001.

<sup>78</sup> See also the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions, Paris 20 October 2005, entered into force on 18 March 2007.

<sup>79</sup> International Convention for the Protection of New Varieties of Plants (UPOV-Convention), 2 December 1961.

Reconstruction and Development, the Asian Development Bank, and the African Development Bank. The UNDP and the World Bank have set up programs in favour of indigenous peoples. UNCTAD has contributed to systematizing the legal material in this field, in their comprehensive report "Protecting and Promoting Traditional Knowledge: Systems, National Experiences and International Dimensions".<sup>80</sup>

Article 27 of the TRIPS Agreement, part of the WTO legal framework, contains a further obligation for national States to protect plant-related traditional knowledge. Article 27.3 TRIPS requires members to protect plant species using either patents or a working system *sui generis*, or a combination of both. In compliance with this obligation, the European Union, for instance, has issued the Biopatent Directive, which makes it possible to patent living organisms.<sup>81</sup> The fact that Article 27 of the TRIPS Agreement has a strained relationship with the Biodiversity Convention has been widely discussed.<sup>82</sup> In response to these discussions, the WTO Council of Ministers, the responsible council under the TRIPS Agreement, according to paragraph 19 of the Doha Ministerial Declaration,<sup>83</sup> has given up trying to formulate "the relationship between the TRIPS Agreement and the Convention on Biological Diversity, the protection of traditional knowledge and folklore, and other relevant new developments raised by members pursuant to Article 71.1" in more precise terms. "In undertaking this work, the TRIPS Council shall be guided by the objectives and principles set out in Articles 7 and 8 of the TRIPS Agreement and shall take fully into account the development dimension". In the meantime, all further work by the WTO within the Doha Round has shown little (if no) progress in this connection.

Further suggestions for making systems compatible have been developed in other functional connections as well. In 2002, the conference of CBD member states accepted the "Bonn Guidelines on Access to Genetic Resources and Benefit-sharing", which contain guidelines on the protection of traditional knowledge. The Bonn Guidelines were designed to spell out CBD Article 8(j), according to which member states are obliged to "[subject to their national legislation] respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations". Finally, we refer to Articles 19 and 27 of the ICCPR, as part of the United Nations Human Rights Framework, in particular to the general comment on Article 15 CESCR:

"With regard to the right to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of indigenous peoples, States parties should adopt measures to ensure the effective protection of the interests of indigenous peoples relating to their productions, which are often expressions of their cultural heritage and traditional knowledge. In adopting measures to protect scientific, literary and artistic productions of indigenous peoples, States parties should take into account their preferences. Such protection might include the adoption of measures to recognize, register and protect the individual or collective authorship of

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<sup>80</sup> UNCTAD, *Protecting and Promoting Traditional Knowledge: Systems, National Experiences and International Dimensions*, UNCTAD/DITC/TED/10, November 2004.

<sup>81</sup> Directive 98/44/EC of the European Parliament and of the Council of 6 July 1998 about the Legal Protection of Biotechnological Patents, OJ L 213, 30 July 1998, at p. 13.

<sup>82</sup> See Christoph Beat Graber and Martin Girsberger, *supra* note 53.

<sup>83</sup> WTO, Doha Ministerial Declaration adopted on 14 November 2001, WT/MIN(01)/DEC/1, 20 November 2001, at para. 17.

indigenous peoples under national intellectual property rights regimes and should prevent the unauthorized use of scientific, literary and artistic productions of indigenous peoples by third parties. In implementing these protection measures, States parties should respect the principle of free, prior and informed consent of the indigenous authors concerned and the oral or other customary forms of transmission of scientific, literary or artistic production; where appropriate, they should provide for the collective administration by indigenous peoples of the benefits derived from their productions".<sup>84</sup>

This corresponds with the rights expressed in Articles 8(j) and 15(7) of the CBD, according to which traditional knowledge carriers and benefit sharing are central features – requirements conflicting in a certain degree with the norms in the WTO context.

A glance that was arrested upon the identification of the colliding regimes did not go deep enough for traditional knowledge.<sup>85</sup> The virulence of the collision is underestimated if it is considered to be incompatible in fully separated contexts, as in this particular case collisions do not take place merely between the subjective rights of intellectual property owners, or between rights of various national States, or even between norms that have been formulated in different regime contexts. In the case of traditional knowledge, fundamental social principles of organization collide, whose treatment as regime collisions already alienates the actual conflict.

### 3.3.1. *Limitation by the Fictitious Law of Collision*

These considerations suggest the development of a conflict of laws between specialized modern law and holistic institutions in traditional society. At this point, the usual suggestions for a law of collision demand recourse to "the acquisitions and use of indigenous people's heritage according to the customary laws of the indigenous people concerned".<sup>86</sup> As we said above, direct recourse to customary law is, however, impossible, because making reference to local customary law already means looking at holistically organized forms of society through the lens of functional differentiation and functional coding. The law of collision in this sense presupposes a modern counterpart for autonomous law. As this does not exist, it is necessary to follow the approach described above as "productive misunderstanding": modern, transnational institutions will each have to develop their own norms that refer to normative constructs of traditional societies and develop substantive norms of self-restraint. In doing so, it will not be possible to attain a substantive definition for traditional knowledge (either policy or structure). Instead, effective protection may be attained through reference to non-modern holistic knowledge practice that is reconstructed by modern law as "indigenous law" with an *ordre public* reservation.

If we follow this institutionalist point of view, it immediately becomes apparent that it is not enough to protect traditional knowledge as a mere store of knowledge, such as some authors suggest for digital evaluation, documentation and securing of traditional knowledge.<sup>87</sup> Of course, this may serve better the use by modern economy and science. It may also help to prevent illegitimate patenting practices, as the qualification of a

<sup>84</sup> Committee on Economic, Social and Cultural Rights, General Comment No. 17: The Right of Everyone to Benefit from the Protection of the Moral and Material Interests Resulting from Any Scientific, Literary or Artistic Production of Which He Is the Author (Article 15(1)(c)), UN Doc. E/C.12/2005, 21 November 2005; on TCE, see in particular para. 32.

<sup>85</sup> For details, see International Court of Environmental Arbitration and Conciliation, Consultative Opinion on the Compatibility Between Certain Provisions of the CBD and the TRIPS as to the Protection of Traditional Knowledge (EAS – OC 8/2003), Rep. Michael Bothe.

<sup>86</sup> WIPO, Composite Study on the Protection of Traditional Knowledge, WIPO/GTRKF/IC/5/8, 28 April 2003, at para. 105.

<sup>87</sup> Legitimate criticism by Daes, *supra* note 36.

discovery as being a novelty becomes impossible due to its prior digitalization. However, it fails to protect and to facilitate the necessary conditions for traditional knowledge production, because the development of such knowledge depends mainly on the context in which it was produced. In other words: the framework requirements of the respective local culture have to be maintained. At this point, the conflict between the highly specialized modern-day definition of knowledge and holistic traditional knowledge re-erupts. Can modern law fulfill the expectations raised by this conflict? “Globalize diversity holistically” – this is Taubman’s paradox response.<sup>88</sup> It is not only the result, but the entire process of knowledge production, which has to be included in the basic rights’ protection. If one wants to protect traditional knowledge in a certain culture, then basic rights’ protection must include both the knowledge itself and its embedding within culture.<sup>89</sup>

### 3.3.2. Proceduralized Protection of Traditional Knowledge

In other words, modern-day basic rights need to be capable of guaranteeing the conditions of possibility for an autonomous traditional knowledge epistemology. At the same time, it is clear that basic rights should not merely aim at preserving existing culture reservations in their existing form. Solely introducing a species’ protection policy is insufficient, as it targets structural rather than procedural autonomy. The protection of basic rights needs to create a framework in which indigenous cultures can develop independently and in conflict with modernity, either by restricting specific invasions through modernity or, in compensation, stipulating a resource transfer to indigenous peoples. There are a number of starting points with regard to the realization of this aim, to which the law of collision protecting traditional knowledge can connect and provides first indications for further advancement of global basic law protection.

This applies for the attribution of communal-collective rights. Who is the beneficiary of such procedural rights? As discourse rights, these rights serve trans-subjective goals. In identifying the range of beneficiaries using the “traditional knowledge discourse” criterion, it is not an entity in an ontological sense, but the contingent development of processes of subjectification: to what process should the legal enforcement of discourse rights be entrusted? Generally speaking, a personified collective is unnecessary, instead, a whole series of techniques can be used to attribute rights to entities, with the help of which rights of traditional knowledge can be implemented. This is important not only for the rights themselves, but also for the procedural standing. For instance, the Australian Court stated in *Onus v. Alcoa of Australia Ltd.* That,

“the members of the [Gournditichjmarra] community are the guardians of the relics according to their laws and customs and they use the relics. I agree [...] that in these circumstances the applicants have a special interest in the preservation of these relics, sufficient to support *locus standi*”.<sup>90</sup>

A broad definition of the term “community” that reflects the contingencies in the formation of epistemic groups is required,<sup>91</sup> but simultaneously enables the protection of the discourse rights and the effective determination of the circle of addressees. As an example, the Brazilian law describes communities as being:

<sup>88</sup> Taubman, *supra* note 42, at p. 525.

<sup>89</sup> Taubman, *supra* note 42, at p. 540.

<sup>90</sup> *Onus v. Alcoa of Australia Ltd.*, C.L.R. 27 (1981), at p. 149

<sup>91</sup> Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, London: Verso, 1991.

“human group, including descendants of Quilombo communities, differentiated by its cultural conditions, which is, traditionally, organized along successive generations and with its own customs, and preserves its social and economic institutions”.<sup>92</sup>

Enabling these groups to participate in the decision to allocate traditional knowledge is the central challenge in making legal norms compatible. To the extent that authors criticize this challenge as a desideratum of bureaucratization,<sup>93</sup> they tend to ignore that the logic of *altera pars* requires reciprocity. Doing without it ultimately means to accept the mono-directional usurpation of global society, and to give in to global de-regulation instead of striving for constitutionalization. It also means misjudging the various legal obligations, which particularly urge parties to observe the concept of “prior informed consent” and “benefit sharing”.<sup>94</sup> Developing both mechanisms further will be the key to effective traditional knowledge protection:

“Prior informed consent” (PIC)<sup>95</sup> ensures that communal groups participate in the decision-making processes that affect them,<sup>96</sup> and in relation to which they should be given the right to deny access to their resources and knowledge, if necessary.<sup>97</sup> Article 5 of the African Model Act endeavours to put this concept into words:

“(1) Any access to biological resources, knowledge and or technologies of local communities shall be subject to the written prior informed consent of: (i) the National Competent Authority; as well as that of (ii) the concerned local communities, ensuring that women are also involved in decision making. (2) Any access carried out without the prior informed consent of the State and the concerned local community or communities shall be deemed to be invalid and shall be subject to the penalties provided in this legislation or any other legislation that deals with access to biological resources. (3) The National Competent Authority shall consult with the local community or communities in order to ascertain that its/their consent is sought and granted. Any access granted without consultation with the concerned community or communities shall be deemed to be invalid and in violation of the principle and requirement for prior informed consent as required under this Article”.<sup>98</sup>

The various legal consequences that are available in response to a usage of traditional knowledge without valid agreement are addressed here. As such, they are hardly noticeable in the proposed European Commission’s Directive of April 26, 2006 on

<sup>92</sup> Provisional Act No 2, 186-16, 23 August 2001, at Article 7(2).

<sup>93</sup> Hanns Ullrich, “*Traditional Knowledge, Biodiversity, Benefit-Sharing and the Patent System: Romantics v. Economics?*” (2005) EUI Working Paper 2005/07.

<sup>94</sup> See also the Mataatua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples, June 1993. Paragraph 2.5 thereof reads: “Develop in full co-operation with indigenous peoples an additional cultural and intellectual property rights regime incorporating the following: collective (as well as individual) ownership and origin, retroactive coverage of historical as well as contemporary works, protection against debasement of culturally significant items, cooperative rather than competitive framework, first beneficiaries to be the direct descendants of the traditional guardians of that knowledge, multi-generational coverage span”.

<sup>95</sup> See Marc-Antoine Camp, “*Wer darf das Lied singen? Musikethnologische Anmerkungen zum rechtlichen Status traditioneller Musikkulturen*” (2005) *sic!* – Zeitschrift für Immaterialgüter-, Informations- und Wettbewerbsrecht 9, pp. 307-315.

<sup>96</sup> Commission on Human Rights, Sub-Commission on the Promotion and Protection of Human Rights, Working Group on Indigenous Populations, 22<sup>nd</sup> session, 19-23 July 2004, at p. 5: “Free, prior and informed consent recognizes indigenous peoples’ inherent and prior rights to their lands and resources and respects their legitimate authority to require that third parties enter into an equal and respectful relationship with them, based on the principle of informed consent”.

<sup>97</sup> See Ulrich Brand and Christoph Görg, *Postfordistische Naturverhältnisse. Konflikte um genetische Ressourcen und die Internationalisierung des Staates*, Münster: Westfälisches Dampfboot, 2003, at p. 75.

<sup>98</sup> African Model Legislation for the Protection of the Rights of Local Communities, Framers and Breeders, and for the Regulation of Access to Biological resources, OAU Model Law, Algeria, 2000, available at [http://www.wipo.int/tk/en/laws/pdf/oau\\_modellaw.pdf](http://www.wipo.int/tk/en/laws/pdf/oau_modellaw.pdf).

Criminal Measures to Enforce Rights of Intellectual Property, aimed at tightening the Commission's Directive 2004/48/EC,<sup>99</sup> which restricted itself to product piracy. Questions of bio-piracy remain unaddressed. The reference to the creation of consensus according to the customs of the respective epistemic community is particularly relevant with regard to the question of PIC and secondary liabilities in cases of omission, and the resulting penalization or restitutionary obligations.<sup>100</sup> Work on certifying origins in order to secure prior consent and ensure that usage is allocated effectively is decisive in the context of the CBD.<sup>101</sup> The obligation to disclose the origin of knowledge helps not only to guarantee "that only really new discoveries are patented",<sup>102</sup> but also opens up a contact point for communication on controlling established rights of procedure.

To the extent that norms regulating profit distribution to indigenous groups are designed to facilitate usage of traditional knowledge for economic purposes by the usufructuary, contractual agreements regulating usage seem to be least suitable. By integrating the culture into western exchange-economies and destroying cultural-religious content contracts would do the opposite of protecting cultural autonomy. From an intercultural point of view, a solution using funds may therefore be more suitable and less difficult to implement than other regulatory norms, and therefore possibly most promising. The fund solution offers the option of diffuse monetary compensation, which could compensate for the lack of direction in these highly specialized intrusions. UNCED Agenda 21<sup>103</sup> of the World Summit for Sustainable Development in South Africa in September 2002 has offered recently strong support for this regulatory technique. The summit took place a few months after the Bonn Guidelines had been passed. Criticism of the Guidelines was initially directed at facilitating better access to traditional knowledge and placing less emphasis on PIC issues or benefit sharing, but has led to the call to "negotiate within the framework of the Convention on Biological Diversity, bearing in mind the Bonn Guidelines, an international regime to promote and safeguard the fair and equitable sharing of benefits arising out of the utilization of genetic resources" at the Johannesburg World Summit.<sup>104</sup> In response to this demand, the Eighth Conference of the Parties to the CBD of March 2006 in Curitiba has preliminarily systematized these efforts in its Decision VIII/4.<sup>105</sup> It seems to be a promising start for making the contradictory logic described above compatible, to the extent that it culminates in the establishment of an international regime under the umbrella of the CBD that will introduce the concepts of prior informed consent and benefit sharing as effective regulations.

<sup>99</sup> COM(2006) 168 final, 26 April 2006.

<sup>100</sup> Hence liability regimes regularly refer at the same time to customary law. See Tracy Lewis and Joseph H. Reichman, Using Liability Rules to Stimulate Local Innovation in Developing Countries: A Law and Economics Primer, unpublished paper, Columbia University Earth Institute, Center on Globalization and Sustainable Development, 15 September 2003; Carlos Correa, *Protection and Promotion of Traditional Medicine: Implications for Public Health in Development Countries*, Geneva: South Centre, 2002. In the Philippines, the Philippines Indigenous Peoples' Rights Act, Republic Act 8371, § 32 protects, for instance, the rights of indigenous peoples "to the restitution of cultural, intellectual religious, and spiritual property taken without their free and prior informed consent or in violation of their laws, traditions and customs".

<sup>101</sup> See lately CBD, Report of the Meeting of the Group of Technical Experts on an Internationally Recognized Certificate of Origin/Source/Legal Provenance, UNEP/CBD/WG-ABS/5/2, 20 February 2007.

<sup>102</sup> Gregor Kaiser, "Biopiraterie: Der neue Kolonialismus" (2006) *Blätter für deutsche und internationale Politik* 51, pp. 1172-1176, at p. 1175.

<sup>103</sup> Rio de Janeiro, June 1992, available at <http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm>.

<sup>104</sup> UN, Report of the World Summit on Sustainable Development, A/CONF.199/20, 2002, at section 44(o).

<sup>105</sup> CBD, Draft Decisions of the Eighth Meeting of the Conference of the Parties to the Convention of Biological Diversity, UNEP/CBD/COP/8/1/Add.2, 1 March 2006, at pp. 48-59.