# Resolved: A just government ought to abolish intellectual property protections for genetic resources.

**Author: Kyle Cheesewright**

Topic Analysis/Research Guide 3

Further Reading/Resources 6

Definitions and Overveiw 7

Affirmative 11

AC 12

Background 17

Dehumanization 18

Colonialism 20

Patents on Food 23

Difficult to Reverse 29

Open Source: Dual Use Strategy 31

Negative 33

IPR protections can be Transformed 36

Autonomy Extensions 37

## Topic Analysis/Research Guide

This resolution calls on debaters to get involved in discussions about intellectual property and genetic resources. Interestingly enough, many of the most mainstream aspects of the intellectual property discussion relate to the patenting of Pharmaceutical drugs, and are thus, largely, outside the preview of this resolution. This resolution is asking an even more foundational question: How should society deal with the ownership of the basic building blocks of life itself.

Before we get too far into this discussion, it would probably useful to explore what “Intellectual Property Protections” are. IPP is a way for people to protect non-tangible goods. A book that has been written? IP. That new prescription drug? IP. That arrangement of sounds in a melodic manner? IP. The most common methods of protection of Intellectual Property are patents, trademarks, copyrights, and trade secrets. What this resolution focuses on, primarily, will be patents.

One of the major areas in which this resolution does mirror some major strands in discussion is around the question of Genetically Modified foods. GMO foods are often foods that have patents placed on them, because of the genetic resources they contain. A variety of techniques are deployed in order to protect the patents that are held by different organizations, including, a while back, the proposition that “terminator” genes be placed in GM food that would stop the seeds from being able to reproduce from year to year. What this means, practically, is that the resolution is asking about if corporations and other institutions should be able to claim ownership over this type of life.

An additional way that IPP are relevant in this topic is in the patenting, or protecting, of certain parts of the human genome. For several decades, the Human Genome Project has been cataloging and in many cases, allowing people to patents certain parts of the human genome, or DNA. Another, more controversial project, worked to collect and preserve samples of DNA from populations thought to be at high risk of disappearing. These projects often sought to collect genetic material from indigenous people, to use for a variety of different purposes.

This resolution certainly opens up some pretty interesting and provocative doors for debaters to explore. For example, *The Immortal Life of Henrietta Lacks* is a book that chronicles the production and use of “HeLa” cells, the first human cells that were able to reproduce outside of the human body. These cells were harvested from an African-American women, and it took doctors decades to even tell her family how her cells had been used. This resolution could be interestingly explored with reference to Henrietta Lacks, particularly in conjunction with explorations of the treatment of race in the US.

Furthermore, much like the Genome project that I mentioned above, studies and copyrighting of Indigenous folks DNA has created quite a serious controversies at several points in the past. Tribes that have been found to be resistant to certain types of diseases—like leukemia—have often found samples of their blood used in ways that they never gave permission for, and subsequently had their DNA patented.

All of this is done because of the general drive in US and Western society for innovation and profit. Under a capitalist system, private property and profit have been established as the basic units against which can produce most systematic inquiry. Particularly around issues of GM foods, or the production of drugs, a traditional defense of Intellectual Property rights would probably defend the value of IP to development.

Currently, much of the conversations about Intellectual Property and Genetic Resources are being driven in conjunction with questions about “Traditional Knowledge” through a UN committee dedicated to intellectual property, the “World Intellectual Property Organization” or WIPO. Here is a quick card that explains some of these connections.

#### A description of some of the connections between Genetic Resources (GRs), Associated Traditional Knowledge (ATK), and Intellectual Property (IP).

Vivas-Eugui 2012 [David (Innovation Policy Advisory for the International Centre for Trade and Sustainable Development {ICTSD}; Geneva, Switzerland) “Bridging the Gap on Intellectual Property and Genetic Resources in WIPO’s Intergovernmental Committee (IGC)” ICTSD Issue Paper No. 34 (2012): http://www.ictsd.org/downloads/2012/02/bridging-the-gap-on-intellectual-property-and-genetic-resources-in-wipos-intergovernmental-committee-igc.pdf]

The debate on GRs, ATK and IP has emerged as a consequence of both an increased recognition of their economic value and a series of judicial decisions and laws that enabled the patenting and protection of life forms, allowing the capture and addition of value to those resources and knowledge through a series of technologies. The potential economic value of GRs has been central to the IP-related debate and there are several estimates regarding the economic value of their utilization. In general terms, biodiversity provides a great range of ecosystem services, such as local water, food provision, materials for sustaining livelihoods and climate regulation. For example, it has been estimated that conserving forests avoids greenhouse gas emissions worth about USD 3.7 trillion.5 Early estimates indicated that the value of products derived from GRs worldwide was USD 500-800 billion.6 During the period 2002-03, about four-fifths of new chemicals introduced globally were derived from natural products.7 More recent estimates indicate that three-quarters of the world’s population depend on natural traditional medicines and that approximately half of synthetic drugs have a natural origin, including 10 of the 25 highest selling drugs in the United States (US).8 So it is clear that GRs linked to ATK can in many cases reduce R&D costs and prove to be essential inputs in product development. There is also a great range of both economic and noneconomic values attached to biodiversity, such as cultural values embodied in TK and practices that allow many indigenous and local communities to survive.

In terms of what you will find in this file:

The Affirmative takes the stance that copyrighting the basic building blocks of life is bad, and connected with biopolitical control. There are some extension cards, particularly ones dealing with the use of genetic resources in plants, and arguing for the importance of producing food that is not reliant on corporations.

A strategy that could work as bridge between the Affirmative and Negative is one based on the concept of “Open Source” scientific inquiry. I personally think that this is an interesting path, but much of it depends on if one can consider “open source” approaches as approaches that maintain “Intellectual Property protections” or reject them. I think that there are a few strong arguments that these claims would be Affirmative, and a few strong claims that these arguments would be classified in the Negative arsenal.

Finally, the direct defense of IP rights in this file comes mostly from the argument that Intellectual Property should be protected in order to preserve indigenous knowledge and cultures. Depending on what route you would like to take, I would suggest doing some additional reading. A great place so start would be with some of the sources listed in the next section. I have cut a few cards from several of these sources—but I am certain they would yield more information—and with this topic, a huge part of the battle will be getting yourself familiar with many of the shorthand, scientific concepts that appear in most of these cards.

## Further Reading/Resources

Deibel, Eric. “Open Genetic Code: On Open Source in the Life Sciences.” *Life Sciences, Society, and Policy: A SpringerOpen Journal* 10.2 (2014): http://www.lsspjournal.com/content/10/1/2

“Glossary of Key Terms Related to Intellectual Property and Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions” from **Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore.** Can be accessed: <http://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_22/wipo_grtkf_ic_22_inf_8.pdf>

Halbert, Debora J. *Resisting Intellectual Property*. London and New York: Routledge, 2005.

Kinsella, Stephan. *Against Intellectual Property.* Mises Institute, 2008. https://mises.org/library/against-intellectual-property-0

Lock, Margaret. “Genetic Diversity and the Politics of Difference. *Chicago-Kent Law Review* 75.1 (December 1999): 83-111. http://scholarship.kentlaw.iit.edu/cgi/viewcontent.cgi?article=3184&context=cklawreview

Munzer, Stephen R. and Kal Rustiala. “The Uneasy Case for Intellectual Property Rights in Traditional Knowledge.” *Cardozo Arts and Entertainment Law Journal* 27.1 (2009): http://www.cardozoaelj.com/wp-content/uploads/Journal%20Issues/Volume%2027/Issue%201/Munzer.pdf

Neuwelt, Pat M., Deborah Gleeson, Briar Ma. “Patently Obvious: A Public Health Analysis of Pharmaceutical Industry Statements on the Trans-Pacific Partnership International Trade Agreements.” *Critical Public Health* 26.2 (2016): 159-172.

Vivas-Eugui, David. “Bridging the Gap on Intellectual Property and Genetic Resources in WIPO’s Intergovernmental Committee (IGC)” ICTSD Issue Paper No. 34 (2012): http://www.ictsd.org/downloads/2012/02/bridging-the-gap-on-intellectual-property-and-genetic-resources-in-wipos-intergovernmental-committee-igc.pdf]

## Definitions and Overveiw

#### Comprehensive set of International Definitions of “Genetic Resources.”

WIPO, 2012 (World Intellectual Property Organization; “Glossary of Key Terms Related to Intellectual Property and Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions;” Intergovernmental Committee on Intellectual Property and Genetic Resources, /Traditional Knowledge and Folklore; Twenty-Second Session, 7/9-13/2012; http://www.wipo.int/edocs/mdocs/tk/en/wipo\_grtkf\_ic\_22/wipo\_grtkf\_ic\_22\_inf\_8.pdf)

Article 2 of the Convention on Biological Diversity (1992) defines ”genetic resources” as “genetic material of actual or potential value.” The “Like-Minded Countries Contribution to the Objectives and Principles on the Protection of Genetic Resources and Preliminary Draft Articles on the Protection of Genetic Resources” (document WIPO/GRTKF/IC/19/11 provides the same definition at Article 1(2)(d).

Article 1 of the Decision 391 on Access to Genetic Resources of Andean Community (1996) defines “genetic resources” broadly as “all biological material that contains genetic information of value or of real or potential value.”

The Food and Agriculture Organization (FAO) Glossary for Fisheries defines the term as “germplasm of plants, animals or other organisms containing useful characters of actual or potential value. In a domesticated species it is the sum of all the genetic combinations produced in the process of evolution.”

Other legal instruments make reference to genetic resources using different terms:

Article 2 of the FAO International Treaty on Plant Genetic Resources for Food and Agriculture (2001) defines “plant genetic resources” as “any material of plant origin, including reproductive and vegetative propagating material, containing functional units of heredity.”

Article 2 of the FAO International Code of Conduct for Plant Germplasm Collecting and Transfer (1993) defines plant genetic resources as “the reproductive or vegetative propagating materials of plants.”

Article 2.1 (a) of the FAO International Undertaking on Plant Genetic Resources (1983) defines the term as “the reproductive or vegetative propagating material of the following categories of plants: i) cultivated varieties (cultivars) in current use and newly developed varieties; ii) obsolete cultivars; iii) primitive cultivars (land races); iv) wild and weed species, near relatives of cultivated varieties; and v) special genetic stocks (including elite and current breeders’ line and mutants)”. The International Undertaking does not refer to “functional units of heredity.”

Other legal instruments on intellectual property do not use the term and refer to “biological material.” The European Union Directive on the Legal Protection of Biotechnological Inventions (1998) defines it as “material containing genetic information and capable of reproducing itself or being reproduced in a biological system.”

According to the United States Code of Federal Regulations, biological material shall include “material that is capable of self-replication either directly or indirectly.”

According to Article 2 of the Convention on Biological Diversity (1992), biological resources “includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity.”

#### World Intellectual Property Organization (WIPO) defines genetic resources.

WIPO, accessed 2016 (World Intellectual Property Organization, [Intergovernmental Committee established by the United Nations] “Genetic Resources;” <http://www.wipo.int/tk/en/genetic/>)

Genetic resources (GRs) refer to genetic material of actual or potential value. Genetic material is any material of plant, animal, microbial or other origin containing functional units of heredity. Examples include material of plant, animal, or microbial origin, such as medicinal plants, agricultural crops and animal breeds.

#### **WIPO outlines the basic status quo relationship between genetic resources and intellectual property.**

WIPO, accessed 2016 (World Intellectual Property Organization, [Intergovernmental Committee established by the United Nations] “Genetic Resources;” <http://www.wipo.int/tk/en/genetic/>)

GRs [genetic resources] as encountered in nature are not creations of the human mind and thus they cannot be directly protected as intellectual property (IP). However, there are IP issues associated with GRs. Inventions or plant varieties based on or developed using GRs (associated with traditional knowledge or not) may be patentable or protected by plant breeders’ rights. In considering IP issues associated with GRs, WIPO’s work complements the frameworks for access and benefit-sharing provided by the Convention on Biological Diversity (CBD) and its Nagoya Protocol, and the International Treaty on Plant Genetic Resources for Food and Agriculture of the United Nations Food and Agriculture Organization (FAO).

#### The purpose of intellectual property guidelines.

WIPO, 2012 (World Intellectual Property Organization; “Glossary of Key Terms Related to Intellectual Property and Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions;” Intergovernmental Committee on Intellectual Property and Genetic Resources, /Traditional Knowledge and Folklore; Twenty-Second Session, 7/9-13/2012; http://www.wipo.int/edocs/mdocs/tk/en/wipo\_grtkf\_ic\_22/wipo\_grtkf\_ic\_22\_inf\_8.pdf

From its first session, the IGC supported a task which would lead to the development by WIPO of Intellectual Property Guidelines for Access and Benefit-sharing. It was proposed that the Guidelines be based on a systemic survey of actual and model contractual agreements in the form of the WIPO Database of Biodiversity-related Access and Benefit-sharing Agreements.83 A first draft84 was prepared taking into account the operational principles identified by the IGC for the development of such Guidelines. This draft was later updated for purposes of the seventeenth session of the IGC. The purpose of the Intellectual Property Guidelines for Access and Benefit-sharing is to serve both providers and recipients of genetic resources when they negotiate, develop and draft the intellectual property elements of mutually agreed terms for access to genetic resources and benefit-sharing. They illustrate the practical intellectual property issues that providers and recipients are likely to face when negotiating an agreement, contract or license. The diversity of national law and of the practical interests of providers and recipients are likely to lead to a wide range of choices when actual provisions are negotiated and drafted. Guidelines may therefore support providers and recipients in ensuring that access and benefit-sharing is on equitable, mutually agreed terms, but does not prescribe one template or set of choices. Further, nothing in such Guidelines should be interpreted to affect the sovereign rights of States over their natural resources, including their entitlement to set terms and conditions on access and benefit-sharing. Guidelines would be voluntary and illustrative only. They would be no substitute for relevant international, regional or national legislation. Traditional knowledge is often associated with genetic resources, and this can provide valuable insights into how genetic resources can be preserved, maintained, and used for the benefit of humanity. The Guidelines also apply to traditional knowledge associated with genetic resources.

#### Define: Patent

WIPO, 2012 (World Intellectual Property Organization; “Glossary of Key Terms Related to Intellectual Property and Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions;” Intergovernmental Committee on Intellectual Property and Genetic Resources, /Traditional Knowledge and Folklore; Twenty-Second Session, 7/9-13/2012; <http://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_22/wipo_grtkf_ic_22_inf_8.pdf>

A patent is defined as “a document which describes an invention which can be manufactured, used, and sold with the authorization of the owner of the patent. An invention is a solution to a specific technical problem. A patent document normally contains at least one claim, the full text of the description of the invention, and bibliographic information such as the applicant’s name. The protection given by a patent is limited in time (generally 15 to 20 years from filing or grant). It is also limited territorially to the country or countries concerned. A patent is an agreement between an inventor and a country. The agreement permits the owner to exclude others from making, using or selling the claimed invention.” Article 27(1) of the World Trade Organization (WTO) Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement states that “[…] patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. […] patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced.”

#### Open Source is both a challenge, and a continuation, of contract law. It may, or may not be a topical example of the Affirmative.

Kloppenburg, 2014 (Jack [Department of Community and Environmental Sociology at the University of Wisconsin-Madison. Founder of the Open Source Seed Initiative.] “Re-Purposing the Master’s Tools: The Open Source Seed Initiative and the Struggle for Seed Sovereignty.” *The Journal of Peasant Studies* 41:6 (2014). DOI: 10.1080/03066150.2013.875897)

A material expression of this tendency can be seen in the creation in the United States of the Open Source Seed Initiative (OSSI), of which I am a founding member. Organized by a working group of public plant breeders, private breeders, non-governmental organizations (NGOs) and sustainable food system advocates, OSSI intends to encourage and reward the sharing rather than the restriction of germplasm, to revitalize public plant breeding and to integrate the skills and capacities of farmer breeders with those of plant scientists. A key tool for achieving these goals is development of ‘open source’ licenses that preserve the right to use material for breeding and the right of farmers to save and replant seed. Modeled on the legal arrangements successfully deployed by the free and open source software movement, OSSI hopes that its licenses might undergird the creation of a ‘protected commons’ populated by farmers and plant breeders whose materials would be freely available and widely exchanged but would be protected from appropriation by those who would monopolize them. Although constituted as a North American initiative in the first instance, it is OSSI’s ambition to catalyze the establishment of allied initiatives among indigenous peoples, in the Global South and in Europe. That sounds nice in theory (Kloppenburg 2010). The actual process of implementation has been rather more complicated than we of OSSI had hoped. And here the quotation from poet Audre Lorde is germane. An open source license is a tool constituted by the provisions of contract law, backed by the authority of the state. As Lorde warns, it is a tool of the master inasmuch as the structure and provisions of the legal system have for the most part been designed to facilitate the activities of the dominant stakeholders in the overarching social formation. That does not mean that space for progressive and liberatory action is absent, for taking Lorde at face value is to subscribe to a species of determinism. But we at OSSI should surely take her caution seriously. Re-purposing contract law is not simple, and it is prudent to assess the degree to which it implicates us in relationships we might prefer to avoid as well as the degree to which it might produce the genuine change that we desire.

## Affirmative

### AC

#### The Affirmative opens with a story from Deborah Halbert in 2005:

[Debora J. (Associate Professor of Political Science at Otterbein College, USA) Resisting Intellectual Property. London and New York: Routledge, 2005)

In the mid-1980s, the Hagahai people of Papua New Guinea also found themselves used as the raw material in a patent claim. The Hagahai needed medical assistance and in return for medicine they donated blood samples to US anthropologist Carol Jenkins.40 The blood turned out to have a unique property resistant to a type of leukemia.41 After identifying the important properties, the National Institute of Health (NIH) filed a patent on the cell line from a member of the tribe.42 Once the patent application became public knowledge, controversy ensued over the nature of informed consent and what ownership should mean.43 Many Indigenous rights advocates suggested that the patent was a violation of the human rights of the Hagahai. As intellectual property expert Aroha Mead argued, “You are taking the lifeblood of individuals and asserting ownership. It is bad enough that you do it to your own citizens, but much worse to do it to people of other countries.”44 To patent and commodify body parts is “like slavery in a high-tech science world.”45 Indigenous rights advocates argued from an ethical standpoint that saw the human being as a sacred entity that should not be commodified.46 The Rural Advancement Foundation International (RAFI) was in the forefront of the criticism of the NIH patent. They argued that “the United States Government has issued itself a patent on a foreign citizen. On March 14, 1995, an indigenous man of the Hagahai people…ceased to own his genetic material.”47 While legally it is incorrect to say that a patent has been issued on a person, the rhetoric resonates powerfully for those not entrenched within the legal paradigm of patent law. For RAFI and other Indigenous rights groups, there is no difference between a person’s genetic material and the person himself, despite the fact the US legal system easily divides the person from the body part. The holistic understanding of the human body is an important conceptual alternative to the “raw material” approach of the US legal system and the biotechnology industry, but it is also an approach that is much more difficult to develop when placed within the context of intellectual property law. Within the moral framework developed by the activists, the patenting of this cell line is an unthinkable and dehumanizing act. Within the patent framework, by contrast, it is simply a business necessity.

#### THUS, I Affirm: A just government ought to abolish Intellectual Property Protections for genetic resources.

#### First, The patenting of DNA relies on the historical precedent set by slavery, opening a strange door towards the patenting of humanity itself.

Halbert 2005 [Debora J. (Associate Professor of Political Science at Otterbein College, USA) *Resisting Intellectual Property*. London and New York: Routledge, 2005)

Recombinant DNA (rDNA) was discovered in 1973 and profoundly changed the scientific community by giving researchers the ability to rearrange and transplant genes.6 Now that researchers were able to splice genes together, it became possible to create living organisms not found in nature. The life form created by Ananda Chakrabarty was one such creature. Chakrabarty spliced genes together to create an oil-eating organism that proved useful in cleaning up oil spills. Upon filing his patent, Chakrabarty sought protection for the process of creating the organism, for the method of delivering the organism to an oil spill, and for the organism itself. The Patent and Trademark Office (PTO) rejected the patent application on the organism arguing that it was living and thus could not be patented. The PTO granted patent rights for the process and delivery mechanisms.7 Chakrabarty appealed and filed suit in Diamond. v. Chakrabarty. 8 The US Court of Customs and Patent Appeals held that “the fact that micro-organisms are alive is without legal significance for purposes of the patent law.”9 The Supreme Court agreed with the Appeals Court. Of course, living creatures have long been subject to the property law of chattel. The Diamond decision merely extends the ownership of chattel to the genetic level. The question the Supreme Court sought to answer was whether a living creature could be considered a “manufacture” or “composition of matter” under the patent law.10 Congress’s legislative intent was to broadly construe the definitions of “manufacture” and “composition of matter.” For the purposes of the argument, the Court defined “manufacture” as “the production of articles for use from raw or prepared materials by giving to these materials new forms, qualities, properties, or combinations, whether by hand-labor or by machinery.”11 Thus, a living creature may be considered “raw material” for the purposes of patent law. The labor invested in this raw material is what produces the property; the creature prior to becoming the subject of scientific inquiry had no intrinsic worth. The limits the Supreme Court recognized included “the laws of nature, physical phenomena, and abstract ideas,” none of which can be patented.12 These “natural” phenomena include such things as gravity or the discovery of a plant in the wild, both of which remain common property because they are products of nature. Chakrabarty’s organism, however, does not exist in nature, being the laboratory creation of a scientist and thus could not be considered the discovery of a “natural” phenomenon. The Supreme Court in a 5–4 decision argued that Chakrabarty’s genetically engineered organism, though living, was an “artificial substance.”13 Thus, the labor Chakrabarty had invested in this living organism was enough to justify his ownership of the organism for the purposes of commercially exploiting it. The ability to genetically design and own living creatures stemming from the Chakrabarty decision opened the door for the biotechnology industry. A variety of other living creatures have since been patented, including a genetically engineered mouse.14 Defining “manufacture” so broadly made it possible to understand the human genome as a patentable object as well. The key analysis allowing the human genome to be understood as an “artificial substance” instead of a “physical phenomena” lies in the work the scientist does to the human genome before it can be patented. Thus, the human genome is not a product of nature, but the product of scientific inquiry. The reasoning behind this will be evaluated in the next sections.

#### Further, Systems of IP protections ultimately hinder scientific progress through overly focused inquiry, and removing the potential cooperation.

Halbert 2005 [Debora J. (Associate Professor of Political Science at Otterbein College, USA) *Resisting Intellectual Property*. London and New York: Routledge, 2005)

The commercial competition for sequencing the human genome suggests that the initial intent of keeping the human genome in the public domain failed. The patenting of different genes has become an essential element in the race to complete the Human Genome Project.81 It is also important to note that many scientists working in genetics think patenting should not be the primary method for protecting inventions. The Human Genome Organization (HUGO) issued a statement regarding patents in 1995 that expressed their concerns with the patent system’s ability to hinder research that would benefit the pubic.82 Private companies interested in capitalizing on genetic research are less interested in mapping the entire human genome and more interested in focusing on the key genetic elements that could lead to lucrative medical applications.83 However, in their race to patent the lucrative components of the human genome, they may also hinder scientific discovery for the greater good.

#### Next, Intellectual Property Protections for human genetic materials cut the human into pieces in service of a perfectly ordered society.

Halbert 2005 [Debora J. (Associate Professor of Political Science at Otterbein College, USA) *Resisting Intellectual Property*. London and New York: Routledge, 2005)

Patent attorneys and genetic engineers seem to be “attempting to rewrite genesis.”98 By understanding the human being as a collection of property rights it becomes possible to commodify the individual. As Margaret Lock writes in her excellent article on the subject, When human blood, cells, and genetic material are understood simply as things-in-themselves to which monetary value can be attached, their worth as culturally significant entities, as the basis and affirmation of human life in a specific time and place, may be eclipsed.99 The reason the work of activists on this point is so crucial is that it is important to resist the reduction of human life to the economic calculations of biotechnology companies. A new theoretical understanding may also be necessary. The commodification of biodiversity, genes, personalities, and Indigenous knowledge within the intellectual property system extends the technological language of efficiency and use-value to new levels. Perhaps taking a Heideggerian approach to these issues may provide a form of resistance at the theoretical level. Heidegger used the language of enframing to describe the process of turning everything into a resource.100 The language applying patent rights to human genes treats these “things” as the equivalent of a wasteland waiting for cultivation. For Heidegger, technology isn’t neutral: Everywhere we remain unfree and chained to technology, whether we passionately affirm or deny it. But we are delivered over to it in the worst possible way when we regard it as something neutral; for this conception of it, to which today we particularly like to do homage, makes us utterly blind to the essence of technology.101 Instead of neutrality, technology transforms everything into raw materials to be used. Iain Thompson argues that, “everything is ‘sucked up’ into its purview, including the modern subject, is reduced to the ontological status of a resource to be optimized.”102 Such a society renders human subjects into raw materials, made so obviously clear by the discussion of intellectual property rights in genes and body parts. An example of this optimization is the issue of property rights in the genetic information of Indigenous peoples. It is claimed that these people are not “using” their genes for the same purpose as biotechnology companies. If biotech companies do not isolate the appropriate properties, they will go uncultivated and unused in a proprietary sense. In other words, by thinking of Indigenous people as raw materials scientists can more efficiently utilize the knowledge stored in their bodies. It is the perfectly ordered society, one that streamlines humans into the technological system that is dangerous.

#### Finally, Biopolitics necessitates endless cycles of violence and slaughter in the name of preserving the health of the body politic – this makes genocide and extinction inevitable.

Foucault 1978 (Michel, philosopher and chair at the College de France, “The History of Sexuality”, p. 135-37)

For a long time, one of the characteristic privileges of sovereign power was the right to decide life and death. In a formal sense, it derived no doubt from the ancient patria potestas that granted the father of the Roman family the right to “dispose” of the life of his children and his slaves; just as he had given them life, so he could take it away. By the time the right of life and death was framed by the classical theoreticians, it was in a considerably diminished form. It was no longer considered that this power of the sovereign over his subjects could be exercised in an absolute and unconditional way, but only in cases where the sovereign’s very existence was in jeopardy: a sort of right of rejoinder. If he were threatened by external enemies who sought to overthrow him or contest his rights, he could then legitimately wage war, and require his subjects to take part in the defense of the state; without “directly proposing their death,” he was empowered to “expose their life”: in this sense, he wielded an indirect power over them of life and death. But if someone dared to rise up against him and transgress his laws, then he could exercise a direct power over the offender’s life: as punishment, the latter would be put to death. Viewed in this way, the power of life and death was not an absolute privilege: it was conditioned by the defense of the sovereign and his own survival. Must we follow Hobbes in seeing it as the transfer to the prince of the natural right possessed by every individual to defend his life even if this meant the death of others? Or should it be regarded as a specific right that was manifested with the formation of that new juridical being, the sovereign? In any case, in its modern form—relative and limited—as in its ancient and absolute form, the right of life and death is a dissymmetrical one. The sovereign exercised his right of life only by exercising his right to kill, or by refraining from killing; he evidenced his power over life only through the death he was capable of requiring. The right which was formulated as the “power of life and death” was in reality the right to take life or let live. Its symbol, after all, was the sword. Perhaps this juridical form must be referred to a historical type of society in which power was exercised mainly as a means of deduction (prelevement), a subtraction mechanism, a right to appropriate a portion of the wealth, a tax of products, goods and services, labor and blood, levied on the subjects. Power in this instance was essentially a right of seizure: of things, time, bodies, and ultimately life itself; it culminated in the privilege to seize hold of life in order to suppress it. Since the classical age the West has undergone a very profound transformation of these mechanisms of power. “Deduction” has tended to be no longer the major form of power but merely one element among others, working to incite, reinforce, control, monitor, optimize, and organize the forces under it: a power bent on generating forces, making them grow, and ordering them, rather than one dedicated to impeding them, making them submit, or destroying them. There has been a parallel shift in the right of death, or at least a tendency to align itself with the exigencies of a life-administering power and to define itself accordingly. This death that was based on the right of the sovereign is now manifested as simply the reverse of the right of the social body to ensure, maintain, or develop its life. Yet wars were never as bloody as they have been since the nineteenth century, and all things being equal, never before did regimes visit such holocausts on their own populations. But this formidable power of death—and this is perhaps what accounts for part of its force and the cynicism with which it has so greatly expanded its limits—now represent itself as the counterpart of a power that exerts a positive influence on life, that endeavors to administer, optimize, and multiply it, subjecting it to precise controls and comprehensive regulations. Wars are no longer waged in the name of a sovereign who must be defended: they are waged on behalf of the existence of everyone; entire populations are mobilized for the purpose of wholesale slaughter in the name of life necessity: massacres have become vital. It is as managers of life and survival, of bodies and the race, that so many regimes have been able to wage so many wars, causing so many men to be killed. And through a turn that closes the circle, as the technology of wars has caused them to tend increasingly toward all-out destruction, the decision that initiates them and the one that terminates them are in fact increasingly informed by the naked question of survival. The atomic situation is now at the end point of this process: the power to expose a whole population to death is the underside of the power to guarantee an individual’s continued existence. The principle underlying the tactics of battle—that one has to be capable of killing in order to go on living—has become the principle that defines the strategy of states. But the existence in question is no longer the juridical existence of sovereignty; at stake is the biological existence of a population. If genocide is indeed the dream of modern powers, this is not because of a recent return of the ancient right to kill; it is because power is situated and exercised at the level of life, the species, the race, and the large-scale phenomena of population.

### Background

#### The basics of the John Moore Case—a classic of the ethics of property rights and the body.

Halbert 2005 [Debora J. (Associate Professor of Political Science at Otterbein College, USA) *Resisting Intellectual Property*. London and New York: Routledge, 2005)

John Moore’s case has become a classic for questioning the ethics of property rights in the body. The case began when Moore discovered that his cancerous spleen had been used to create a cell line with commercial value without his knowledge. Moore suffered from hairy-cell leukemia and the operation on his spleen was considered essential for his health. Dr Golde, Moore’s physician, used the extracted tissue to create a patentable cell line from Moore’s T-lymphocytes.15 The cell line was later sold to a Swiss drug company resulting in a drug worth millions of dollars.16 In what might be considered a breach of ethics, Dr Golde did not reveal his full interest in Moore’s spleen during the initial operation, and he did not reveal his ongoing interest in Moore’s tissue during the follow-up visits he required Moore to make. Moore sued UCLA for breach of fiduciary duty and to establish a property right in his spleen under the tort of conversion.17 The California Supreme Court found that UCLA had committed a breach of fiduciary duty by not notifying Moore of their research intentions and by failing to obtain informed consent for their research.18 However, the Court refused to acknowledge that Moore had a property right in his tissue. Instead, the court found that the California Board of Regents had a property right to Moore’s cell line.19 As Alan Hyde put it, “Moore’s cells were property, but they weren’t his. For surely they were the property of the medical researchers after they were removed from Moore’s body.”20

### Dehumanization

#### The commodification of the body allowed by the IPR approach to understanding humanity results in dehumanization.

Halbert 2005 [Debora J. (Associate Professor of Political Science at Otterbein College, USA) *Resisting Intellectual Property*. London and New York: Routledge, 2005)

The human body in modern patent law is “raw material” and the “manufactured product” of a technological society.3 The human personality is also woven into the world of property rights.4 When the extension of property rights has reached the cornerstones of human identity – the body and the personality – it is perhaps time to begin to understand the underlying theory, which has allowed this extension to occur. Of course, the motivating factor in the development of ownership rights in the body is commercial exploitation and the centralization of intellectual property rights into the hands of a few biotechnology and entertainment powers. However, taking the commodification of life to the level of the human body has been possible only by extending our existing understanding of property much further than it has gone in the past. Once a human being has been divided into an abstract bundle of rights, these rights can form new networks of ownership and control over the body.

#### The introduction of property rights into questions over the value of humanity ultimately shifts the question to the market, and forever changes the world.

Halbert 2005 [Debora J. (Associate Professor of Political Science at Otterbein College, USA) *Resisting Intellectual Property*. London and New York: Routledge, 2005)

For those advocating the rights of Indigenous peoples, there is no distinction between the human and their tissue. By refusing to deconstruct the body into a set of parts that can be the subject of legal rights, those fighting the patenting of human tissue are attempting to articulate a competing understanding of the human subject – a Kantian notion of human subjectivity. Of course, their efforts are thwarted by the immensely powerful discourse of markets. Ultimately, the Hagahai have been brought into the commodity culture. The debate now revolves around compensating them for the tissue donations instead of debating if the human body should be a commodity at all. As journalist Pauline Lane notes, “It was a turning point in the Hagahai’s perception of the world. Today, they feel cheated by what happened. The issue of money for blood has brought a new dynamic into what had been a cashless economy.”51 Some argue that only by patenting the cell lines was it possible to provide the Hagahai with protection.52 Unlike the Moore patent, the patent involving the Hagahai mentions the tribe, giving them some rights to any future development. Because the patent names the Hagahai, it can keep other less ethical institutions from using the cell line without paying royalties to the NIH and the Hagahai.53 However, royalties seem a high price to pay for the commodification of human tissue and the success of the property rights discourse that will forever change one’s perception of the world. As Alejandro Argumedo noted, the attempt to patent this information was “arguably, the most offensive patent ever issued.”54 In the end, the discourse of property rights won and those trying to articulate the human body as some sort of holistic being were unsuccessful. The Hagahai case has made the patenting of human-based products an important political and hopefully public discussion. One outcome of the NIH patent is a growing opposition to the process of patenting the cell lines of Indigenous peoples. This opposition has forced those working within the Western scientific community to rethink their approach to the human body as raw material. What is evolving instead of the language of humans as raw materials is an understanding of the human as an autonomous agent who should control the outcomes of research into their genetic resources. Thus, you can treat a person’s cells and tissues as the subject of science as long as you ask first. While an improvement, there is still much work on an alternative framework to be done.

#### IP protections operate using a flawed version of human nature, and risk mass starvation.

Shiva 1996 [Vandana [Scholar, Activist, and Author] “Agricultural Biodiversity, Intellectual Property Rights, and Farmers Rights.” *Economic and Political Weekly* 31.25 (1996); 1621-1623+1625-1631. <http://www.jstor.org/stable/4404305>]

The US IPR orthodoxy is based on a fallacious idea that people do not innovate or generate knowledge unless they can derive private profits. However, greed is not a 'fundamental fact of human nature' but a dominant tendency in societies that reward it. In the area of seeds and plant genetic resources, innovation in both 'formal' and 'informal' systems has so far been guided by the larger human good. Norman Borlaug, the scientist behind the green revolution and the recipient of the Nobel peace prize, made this clear in his statement at a press conference at the Indian Agricultural Research Institute, New Delhi on February 8, 1996. He expressed concern about private companies and TNCs gaining control of plant genetic resources and seeds and patenting plants. Borlaug said, “We battled against patenting. I and late Glen Anderson (of International Wheat and Maize Research Institutes) went on record in India as well as other fora against patenting and always stood for free exchange of germplasm.” He saw IPRs in PGRs as a prescription for famine. Commenting on the US demand for patents he said, "God help us if that were to happen, we would all starve".

### Colonialism

#### Private property and the movement of European colonialism are intricately linked.

Halbert 2005 [Debora J. (Associate Professor of Political Science at Otterbein College, USA) *Resisting Intellectual Property*. London and New York: Routledge, 2005)

The narrative of colonization describes Indigenous peoples as “childlike” and in need of protection and education at the hands of the advanced and civilized white man.8 As Europeans explored and mapped the world, bringing information and samples back to Europe with them, local populations and the natural environment were treated as a relatively undifferentiated mass.9 There is no question that early European explorers were able to accumulate information about the places they visited through the help and knowledge of the local population. However, possibly because Indigenous peoples and the natural environment were so closely associated in the minds of Europeans, the appropriation of this knowledge, much like the appropriation of lands, was quickly obscured by the fiction of colonial superiority and the original genius of the Western scientist and explorer.10 Despite the manner in which the discourse of colonization rendered the contributions of Indigenous peoples invisible, Europeans did see the possibility of knowledge exchanging hands. Knowledge of a civilized way of life could be imparted wherever Europeans came into contact with local peoples. Part of the “knowledge” imparted to Indigenous groups around the world was a theory of private property that made it possible for Europeans to assert sovereign ownership over the territories of Indigenous peoples.11 The acquisition of private property was at the heart of colonizing measures as European countries scrambled to develop outposts from which to secure the natural resources necessary for industrialization. The development of private property throughout the colonized world was made possible largely through theft and coercion concealed behind legal rules and doctrines. European law, in fact, was complicit in the takings.12 While the already functional alternative property systems constructed by Indigenous peoples were never considered in the colonizing process, the European doctrine of natural rights also proved to be a problematic discourse when applied to new and already occupied territories. The extension of natural rights, especially to property, would logically provide Indigenous groups with property rights in their territories. Thus, Europeans had to further rationalize their takings by claiming that Indigenous groups were not capable of holding European-style property rights because of their “savage” state. Thus, Europeans only needed to justify their property appropriation within the realm of European law and the law of “civilized” nations. The European narrative of Indigenous existence was told much like the memorial in Hawai’i suggests – the peoples inhabiting these colonized lands were simply an addition to the natural scenery awaiting the civilizing and cultivating abilities of the European. Alternative models of property were disregarded or invisible to the European mind.

#### Intellectual Property Rights (IPRs) are the first step to the total domination of Transnational Corporations (TNCs) and threaten the survival of both people and nations.

Shiva 1996 [Vandana [Scholar, Activist, and Author] “Agricultural Biodiversity, Intellectual Property Rights, and Farmers Rights.” *Economic and Political Weekly* 31.25 (1996); 1621-1623+1625-1631. <http://www.jstor.org/stable/4404305>]

It is often stated that IPRs will not stop traditional farmers using native seeds. However, when it is recognised that IPRs are an essential part of a package of agribusiness-controlled agriculture in which farmers no longer grow native seeds but seeds supplied by the TNC seed industry, IPRs become a means of monopoly that wipe out farmers' rights to save and exchange seed. This leads to TNC totalitarianism in agriculture. TNCs will decide what is grown by farmers, what they use as inputs, and when they sell their produce, to whom and at what price. They will also decide what is eaten by consumers, at what price, with what content, and how much information is made available to them about the nature of food commodities. IPRs are a significant instrument for the establishment of this TNC totalitarianism. The protection of the rights of citizens as producers and consumers needs the forging of new concepts and categories, new instruments and mechanisms to counter and limit the monopoly power of TNCs in agriculture. Community rights are an important balancing concept for protecting the public interest in the context of IPR protection for corporations. In the field of food and agriculture, farmers' rights are the countervailing force to breeders' rights and patents on seed and plant material. Farmers' rights in the context of monopoly control of the food system become relevant not just for farming communities, but also for consumers. They are necessary not just for the survival of the people but also for the survival of the country. Without sovereign rights of farming communities to their seed and plant genetic resources, there can be no sovereignty of the country.

#### The use of Intellectual Property to restrict access to genetic materials fails to account for the importance of reciprocity making it fundamentally unjust.

Kloppenburg, 2014 (Jack [Department of Community and Environmental Sociology at the University of Wisconsin-Madison. Founder of the Open Source Seed Initiative.] “Re-Purposing the Master’s Tools: The Open Source Seed Initiative and the Struggle for Seed Sovereignty.” The Journal of Peasant Studies 41:6 (2014). DOI: 10.1080/03066150.2013.875897)

My own enthusiasm for OSSI is rooted in the same frustrations that so thoroughly inform LVC’s spurning of the ‘benefit sharing’ provisions of the ITPGRFA as being ‘offered the proceeds from the theft of our seeds’ (LVC 2011). The legitimacy of plant genetic resources as the ‘common heritage of mankind’ was called into question at the FAO during the 1980s because, as it expanded globally, the seed industry had begun using IPRs to exclude others from access to their varieties for multiplication and breeding purposes. The problem was not that seed companies were obtaining and using crop genetic resources, or even that they were selling seed, but that they were restricting access to and preventing the use of materials that, as a matter of reciprocity, ought to have been shared. It is this failure of reciprocity – and, with patenting, the elimination of the right to replant and to use for further breeding, the loss of the derivative right to use – that is regarded as asymmetrical and therefore unjust. The inequitable nature of this practice has been compounded as corporations have used IPRs over genetic materials not just to accrue monopoly rents, but to actively undermine the independence of farmers and the integrity and capacity of public plant science. Significantly, the initial strategic response at the FAO in 1983 was not to make companies pay for genetic resources but to declare that what they claimed as proprietary lines were in fact part of common heritage. This position was deemed impractical by many and the debate was soon transformed from how to enlarge the commons to how make industry pay for its raw materials.

#### The economic value of Genetic Resources are not provided to the countries that host those resources, because of the difficulty of assigning value in a globalized atmosphere of work.

Vivas-Eugui 2012 [David (Innovation Policy Advisory for the International Centre for Trade and Sustainable Development {ICTSD}; Geneva, Switzerland) “Bridging the Gap on Intellectual Property and Genetic Resources in WIPO’s Intergovernmental Committee (IGC)” ICTSD Issue Paper No. 34 (2012): <http://www.ictsd.org/downloads/2012/02/bridging-the-gap-on-intellectual-property-and-genetic-resources-in-wipos-intergovernmental-committee-igc.pdf>]

In practice, it has been extremely problematic for provider countries to capture the economic value of their GRs due to their intangible nature, wide variety and difficulties in controlling them outside national jurisdictions. Also, there seems not to be yet clear markets for GRs and when they exist they are highly imperfect.9 In addition, many estimates have been subject to over-expectation as to the capacity to extract value from domestic GRs, especially from bioprospecting.10 For example, thus far, bioprospecting activities have not generated significant revenues for provider countries.11 One reason for this is that a considerable part of the added value in bioprospecting projects accrues outside the country where it takes place.

#### While clear statistics on biopiracy from indigenous populations do not yet exist, the problem seems widespread.

Vivas-Eugui 2012 [David (Innovation Policy Advisory for the International Centre for Trade and Sustainable Development {ICTSD}; Geneva, Switzerland) “Bridging the Gap on Intellectual Property and Genetic Resources in WIPO’s Intergovernmental Committee (IGC)” ICTSD Issue Paper No. 34 (2012): <http://www.ictsd.org/downloads/2012/02/bridging-the-gap-on-intellectual-property-and-genetic-resources-in-wipos-intergovernmental-committee-igc.pdf>]

Clear statistics on biopiracy and misappropriation do not exist but compilations of selected cases prepared by different NGOs and research centres are available and often updated. For example, a report by two research centres22 recorded 36 cases of potential biopiracy cases in Africa up to 2006, including 12 cases related to medicine, six to cosmetics, seven in agriculture and another six in other biotechnology applications. These types of reports are becoming very specific on the GRs in question, their utilization, patents requested and filing place. It should be noted that, regarding reported cases of potential or actual biopiracy, ABS contracts and material transfer agreements by competent authorities have rarely been presented as legal or political defences by IP applicants. In this regard, it seems that besides the issue of erroneous patents, the lack of benefit arrangements is widely spread in cases reported so far. So claims over the lack of benefit-sharing arrangements seem to be solid unless IP applicants in those cases start showing evidence to the contrary.

### Patents on Food

#### Farmer Rights, not intellectual property rights, are an ecological, economic, cultural, and political imperative.

Shiva 1996 [Vandana [Scholar, Activist, and Author] “Agricultural Biodiversity, Intellectual Property Rights, and Farmers Rights.” *Economic and Political Weekly* 31.25 (1996); 1621-1623+1625-1631. <http://www.jstor.org/stable/4404305>]

Farmers' rights are an ecological, economic, cultural and political imperative. Without community rights, agricultural communities cannot protect agricultural biodiversity. This biodiversity is necessary not just for the ecological insurance of agriculture. The right to agricultural biodiversity is also an economic imperative because without it our farmers and our country will lose their freedom and options for survival. Since biodiversity and cultural diversity are intimately linked, conservation of agricultural biodiversity is a cultural imperative also. Finally, without farmers' rights, there is no political mechanism to limit monopolies in agriculture and the inevitable consequences of displacement, hunger and famine that will follow total monopoly control over food production and consumption through the monoply ownership of seed, the first link in the food chain. Table I illustrates the new concentration in the seed industry and the new convergence of the chemical industry with the seed industry.

#### The erosion of biodiversity and freedom is a natural consequence of allowing patents on genetic materials.

Shiva 2012 (Dr. Vandana Shiva. [Activist and author. Founder of the Research Foundation for Science, Technology, and Ecology] “The Seed Emergency: The Threat to Food and Democracy.” *Al Jazeera* 6 February 2016. <http://www.aljazeera.com/indepth/opinion/2012/02/201224152439941847.html>

The past twenty years have seen a very rapid erosion of seed diversity and seed sovereignty, and the concentration of the control over seeds by a very small number of giant corporations. In 1995, when the UN organised the Plant Genetic Resources Conference in Leipzig, it was reported that 75 per cent of all agricultural biodiversity had disappeared because of the introduction of "modern" varieties, which are always cultivated as monocultures. Since then, the erosion has accelerated. The introduction of the Trade Related Intellectual Property Rights Agreement of the World Trade Organisation has accelerated the spread of genetically engineered seeds - which can be patented - and for which royalties can be collected. Navdanya was started in response to the introduction of these patents on seeds in the General Agreement on Tariffs and Trade - a forerunner to the WTO - about which a Monsanto representative later stated: "In drafting these agreements, we were the patient, diagnostician [and] physician all in one." Corporations defined a problem - and for them the problem was farmers saving seeds. They offered a solution, and the solution was to make it illegal for farmers to save seed - by introducing patents and intellectual property rights on those very seeds. As a result, acreage under GM corn, soya, canola, cotton has increased dramatically.

#### Threats to Seed Sovereignty result in the loss of biodiversity, and are linked to massive sets of farmer suicide.

Shiva 2012 (Dr. Vandana Shiva. [Activist and author. Founder of the Research Foundation for Science, Technology, and Ecology] “The Seed Emergency: The Threat to Food and Democracy.” *Al Jazeera* 6 February 2016. <http://www.aljazeera.com/indepth/opinion/2012/02/201224152439941847.html>

Besides displacing and destroying diversity, patented GMO seeds are also undermining seed sovereignty. Across the world, new seed laws are being introduced which enforce compulsory registration of seeds, thus making it impossible for small farmers to grow their own diversity, and forcing them into dependency on giant seed corporations. Corporations are also patenting climate resilient seeds evolved by farmers - thus robbing farmers of using their own seeds and knowledge for climate adaptation. Another threat to seed sovereignty is genetic contamination. India has lost its cotton seeds because of contamination from Bt Cotton - a strain engineered to contain the pesticide Bacillus thuringiensis bacterium. Canada has lost its canola seed because of contamination from Roundup Ready canola. And Mexico has lost its corn due to contamination from Bt Cotton. After contamination, biotech seed corporations sue farmers with patent infringement cases, as happened in the case of Percy Schmeiser. That is why more than 80 groups came together and filed a case to prevent Monsanto from suing farmers whose seed had been contaminated. As a farmer's seed supply is eroded, and farmers become dependent on patented GMO seed, the result is debt. India, the home of cotton, has lost its cotton seed diversity and cotton seed sovereignty. Some 95 per cent of the country's cotton seed is now controlled by Monsanto - and the debt trap created by being forced to buy seed every year - with royalty payments - has pushed hundreds of thousands of farmers to suicide; of the 250,000 farmer suicides, the majority are in the cotton belt.

#### Allowing patents on the genetic matter of plants is theft of the common resources of humanity for the profit of corporations—and their theft fails to produce better seed.

Shiva 2012 (Dr. Vandana Shiva. [Activist and author. Founder of the Research Foundation for Science, Technology, and Ecology] “The Seed Emergency: The Threat to Food and Democracy.” *Al Jazeera* 6 February 2016. <http://www.aljazeera.com/indepth/opinion/2012/02/201224152439941847.html>

Even as the disappearance of biodiversity and seed sovereignty creates a major crisis for agriculture and food security, corporations are pushing governments to use public money to destroy the public seed supply and replace it with unreliable non-renewable, patented seed - which must be bought each and every year. In Europe, the 1994 regulation for protection of plant varieties forces farmers to make a "compulsory voluntary contribution" to seed companies. The terms themselves are contradictory. What is compulsory cannot be voluntary. In France, a law was passed in November 2011, which makes royalty payments compulsory. As Agriculture Minister Bruna Le Marie stated: "Seeds can be longer be royalty free, as is currently the case." Of the 5,000 or so cultivated plant varieties, 600 are protected by certificate in France, and these account for 99 per cent of the varieties grown by farmers. The "compulsory voluntary contribution", in other words a royalty, is justified on grounds that "a fee is paid to certificate holders [seed companies] to sustain funding of research and efforts to improve genetic resources". Monsanto pirates biodiversity and genetic resources from farming communities, as it did in the case of a wheat biopiracy case fought by Navdanya with Greenpeace, and climate resilient crops and brinjal (also known as aubergine or eggplant) varieties for Bt Brinjal. As Monsanto states, "it draws from a collection of germ-plasm that is unparalleled in history" and "mines the diversity in this genetic library to develop elite seeds faster than ever before". In effect, what is taking place is the enclosure of the genetic commons of our biodiversity and the intellectual commons of public breeding by farming communities and public institutions. And the GMO seeds Monsanto is offering are failing. This is not "improvement" of genetic resources, but degradation. This is not innovation but piracy. For example, the Alliance for a Green Revolution in Africa (AGRA) - being pushed by the Gates Foundation - is a major assault on Africa's seed sovereignty.

#### IP has historically served the interests of corporations, and limited access to plants.

Kloppenburg, 2014 (Jack [Department of Community and Environmental Sociology at the University of Wisconsin-Madison. Founder of the Open Source Seed Initiative.] “Re-Purposing the Master’s Tools: The Open Source Seed Initiative and the Struggle for Seed Sovereignty.” The Journal of Peasant Studies 41:6 (2014). DOI: 10.1080/03066150.2013.875897)

And for capital the law has been a consistent and powerful mechanism for commodification of the seed in the United States, in Europe and globally. As early as the 1890s, seed companies in the US had begun agitating for application of intellectual property rights to new crop varieties. In 1930, they settled for a Plant Patent Act covering some asexually reproducing species. European seed companies, no less interested in the commodification of germplasm than their American counterparts, introduced patent-like ‘plant breeders’ rights’ (PBR) through the creation of the Union for the Protection of New Varieties of Plants (UPOV) in 1961. UPOV became both the model and justification for passage of the similar US Plant Variety Protection Act (PVPA) in 1970. A major difference between US and European approaches to restricting farmers’ access to germplasm has been the use in the European Union (EU) of a ‘Common Catalogue’ which has prohibited the exchange or sale of any but the officially approved and listed cultivars (Bocci 2009). In the US, the seed industry vigorously opposed application of varietal quality standards or limitations on its marketing strategies. Though revisions have further circumscribed their original rights under UPOV and PVPA, farmers can still save and replant seed of protected varieties for their own use, and breeders can employ those materials for the production of new cultivars. However, neither a ‘farmer’s exemption’ nor a ‘research exemption’ is available for material protected under US utility patent law. And with the 1980 Diamond v. Chakrabarty decision of the US Supreme Court, plants became patentable subject matter. A series of legal challenges over the past 15 years (i.e. Asgrow Seed Co. Winterboer, 1995; J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred, 2001; Bowman v. Monsanto Co., 2013) have served only to confirm and reinforce the status of new crop varieties – and genes, and gene sequences, and tissue, and plants and seeds – as intellectual property. Although the European Patent Office has held that patents on plant varieties per se should not be issued, genes and gene sequences are patentable and their insertion in plant varieties redounds to a de facto patenting of the variety (Louwaars et al. 2009). With a few exceptions (Australia, Japan, Korea), patenting plants and/or plant genes is not countenanced outside North America and the EU. However, the ‘trade-related aspects of intellectual property rights’ (TRIPS) provisions of the World Trade Organization (WTO) require that member nations institute some form of intellectual property rights (IPR) for plants. Many countries simply accede to UPOV (Blakeney 2012), while others are coming under direct bilateral pressure from the US and EU nations to institute ‘TRIPSplus’ arrangements that go beyond UPOV to more closely approximate patent regimes (Vivas-Egui and Oliva 2010).

#### Patent’s of plant genetic material are being increasingly concentrated into the hands a small number of corporations and kills competition.

Kloppenburg, 2014 (Jack [Department of Community and Environmental Sociology at the University of Wisconsin-Madison. Founder of the Open Source Seed Initiative.] “Re-Purposing the Master’s Tools: The Open Source Seed Initiative and the Struggle for Seed Sovereignty.” The Journal of Peasant Studies 41:6 (2014). DOI: 10.1080/03066150.2013.875897)

The availability of utility patent protection for plants and plant improvement processes and technologies has been aggressively embraced by both public and private interests. Even as applications for PBR have risen constantly since 1980, they have now been overtaken by an enormous pulse of utility patent applications which began in 1990 (Graf et al. 2003, Pardey et al. 2013). Although the number of patents applied for annually is increasing in both the US and Europe, the number of applicants is decreasing. In the period 2004– 2008 the five so-called ‘Gene Giants’ (Monsanto, DuPont, Syngenta, Bayer, Dow) accounted for 83.4 percent of patent applications in the US (Pardey et al. 2013, 28) and 35 percent of applications in the EU in the years 2003–2007 (Louwaars et al. 2009, 36). These patterns reflect a continuation of the historical increase in the level of concentration in the seed industry. Consolidation by dominant firms has been extended domestically and internationally, with a new emphasis on acquiring vegetable seed companies (see especially Howard 2009). The leading six companies now enjoy an estimated 66 percent market share of global commercial seed sales which are valued now in excess of $US35 billion (ETC Group 2013, 3). This market power is both enabled and enhanced by the ownership of key patents on enabling technologies used in the production of cultivars containing genetically modified (GM) traits which are themselves patented. The need to license these traits ties remaining local and regional seed companies to the Gene Giants and also acts as a barrier to entry for potential new firms.

#### The enforcement of IPR in agriculture reveals the depth of collusion between private industry and public policy (Cap Link)

Kloppenburg, 2014 (Jack [Department of Community and Environmental Sociology at the University of Wisconsin-Madison. Founder of the Open Source Seed Initiative.] “Re-Purposing the Master’s Tools: The Open Source Seed Initiative and the Struggle for Seed Sovereignty.” The Journal of Peasant Studies 41:6 (2014). DOI: 10.1080/03066150.2013.875897)

Although a great deal of attention has been focused on Monsanto for its dogged pursuit of farmers allegedly violating contracts or infringing its patents, many more companies are actually deeply but less visibly involved in global enforcement of the privileges to which IPR and contract law entitle them. The February 2013 issue of the trade journal Seed World carries full-page advertisements from each of two companies – Agro Protection USA Inc., and Seed Technology Education Program – which offer their services for ensuring grower ‘compliance’ with IPR requirements. Rather than outsource such enquiries, some companies have banded together to encourage farmers to inform on one another. The Farmers Yield Initiative (FYI) is a coalition of 37 private and public partners which ‘has the collective goal of advancing wheat research, education, seed certification, and the enforcement of intellectual property rights under the Plant Variety Protection Act (PVP) and patent laws’ (Farmers Yield Initiative 2013). The FYI website provides a link to ‘Submit a Tip’ via snail-mail, email or a ‘toll free number’ which (at least when I called it) connects to a private law office in Arkansas. Although FYI may appear to be an example of typically American excess, the Anti-Infringement Bureau for Intellectual Property Rights on Plant Material (AIB) – a group of 14 European and Japanese seed companies, plus Monsanto – prominently places a large, red ‘Report Piracy Now!’ button on all of its web pages (Anti-Infringement Bureau 2013). Similar enforcement activities have emerged in Colombia and Brazil. What does give the American FYI project an especially Orwellian flavor is the participation of 14 public agencies: eight land grant universities, three state crop improvement associations, a university research foundation, a state seed department and the United States Department of Agriculture’s Plant Variety Protection Office. The active involvement of these institutions in so ethically problematic an initiative is an indication of how powerful the chronic debilitating pressures on public plant breeding have been. Foremost among these has been a long-term decline in federal and state funding for public agricultural science generally and for classical plant breeding in particular. Public institutions have been powerfully attracted to contractual relationships with industry in order to replace diminishing resources, and public plant breeders have often found it necessary to depend on royalty-bearing germplasm releases to maintain their programs. Closer financial and intellectual ties to a concentrated commercial seed sector compound historic pressures for public researchers to move away from the production of finished cultivars in favor of basic research and germplasm enhancement that complements rather than competes with private work (Coffman et al. 2007).

#### Four principals of Seed Sovereignty.

Kloppenburg, 2014 (Jack [Department of Community and Environmental Sociology at the University of Wisconsin-Madison. Founder of the Open Source Seed Initiative.] “Re-Purposing the Master’s Tools: The Open Source Seed Initiative and the Struggle for Seed Sovereignty.” The Journal of Peasant Studies 41:6 (2014). DOI: 10.1080/03066150.2013.875897)

From a review of Navdanya and LVC materials, I distill four principal and constitutive dimensions of seed sovereignty:

The right to save and replant seed. The irreducible monad of what LVC (2011) describes as ‘a war for control over seeds’ is the right to save and replant seed. It is precisely this circuit that capital seeks to sunder using both technical and legal tools. The ur-principle of seed sovereignty is that farmers ‘must be autonomous in terms of seed’ (LVC 2013b). From this core commitment flow a number of linked propositions. The right to share seed. Following closely on the right to save and replant one’s own seeds is the right to share those seeds with others and to receive seeds from others. It is on this foundation of open, reciprocal exchange that crop genetic diversity has, for millennia, been maintained and increased. While it is fundamental that farmer-to farmer exchange should be unimpeded, there is also a clear sense that plant genetic resources are a ‘treasure that we farmers generously place at the service of humanity’ at large (LVC 2011). Preserving the shared access of the global community to these materials requires the ‘safeguarding of commons against privatization’ (LVC 2013c), or their treatment as a ‘public good’ (Shiva 2012a, 2012b). But the various and contested meanings of ‘commons’ and ‘public good’ are never engaged and a framework for sharing beyond the farm is not explored. The right to use seed to breed new varieties. The right to save, replant and share seed is linked to the capacity of farmers to generate new cultivars adapted to their own production system. To the extent that farmer breeders respond – as they must – to the pest, disease and agronomic challenges posed by a rapidly changing ecosphere, they will be developing genetic material of significant utility for a necessary shift to a more resilient, sustainable agriculture. ‘We will continue to share seeds knowing that our knowledge, our science, our practice as guardians of seed diversity are crucial to adapting to climate change’ (LVC 2013c). The right to participate in shaping policies for seed. The foregoing rights to save, replant, share and breed are precisely the activities that UPOV, PVPA, ‘bag tag’ licenses and utility patents are intended to abridge. As manifestations of a legal superstructure, reform or repeal of such arrangements must be undertaken in the political realm. Accordingly, Shiva and her colleagues propose a ‘Law of the seed’ (Shiva et al. 2013), though less as a serious attempt to formulate a concrete regulation than as a discursive device to focus attention on policy options. In its ‘Bali seed declaration,’ LVC demands the ‘enshrining in the laws of each country and at the global level the recognition of the inalienable rights of peasant and family farmers to conserve, use, exchange, sell and protect their seeds’ (LVC 2013a). No less than ‘food sovereignty’, ‘seed sovereignty’ is to be achieved through democratic participation and legislative action.

#### The movement for seed sovereignty must be based in opposition to Intellectual Property Rights.

Kloppenburg, 2014 (Jack [Department of Community and Environmental Sociology at the University of Wisconsin-Madison. Founder of the Open Source Seed Initiative.] “Re-Purposing the Master’s Tools: The Open Source Seed Initiative and the Struggle for Seed Sovereignty.” The Journal of Peasant Studies 41:6 (2014). DOI: 10.1080/03066150.2013.875897)

Opposition to intellectual property rights. The leading and most efficacious modality for corporate appropriation of the seed is the imposition of IPR. The effects of IPR mechanisms have been so severe that there is no tolerance for them in any configuration: ‘industrial property over seeds, including patents and plant variety certificates are but different forms of theft…All forms of patents; plant variety protection and its royalties on farm-produced seeds; as well as other forms of industrial property must be banned’ (LVC 2011). This uncompromising attitude toward IPRs often given an epistemological justification that carries ethical weight: ‘We oppose intellectual property over any form of life. We want to elevate to a universal principle the fact that genes, as the essence of life, cannot be owned’ (LVC 2001, 49); and ‘patents on seeds are ethically wrong because seeds are life forms’ (Shiva et al. 2013, 5).

### Difficult to Reverse

#### The revocation of improperly granted patents can be incredibly difficult, and is often beyond the means of those injured by improperly granted patents. Yellow Enola beans prove.

Vivas-Eugui 2012 [David (Innovation Policy Advisory for the International Centre for Trade and Sustainable Development {ICTSD}; Geneva, Switzerland) “Bridging the Gap on Intellectual Property and Genetic Resources in WIPO’s Intergovernmental Committee (IGC)” ICTSD Issue Paper No. 34 (2012): <http://www.ictsd.org/downloads/2012/02/bridging-the-gap-on-intellectual-property-and-genetic-resources-in-wipos-intergovernmental-committee-igc.pdf>]

In some cases and jurisdictions, revocation of patents due to lack of the fulfilment of patentability criteria has occurred. A recent example is the nullification of a patent on the yellow Enola bean (US Patent 5’894’079) by the US Court of Appeals (2009) on the grounds that the patent did not fulfil the criterion of non-obviousness. However, this only occurred after more than 10 years of litigation that was financed and supported by the International Centre for Tropical Agriculture. Since in this case the litigation focused on whether the patent fulfilled the patentability criteria, important questions, such as whether the patent applicant had authorization or an access contract/material transfer agreement could not be raised. During the period of litigation, the holder of the patent maintained a monopoly, which allowed him to exert his power over farmers and bean importers and exporters through countless lawsuits, threats and customs inspections. And despite these obvious abuses resulting in significant losses for farmers, there was no compensation. This type of situation shows that revocation in foreign jurisdictions can occur but only when effective action is taken by relevant stakeholders, placing the burden on those that consider the current level of patent examination and information available in the hands of examiners to be insufficient. Revocation actions also tend to be very expensive and not all actors or countries can undertake it. That is why invalidation or revocation actions initiated have been limited

#### Globalization massively complicates the ability to determine the root of GR. The “TAM” mild habanero pepper proves.

Vivas-Eugui 2012 [David (Innovation Policy Advisory for the International Centre for Trade and Sustainable Development {ICTSD}; Geneva, Switzerland) “Bridging the Gap on Intellectual Property and Genetic Resources in WIPO’s Intergovernmental Committee (IGC)” ICTSD Issue Paper No. 34 (2012): <http://www.ictsd.org/downloads/2012/02/bridging-the-gap-on-intellectual-property-and-genetic-resources-in-wipos-intergovernmental-committee-igc.pdf>]

A recent case of potential biopiracy and/or misappropriation has been identified in relation to the US Plant Variety Protection Office’s issuing a certificate (number 200400329) to the Texas Agricultural Experiment Station, part of Texas A&M University (TAM), for the ‘TAM Mild Habanero Pepper’ in 2007. The main biopiracy concern in this case is that the pepper (Capsicum chinense) cultivar was bred from a cross between an orange habanero pepper from the Yucatán Peninsula and a pepper from a US Department of Agriculture (USDA) gene bank (PI 543188) collected from Bolivia. Due to the mildness of the tam mild habanero pepper, the breeder has indicated their excitement about the possibility of selling them to salsa companies and as a fresh product at USD 3-4 per pound; while the comparable jalapenos peppers fetch around 50 cents per pound. Despite tampering in Texan laboratories, much of the uniqueness of this mild habanero can likely be put down to the variety collected in Bolivia. There are long lists of documenting and archaeological evidence that indicate the extent of breeding and use of cultivars of the Capsicum chinense species, including the habanero pepper in South and Central America since 2000 BC. The US Genetic Resources Information Network database record indicates that the original variety is ‘not piquant’ and that it is ‘said to be grown locally’ in Bolivia. A USDA official purchased the original variety from a Brazilian vendor in the Cobija market of Nicolas Suarez Province (Pando Department), which borders Brazil, on 13 November 1988. The plant material was then transferred to the USDA Plant Genetic Resources Conservation Unit in Georgia where the Texan breeders appear to have obtained the germplasm (PI 543188). This case raises concerns over how some germplasm has been collected, stocked and distributed without the existence of authorization from the country of origin, especially by institutions that should be fully aware of rights over those materials and international process and regulations on the matter. As of yet there has not been national or international action but the Permanent Mission of Plurinational State Bolivia to the UN in Geneva has been notified of the case and an investigation of relevant facts seems to be underway.

## Open Source: Dual Use Strategy

#### The evolution of open source from technology into genetic material allows for a “protected commons” which ends Intellectual Property protections by constructing a permanent commons—in which access is only governed by ones decision to participate.

Kloppenburg, 2014 (Jack [Department of Community and Environmental Sociology at the University of Wisconsin-Madison. Founder of the Open Source Seed Initiative.] “Re-Purposing the Master’s Tools: The Open Source Seed Initiative and the Struggle for Seed Sovereignty.” The Journal of Peasant Studies 41:6 (2014). DOI: 10.1080/03066150.2013.875897)

A ‘protected commons’, as Richard Jefferson (2006, 23) has so aptly phrased it, is precisely what an open source approach is designed to create. Frustrated by expanding constraints on their ability to add to, modify and share as freely as seemed personally and socially desirable, individual software developers have sought ways to create space in which they could develop content and code that could be liberally exchanged and built upon by others, but not appropriated and privatized by corporations. As Richard Stallman so memorably explains, ‘“free software” is a matter of liberty, not price. To understand the concept, you should think of “free” as in “free speech”, not as in “free beer”’ (Stallman 2002, 43). The right to derivative use is the core of free and open source software (but note that Stallman refuses to accept ‘open source’ as an adequate descriptor since it does not explicitly reference ‘freedom’). The tool for achieving this freedom of derivative use is a license, a form of contract. Open source software is copyrighted and then made available under a license that permits further modification and distribution as long as the modified software is distributed under the same license. This arrangement produces a ‘viral’ effect that, critically, enforces continued sharing as the program and any derivatives and modifications are disseminated. Also critically, the virality of the license also prevents appropriation by companies that would make modifications for proprietary purposes since any software building on the licensed code is required by the license to be openly accessible. This feature – called ‘copyleft’ – is what distinguishes ‘open source’ from mere ‘open innovation’. Thus, software developed under an open source license is released not into an open innovation/open access commons, but into a ‘protected commons’ populated by those who agree to share but effectively inaccessible to those who will not. In this way ‘copyright or patent rights are exercised to share and socialize intellectual property – counter to the very meaning of the exclusivity that characterizes it’ (Dusollier 2007, 1394). That is, the tools of the master are re-purposed in a way that the master did not intend and which actively subverts the master’s hegemony.

#### An open-source approach to the life sciences opens the possibility of interdisciplinary cooperation within the sciences.

Deibel 2014 [Eric (Professor of Biotechnology at Delft University of Technology, The Netherlands; Institute Francillen Recherche, Innovation Societe (IFRIS) Paris, France) “Open Genetic Code: On Open Source in the Life Sciences” *Life Sciences, Society and Policy* 10.2 (2014): http://www.lsspjournal.com/content/10/1/2)

The availability of the information is integral to the interaction of researchers with a wide range of datasets being used in the different sub-disciplines of the life sciences. This includes many examples of open source projects with users around the world like the the bio-versions of programming languages like are bio- java, bio-perl, bio-spice, bio-harvester and bio-lisp. Each of these has its own voluntary or public science support communities like the Open Bioinformatics Foundation. Elsewhere there are numerous projects in bio-informatics that aim for a wide range of open source software tools for the analysis of data. For example there is Bio-SPICE a software tool set that is specially designed for research into the modeling and simulation of ‘spatio-temporal processes in living cells’. Its website describes Bio-SPICE by writing: “Bio-SPICE, an open source framework and software tool-set for Systems Biology”f. Finally, these programs illustrate the significance of the ability to rewrite software programs for asking novel biological questions, which is necessary in many different kinds of experiments. The point is therefore not only that there are some software programs in the life sciences that are open source whereas most are not; open source is integral to forms of experimentation that depends on constant coordination of a 'multiplicity of techniques coordinated on an elevated surface (the screen)' (see Mackenzie 2010: 189). Crucially, the introduction of open source in the life sciences is therefore not a feature of patenting or the proliferation of exclusivity. This is an alternative that takes its shape at the intersection with informatics and as a necessary part of questioning the biological, which is too limited in the case of preprogrammed homology searches of databases or software programs that already make information available in the public domain. This difference is significant: it implies a changing relationship between 'openness' and exclusivity that runs throughout the the life sciences and that requires increasingly wide variety of researchers with highly specialized knowledge and different levels of commitment to work together.

## Negative

#### I negate the resolution: A just government ought to abolish intellectual property protections for genetic resources.

#### In this debate, I value autonomy. Autonomy theory demands the provision of community IPR to indigenous groups.

Stenson and Gray 1999 [Anthony J. and Tim S. (Political Theorists working in the Department of Politics at the University of Newcastle upon Tyne, England) “An Autonomy-Based Justification for intellectual Property Rights of Indigenous Communities.” Environmental Ethics 21 (Summer 1999): 177-190]

In Will Kymlicka’s Liberalism, Community and Culture,18 we find a fully developed theory of autonomy that encompasses the idea expressed by Greaves. According to Kymlicka, cultural communities are entitled to special protection under the law when their integrity is threatened by outside forces. This is not to say that communities are inherently valuable and entitled to protection in themselves; rather, Kymlicka grounds his theory in individual autonomy. Respect for the equal rights of individuals to the resources necessary to form their own conception of the good life entails that we guarantee the access to the cultural framework which is a precondition of forming such a conception. This means that under certain circumstances, full respect for individuals requires legal protection of their culture. It is our contention that community IPRs in their plant genetic resources constitutes one of the special rights necessary under Kymlicka’s proposals.

#### Contention One: Refusals to respect alternative forms of indigenous alternative property systems is part and parcel of colonialization.

Halbert 2005 [Debora J. (Associate Professor of Political Science at Otterbein College, USA) Resisting Intellectual Property. London and New York: Routledge, 2005]

This division, between the “civilized” and “uncivilized,” formed the foundation of contemporary thought about traditional knowledge. In 1957, the International Labor Organization (ILO) adopted the Convention Concerning the Protection and Integration of Indigenous and Other Tribal and SemiTribal Populations in Independent Countries in which they claimed Indigenous peoples could be protected only if they assimilated into larger national groups and began to engage in more civilized forms of expression and innovation.20 Such an attitude reproduces a racist and imperialist discourse of colonization without recognizing the value of diverse cultures, or the possible value of alternative knowledge systems. The underlying assumption of Western superiority reduces traditional lifestyles to the “natural” condition of Indigenous peoples while ignoring the centuries of innovation that are central to these ways of life. Constructing the lives of Indigenous peoples as “natural” made it much more likely that traditional knowledge will be appropriated without attribution, much like the raw “natural” materials of local areas have been appropriated in the past. Lumping Indigenous peoples with the natural environment, as the Hawai’i memorial suggests, puts these peoples in a natural, not a civilized state, and as such their knowledge represents the “common heritage of humankind” ready for productive use. It places “traditional” knowledge in the public domain. According to the dominant Western agenda that is constantly searching for new resources to consume, this knowledge, much like uncultivated land, only gains value through the labor of the person who privatizes it and transforms it into a commercial product that can be consumed.21 By ignoring the possibility of alternative property systems governing the use and transference of traditional knowledge and culture, Western agents reproduce the discourse of colonization today. This time, however, they go beyond the raw materials of natural resources and human bodies (as labor), and exert this discourse over human knowledge and, as the last chapter illustrates, genetic code.

#### Contention Two: The knowledge of indigenous peoples has been used by corporations for profit. Granting IP rights to indigenous communities would be one way to provide protection and compensation for these actions.

Stenson and Gray 1999 [Anthony J. and Tim S. (Political Theorists working in the Department of Politics at the University of Newcastle upon Tyne, England) “An Autonomy-Based Justification for intellectual Property Rights of Indigenous Communities.” Environmental Ethics 21 (Summer 1999): 177-190]

Several writers have claimed that indigenous communities should be granted intellectual property rights (IPRs) to their genetic plant resources (i.e., their plant varieties and their botanical knowledge). Generally such writers believe that without IPRs, such communities will continue to be vulnerable to transnational corporations intent on developing their genetic resources into genetically modified agricultural and medical products for which they obtain highly profitable patents. The germplasm from indigenous peoples’ traditional crop varieties has already contributed enormously to the prosperity of economies of developed nations; yet, little or no compensation has been paid to indigenous communities for its removal. For example, the West African maize, which contains the only known genetic resistance to southern corn leaf blight, was used to breed resistance to the blight in the United States, and it stopped a disease that cost U.S. agriculture one billion dollars in the 1970s.1 A similar fate is likely to befall the ethnobotanical knowledge of indigenous peoples because of its value for pharmaceutical companies in developing lucrative medical products. For example, a Peruvian medicinal tree whose powers were known to local communities, is now being used to manufacture an anti-AIDS drug.2 As Huft points out, the idea that one way of protecting indigenous and farming communities from outside interests seeking to profit from their knowledge is to establish a form of IPRs, originated in the 1980s among agricultural scientists, anthropologists and ”cultural advocates” in the developed world, but “Only in the last five years have the twin ideas of compensation and intellectual property rights begun to be discussed by people in developing countries, in particular among governmental officials.”3

#### Contention Three: IPR for Native Tribes are justified as a matter of cultural autonomy. 3 reasons.

Stenson and Gray 1999 [Anthony J. and Tim S. (Political Theorists working in the Department of Politics at the University of Newcastle upon Tyne, England) “An Autonomy-Based Justification for intellectual Property Rights of Indigenous Communities.” Environmental Ethics 21 (Summer 1999): 177-190]

Applying Kymlicka’s theory of autonomy to the issue of community IPRs in plant genetic resources and botanical knowledge, we argue that these IPRs are justified as special rights necessary to ensure that members of traditional communities are guaranteed equal rights with members of other societies to live their lives in secure cultural environments. Our argument has three steps; first, that its cultural creations are an integral part of a community’s identity, and therefore demand the protection of IPRs; second, that plant genetic resources and botanical knowledge are cultural creations; and third, that the IPRs to be claimed for plant genetic resources and botanical knowledge include the rights in perpetuity of possession, use, management, and rent but not the rights to alienate or destroy.

### IPR protections can be Transformed

#### The use of intellectual property to protect indigenous knowledges can be an interesting nexus to transform intellectual property protections.

Halbert 2005 [Debora J. (Associate Professor of Political Science at Otterbein College, USA) Resisting Intellectual Property. London and New York: Routledge, 2005]

The controversy surrounding traditional knowledge and the intellectual property system is confusing and difficult to sort out.22 Claims rejecting the idea of intellectual property as yet another form of exploitation have been made by some seeking to protect the importance of traditional knowledge.23 At the same time, claims seeking protection of traditional knowledge, arts, crafts, and histories as intellectual property are being made. The differing opinions suggest an interesting disruption where perhaps a new understanding of the role of intellectual property might be reached. The discourse over traditional knowledge is laden with polemics on the nature of exploitation and the importance of intellectual property. It is an excellent example of the clash between intellectual property ideologues and those staking out a territory of resistance. The traditional knowledge debates are an example of what happens when the language of intellectual property is given full reign and is then turned against those who have imposed it – the problem emerges from an intellectual property system gone wild. As Michael Brown points out, concerns over the uses of traditional knowledge emerge in response to the last thirty years of privatization in the USA where a centralized and for-profit system of research replaced research done primarily by universities that continued to be part of the public domain. As the capitalist research paradigm supplanted the academic research paradigm it should come as no surprise that those who found themselves subject to research should begin to question why they should not see the benefits of that research. The result has been, in Brown’s words, a “goldrush atmosphere” on the part of researchers and “unrealistic expectations of gain.”24

### Autonomy Extensions

#### **Autonomy theory in the context of IPR.**

Stenson and Gray 1999 [Anthony J. and Tim S. (Political Theorists working in the Department of Politics at the University of Newcastle upon Tyne, England) “An Autonomy-Based Justification for intellectual Property Rights of Indigenous Communities.” Environmental Ethics 21 (Summer 1999): 177-190]

Having demonstrated that the entitlement theory is inadequate as a justification for community IPRs, we now turn to the autonomy theory, which we believe offers a more convincing justification for community IPRs. Autonomy theory suggests that, as Greaves puts it, “tribal peoples have only their culture to distinguish themselves from everyone else. Their culture gives them their identity and their sense of value as a people. Disseminating that culture to outsiders dilutes their sense of personhood.”17 We believe this idea opens up a new and promising avenue of thinking about IPRs for communities, taking us away from the flawed entitlement argument. The great virtue of linking cultural integrity with personhood is that it leaves behind quasi-mystical notions of communities as real entities capable of laboring, and locates value solely in individuals. Cultural communities become valuable for their importance to individual lives and not in themselves.

#### Full recognition of autonomy demands the recognition of some claims to collective rights.

Stenson and Gray 1999 [Anthony J. and Tim S. (Political Theorists working in the Department of Politics at the University of Newcastle upon Tyne, England) “An Autonomy-Based Justification for intellectual Property Rights of Indigenous Communities.” Environmental Ethics 21 (Summer 1999): 177-190]

Kymlicka argues that liberalism is not inimical to collective cultural rights: indeed, in certain cases it requires such rights. This is because of the individual’s fundamentally “cultural” character: one precondition for the development of autonomy of the individual—and only an autonomous life is a free one—is a rich cultural background. Only by living in a cultural community can people make informed, valuable choices about how to live their own lives: Liberals should be concerned with the fate of cultural structures, not because they have some moral status of their own, but because it’s only through having a rich and secure cultural structure that people can become aware, in a vivid way, of the options available to them, and intelligently examine their value.19 All individuals have a right to resources necessary to develop their inner ability to make good choices about which life styles are valuable to lead. A secure cultural background is one of those resources; each individual is entitled to grow up in a secure culture that gives their lives meaning. Liberal equality, therefore, implies that we ought to preserve cultures, and if doing so requires the institution of special cultural rights, it is what ought to be provided. Such rights, however, are only justified when a culture is in danger of disintegration from outside forces. They are justified because they are aimed at one thing only—the equality, in terms of personal autonomy, of cultural members with the rest of society. Members of the majority culture grow up and live their lives in a secure cultural environment: this culture is not under threat of extinction or dilution. In a liberal state dominated by “colorblind” policies that inadvertently work to damage minority cultural communities, the members of such communities are denied the security enjoyed by members of the wider culture. In Greaves’ terms, their “personhood” is diluted. This is a crucial inequality that cannot be ignored by a liberal state. Special cultural rights are necessary in order that the members of minority cultures have the opportunity of developing freely chosen life-plans commensurate with the shared understanding of their culture; an opportunity which is equal to the opportunities of the members of the majority culture.

#### Cultural Creations are key to community.

Stenson and Gray 1999 [Anthony J. and Tim S. (Political Theorists working in the Department of Politics at the University of Newcastle upon Tyne, England) “An Autonomy-Based Justification for intellectual Property Rights of Indigenous Communities.” Environmental Ethics 21 (Summer 1999): 177-190]

First, we argue that cultural creations—such as works of art, sacred icons, types of clothing, and living materials—have a special significance for the individual members of the cultural communities out of which they arise. For example, if cultural creations are lost, or are made use of in an inappropriate manner by nonmembers, the damage can be keenly felt. As Greaves notes, “When a Hopi man or woman walks down a Tucson street and sees the mythic symbols, handed down from the elders, adorning a tourist’s jogging shorts, culture dies a little—and with it, what makes that person a Hopi.”20 Indeed, cultural creations can often be so central to the community that we can talk of cultural integrity being compromised wherever control over them is lost and outsiders use or abuse them with impunity. The damage here goes deeper than mere personal offence; where cultural integrity is weakened, so is the ability of future individual members to form meaningful conceptions of their own good. Accordingly, communities are justified in claiming IPRs in their cultural creations—not purely because they have created these artifacts (the labor theory of property rights cannot coherently be applied to cultural communities, as we demonstrated in sec. 3), but because IPRs are essential to protect individual members’ capacity to lead meaningful lives.

#### Plant genetic resources are an example of cultural creations.

Stenson and Gray 1999 [Anthony J. and Tim S. (Political Theorists working in the Department of Politics at the University of Newcastle upon Tyne, England) “An Autonomy-Based Justification for intellectual Property Rights of Indigenous Communities.” Environmental Ethics 21 (Summer 1999): 177-190]

Second, we claim that plant genetic resources and botanical knowledge fall into the category of cultural creations. To some, this categorization might seem strange; cultural integrity might depend on the protection of religious imagery and works of folk art, but how can cultural integrity depend on the legal protection of a plant? Our answer is that it is a highly selective view of culture that restricts it to arts and crafts. Culture is more than that, and embraces the everyday activities that people engage in, including organizing their working day and growing food. Indeed, it may be that the apparently mundane activity of growing food is the most “cultural” activity of all, deeply connected to beliefs about the work and the community’s relationship to it. The Hopi Indians of southwestern United States, for example, believe their unique blue-colored corn to be a sacred gift from the “Creator” to them specifically.21 When outsiders use this corn in a crass, commercial way, the Hopi’s deepest self-understandings are trivialized.

#### Indigenous needs for IP protections are so profound, they should never expire.

Stenson and Gray 1999 [Anthony J. and Tim S. (Political Theorists working in the Department of Politics at the University of Newcastle upon Tyne, England) “An Autonomy-Based Justification for intellectual Property Rights of Indigenous Communities.” Environmental Ethics 21 (Summer 1999): 177-190]

The rights of possession, use, and management are obviously justified by the autonomy theory. Since the whole point of that theory is to enable communities to control the outside use of the things that are important to their integrity, the right of possession entailing the exclusion of non-members is the most important right. Rights of use and management clearly follow the right of possession: there is little point in possessing something unless one has the right to use and manage it. Leaving aside for a moment the right to receive an income, the absence of term is vital to community IPRs. Unlike most other property rights, IPRs usually include a limit on their duration; in the United Kingdom, for example, patents run for seventeen years, while copyrights last as long as the author lives, plus another fifty years. There are good reasons for each of these, but a time limit is not a necessary corollary of IPRs per se. Clearly, in the case of community IPRs, a time limit would defeat their purpose, which is to maintain communities as going concerns in perpetuity. Community IPRs must, therefore, enjoy the absence of term shared by most ordinary property rights.