# Greenhill R3 Aff vs Westwood AG

# 1AC

### Biopiracy

#### The continual settler drive to secure its own health has resulted in a system of global biopiracy wherein western transnational corporations have targeted traditional medicine used by tribes in places like Northeast India, establishing patents on biological resources and indigenous medicine for their own profit. Biopiracy renders these Indigenous knowledges and communities as only sites for extraction of knowledge, wealth, and resources, which has spread to the global south and is only increasing in speed due to the genomics revolution.

Bhattacharya 14 [Sayan Battacharya, Department of Environmental Studies at Rabindra Bharati University in Kolkata, India], “Bioprospecting, biopiracy and food security in India: The emerging sides of neoliberalism”, International Letters of Social and Humanistic Sciences, SciPress Ltd, pg. 49-54, 2014 //SLC PK

2. BIODIVERSITY, BIOPROSPECTING AND BIOPIRACY

Historically there has been prolific scientific interest in the lifestyles, knowledge, cultures, histories, and worldviews of indigenous peoples. Rural communities depend on traditional knowledge for food, health and agriculture. This traditional knowledge forms the basic cultural identity for them, contributing to social cohesiveness and thereby reducing vulnerability and poverty. 80 % of the world’s populations, mostly the ‘undeveloped’ regions, still rely on the indigenous medicinal knowledge of local plants for their medical needs.3 In India, around 70 % of the population directly depends on land-based occupations, forests, wetlands and marine habitats for ecological livelihoods and cultural sustenance.4

Over 7500 species of plants and several hundred animal species and also metals and minerals are utilized by the folk tradition in India. The custodians and carriers of these traditions are tribal as well as non-tribals, including house wives and welders, thousand of herbal healers, bone setter, vishvaidyas, birth attendants, potters, gold-smiths, black smiths, barbers and even wandering monks.

According to ASI, there are 4635 ethnic communities in India. In principle each of these communities could be having their own oral medical traditions that have been evolving across time and space.3 Traditional knowledge does not only include only the recorded knowledge of plants for medicinal use but also the oral knowledge that has been passed on from generations to generations. In India there have been a lot of cases where the indigenous knowledge has been tried to be taken away. Due to its easy access, it has been prone to piracy. According to UNDP Human Development Report 1999: “The South is the source of 90 per cent of the world’s biological wealth – India, for example, has 81,000 species of fauna and 47,000 of flora, including 15,000 plant varieties unique to the country – and yet industrial countries hold 97 per cent of all patents worldwide and are driving the rush to patent plant genetic resources.” 5

Today, the genomics revolution is fueling a new wave of scientific research in the form of bioprospecting, and it is impacting the lives of indigenous peoples around the world. Bioprospecting involves searching for, collecting, and deriving genetic materials from biodiversity samples that can be used in commercialized pharmaceutical, agricultural, industrial, or chemical processing end products.6

The megadiversity countries with 60-70 % of the world`s known biological diversity have significant stake for harnessing the potential of biotechnology and bioprospecting for achieving sustainable economic development.1 The Convention on Biological Diversity (CBD), the first international treaty provides opportunities to biodiversity rich countries to realize benefits arising out of the utilization of their bioresources. The CBD mentioned that national governments have authority to determine access to their genetic resources, and calls on governments to provide for conservation, sustainable use and equitable sharing of benefits from commercial use of those resources.

Between 4 and 40 million biological species are still unknown in the world. New species are being discovered even today. In the last few decades, biotechnology has developed and played a vital role in the development of the agricultural, pharmaceutical and medical industries. As the importance of the biotechnology industry increases, many useful biotechnological inventions can earn their inventors millions of dollars.

The real pirates are those developed countries, especially the US, who benefited and prospered from the plundering of natural resources from the developing and less developed countries without paying any royalty to the source countries at all. Between 25-50 % of current prescription pharmaceuticals come from plants, either directly or through modifications by biochemical methods, and the value of drugs to the U.S. pharmaceutical industry coming from plant species is estimated at over 30 billion USD per year.2 A multinational company or individual who wishes to develop a new product often makes use of the traditional knowledge of local people in deciding upon a plant, animal or other biological source to study.

After the successful production of commercially useful products from those organisms, the company applies for a patent in its own name on those products. In most cases, the inventor not even acknowledges in his patent application that his product was derived from information provided by a local community. Biopiracy therefore can be described as the unjustified extraction of the environmental heritage and traditional knowledge from various regions of the earth for economic exploitation and industrial monopolization.7

Daniel F. Robinson distinguished between three different categories of biopiracy:

“Patent-based biopiracy: The patenting of (often spurious) inventions based on biological resources and/or traditional knowledge that are extracted without adequate authorization and benefit-sharing from other (usually developing) countries, indigenous or local communities.

Non-patent biopiracy: Other intellectual property control (through plant-variety protection or deceptive trademarks) based on biological resources and/or traditional knowledge that have been extracted without adequate authorization and benefit-sharing from other (usually developing) countries, indigenous or local communities.

Misappropriation: The unauthorized extraction of biological resources and/or traditional knowledge from other (usually developing) countries, indigenous or local communities, without adequate benefit-sharing.” 8

2. 1. Global emergence of Biopiracy

A recent report of United Nations Development Programme (UNDP) mentioned that “if unpaid royalty payments were being made to developing countries and indigenous peoples for the plant varieties and local knowledge used by multinational food and drug companies, those providers would earn approximately 5.4 billion USD per year”.2 Examples of countries not receiving their full share of these royalties include Tibet, India, Sri Lanka, South Africa, Samoa, Madagascar, Ecuador, Mexico and the Philippines. Since the 1980s, individual inventors or corporations in some countries, such as the United States, Japan, and some European countries, successfully lobbied government to permit exclusive rights to certain biological materials they developed through patenting. They were given exclusive rights to plant and/or reproduce and market them and have the right to prohibit others from planting, reproducing and selling the material provided.

2. 2. Biopiracy in India: few examples

In the recent past, there have been several cases of biopiracy of traditional knowledge from India. First it was the patent on wound healing properties of haldi (turmeric).9 Curcuma longa, a type of turmeric, is an Indian herb that has been used as treatment for sprains, inflammatory conditions and wounds. The orange coloured root is native to the subcontinent and South East Asia, and for thousands of years has been a one of the major components of Ayurvedic medicine. In 1995, two US scientists from the University of Mississippi were granted US patent 5,401,504 on the use of turmeric. The scientists claimed that turmeric could heal wounds and claiming this to be novel. They have mentioned in their patent application that turmeric has long been used in India as a traditional medicine for treatment of various sprains and inflammatory conditions. But they claimed that there was no research on the use of turmeric as a healing agent for external wounds. The Indian government vigorously challenged the patent and provided numerous research papers predating the patent, proving that turmeric has long been used in India to heal wounds. As a result, the US Patent and Trademark office rejected all patent claims related to turmeric.10

The Neem tree case is another significant example of biopiracy of Indian medicinal plant. Azadirachtin is one of many active compounds present in bark, leaves, flowers and seeds of the Neem tree or Azadirachta indica. The remarkable properties of this compound have been utilized in India from ancient times in the form of extracts of various kinds produced by Indian farmers and small industrial firms in medicine and agriculture. Use of neem had been described in ancient Indian texts written over 2,000 years ago as an air purifier and effective medicine for almost all types of human and animal diseases because of its insect and pest repellant properties.9,10 A US timber importer studied the curing properties of neem and began importing neem seed to his company headquarter in Wisconsin since 1971. He successfully extracted a pesticidal agent from neem extract called Margosan-O. In 1985, the bio-pesticide derived from neem tree received clearance for the product from the US Environmental Protection Agency (EPA). The patent for the product was sold to the multinational chemical corporation, W.R. Grace after 3 years. Since then, many US and Japanese firms gained patents on formulae for stable neem-based solutions and emulsions and other products. The W.R.Grace approached several Indian manufacturers and industries to purchase their technology. The company ultimately managed to start a joint venture with a firm called P.J. Margo Pvt. Ltd to set up a plant in India. The plant processes up to 20 tonnes of seed a day and also established a network of neem seed suppliers in order to guarantee a constant supply of the seeds at a cheap price. In May 2000, a coalition of groups successfully overturned the patent held by the US company, WR Grace and the US Department of Agriculture over the Indian neem tree.10

Basmati is produced largely in Punjab, Western India and in Pakistan. Basmati rice has been one of the fastest growing export items from India in recent times. It is evident that Basmati has been grown for centuries in the subcontinent. After centuries of observation, experimentation and selection, the Indian farmers have developed numerous varieties of the rice to meet various ecological conditions, cooking needs and taste.9 On 2 September 1997, Texasbased RiceTec Inc. was granted patent number 5663484 for a new plant variety that is a cross between American long-grain rice and Basmati rice. RiceTec claimed that the new varieties have the same or better characteristics as the original Basmati rice and can be successfully grown in specified geographical areas in North America. The patent covers the genetic lines of the basmati and includes genes form the varieties developed by farmers. RiceTec has already been trading rice under brand names such as Kasmati, Texmati and Jasmati. RiceTec’s strain possesses the same qualities and characteristics of the Indian traditional varieties of Basmati. On the question of consumer deception, RiceTec clearly labels its product as ‘American type Basmati rice’.10 No case has been filed in the US so far by any interested party from the Indian subcontinent regarding this serious issue. By mid 2000, however, the Indian government decided to challenge some of the claims of the RiceTec patent. World’s largest importer of Basmati rice, Saudi Arabia and the UK, recognized that Basmati rice is unique to Northern India and Pakistan. Furthermore, the Agricultural and Processed Food Export Development Authority and Trade Mark Watch Agency of India have managed to win the Basmati patent case in at least 15 countries (including UK, Australia, France, Spain, Chile and the UAE). In the Basmati case, RiceTec’s action would really become a threat to the sales of Basmati rice from India, and could affect the economic conditions of the rice farmers in India.

Karela (bitter gourd), Jamun (blackberry), Gumar and Brinjal, for instance, are commonly known in India for their anti diabetic characteristics. Their usees are so common in India that there is no novelty involved while using them for curbing diabetes. A patent was, however, obtained in the U.S. by three NRIs for their utilization as a cure for diabetes.11

North East India is very rich in flora especially in cultivation of medicinal plants by the tribes. Resource-rich Nagaland is plagued by bio-piracy with rare medicinal herbs, orchids and other endangered species being smuggled out of the state. These plants are being borne off by pharmaceutical companies for commercial benefits. Ginseng, taxus baccata and cephallu taxus and paris cordifolia have medicinal properties and are often smuggled to Myanmar.12

Some cases have been highlighted with a success story, but there are also numerous stories of deprivation in the context of biopiracy. Corporate patents usually do not recognize or compensate the indigenous people who are the main conservators of those resources. Indigenous communities, over the centuries, have identified and classified plants native to their lands and found their beneficial characteristics. But, the tribes do not have access to legal information that would protect their plants and cultural knowledge nor do they have the finances to obtain them.9 The profit incentive companies often overexploit the beneficial plant resources for commercial use, which ultimately result in the loss of forests and genetic material, crisis of land, plants and cultural knowledge of the indigenous communities.

2. 3. Biopiracy and food security

The stealing of biological resources and indigenous knowledge would affect food security, livelihood of indigenous people, and consumers’ choice. More than 70 % of our food supply is dependent on a small number of edible plant resources, mainly wheat, maize, rice, and potato, which are fundamental to food security. Patenting of these plants varieties will definitely pose threat to the consumers. The patenting of biological technology will encourage monopoly control of plant material by Western transnational corporations. Farmers will become dependent of on corporations for their input in agriculture, i.e. seeds, fertilizers, pesticides and herbicides. It has particularly troubling implications for the developing world as the farmers cannot afford to buy seed each year and traditionally set aside a portion of their harvest to plant in the next growing season. Moreover, with the introduction of the genetically modified crops and high yielding varieties, the local crop varieties are being lost and outcompeted.13 The farmer’s rights to choose the desired crops have become difficult to implement. The technology can execute a devastating effect on the economy and food security of the farmers in developing world and can eventually destroy the locally adapted, inexpensive traditional crop varieties.14 The entire process will eventually lead to the monopolization of trade, which is ultimately against the principle of free trade fostered by the World Trade Organization (WTO).

India’s agriculture being rich in bio-diversity has been always been an easy prey for big corporations engaging in agribusiness for the purpose of bio-piracy.15 Monsanto, for instance, tried to spread genetically modified brinjals in India in the form of Bt Brinjals in spite of the fact that India itself is a source of over 2500 different unique varieties of brinjals.16 Monsanto’s attempt of taking over the market was opposed by the public forcing the government to ban it for an indefinite period of time.16 But Monsanto is still stealing native crops, including brinjals, and quietly working on GM varieties of them in test fields, which is a clear violation of India's Biological Diversity Act 2002 (BDA). The farmer variety has been used by Monsanto in its breeding programs without taking prior permission from Indian farmers and without entering into any kind of benefit sharing agreement with them. This is not just grossly unethical; it is in violation of international agreements like the Convention on Biological Diversity (CBD) and the International Treaty on Plant Genetic Resources (ITPGR) which recognize the rights of the farming community over the genetic wealth used in agriculture.17

#### Western intellectual property rights protections are structurally opposed to traditional Indigenous medicines, causing continual cooption for modern pharmaceuticals while leaving the communities from which they’re derived in the dust.

Eiland 08 [Dr. Eiland received a doctorate in Oriental Archaeology from Oxford University and an LLM from the Munich Intellectual Property Law Center], “Patenting Traditional Medicine”, Nomos Verlagsgesellschaft mbH & Co. KG, pg. 7-10, 2008 //SLC PK

Traditional medicines (TM)1 can form the basis of modern pharmaceuticals. Depend- ing upon national laws, it is possible to protect TM with patents. For instance, a US patent can be issued that derived information or even genetic resources from the TM of another country. This has raised criticism from a number of different perspectives. Most notably there is a perceived conflict between traditional knowledge (TK) struc- tures and patent law. Some question if TM is even an intellectual property (IP) right. There are a number of proposals to protect TM using other forms of IP rights, such as geographical indications and trade secret law. These issues are far from settled, and can have strong political overtones. Before going further, however, TM will be con- sidered in the light of other IP rights.

TM has been a source for pharmaceuticals for a long time. Aspirin is a good example. The ancient Egyptians used willow leaves as an analgesic and anti-inflammatory drug. The Classical world was also familiar with the healing properties of this plant. Hippocrates (460 – 370 BC) recommended the use of extracted juice from the bark of the white willow to suppress pain and fever. It was only in 1828 that the extract of wil- low bark was purified. In 1859 the chemical structure was identified. The drug was mass produced shortly thereafter. Bayer registered the compound on 1 February 1899 under the name of Aspirin. The ‘a’ stood for acetyl, and the ‘spir’ for Spiraea ulmaria, the plant from which the drug had first been isolated. Today it is the most popular analgesic in the world, and new discoveries are ongoing.2 In the case of aspirin, the TK that helped researchers to find the active ingredient was thought at the time to be in the public domain. If aspirin were patented in recent decades, there would no doubt be litigation over who supplied the TK. Other examples of drugs derived from natural substances and that have been incorporated into mainstream medicine are morphine (1806), quinine (1823), atropine (1833) and digitalis.3 In 1982, it was estimated that about 50 % of all filled prescriptions in the US originated from drugs that were derived – one way or another – from natural substances. This generated US sales of about 20 billion.4 Another estimate found that 3/4 of the plants used in prescription drugs originally came to the attention of drug companies because of their use in TM.5 In 1995, the worldwide market value of TM derived pharmaceuticals was estimated to be $43 billon.6 While one could argue about the precise values, TM has significant pharmaceutical applications. Drug companies are interested in acquiring TM, both natural substances, as well as the knowledge about how to use them. In the past, such knowledge was regarded as free information. The assumption was that no one had a right to this information, especially because there usually needed to be a long process of development to make TM into a patentable drug. Modern conceptions of the issue leave little doubt that TM can be an IP right. Considering the large profits generated by modern drugs, there has been increasing pressure to pro- tect TM with patents. Several well-known cases of western companies patenting drugs based on TM has also raised concerns. Some advocates who don’t support the patent system but who do wish income to ‘trickle down’ to the communities who developed the TM suggest that an entirely new legal framework be established. Patents are appreciated by this group as unsuitable:

First, the invention is not dated, so that it is not possible to determine the critical date. As it would have been used for a long period of time, it would lack novelty. Also, the inventor is not determined, since it is knowledge that belongs to the who community. Patents are granted to individuals, or a small group of them, not to an undetermined group of people.7

The main question that emerges is feasibility. Are patents suitable for protecting TM and, if not, what are the alternatives?

The Controversy Bio-piracy is a term minted in the last decades to describe taking biological materials – including TM – and patenting them in the west.8 When this happens TK right holders allege a property right has been violated. The source of the information, as well as the material itself, is not acknowledged. No compensation is paid. When a patent is issued, it is not held by the inventor. The patent will prevent the holder of the TK from taking out a patent themselves. Despite the accusations, however, a patent is granted for an invention that may have little in common with TM as practiced by an indigenous community. Bio-piracy is a very political issue.

This highlights the so called north-south divide.9 The accusation is that wealthy nations in the north rely upon colonial era conceptions of property in order to gain access to TK, including TM, for free. TK is not usually protected using a system of written laws in southern countries. It may be controlled as collective property by trained practitioners (such as a Shaman).10 The fact that the legal systems may be different – they may be termed traditional legal systems – does not make them less valid. It does, however, make compliance difficult. This quickly leads into the issue of disclosing the origin of biological materials as a pre-requisite for patent protection. Indeed, without knowing the origin there can be no thought of benefit sharing.11 Yet from a ‘northern perspective’ these proposals could hamper research and lead to higher drug costs. On the other side, some have suggested that protection of medical knowledge, including drugs, with patents is fundamentally incorrect.12 While this subject captures media and public attention, the patent system is unlikely to be replaced any time soon.13 The real questions are how patents can be used to protect TM, and how patents based on the misappropriation of TM can be stopped. Some consideration will also be paid to other legal methods of protecting TM that have been proposed as alternatives to patents.

TM involves both the substance itself (assumed here to be botanical) as well as the practices used to prepare it for use. Both India and China14 have ancient medical traditions, but they use very different methods of protecting it. The TM of these two countries will be used as a lens to explore some of the issues involved in patenting. There are then two important divisions in the analysis. The first is the kind of protection provided in national legislation. The second issue is the kind of protection offered to TM of other countries in the west as well as in international agreements. America will receive special attention. Prior use or (unpublished) knowledge of an invention in a foreign country is no bar to obtaining a patent in America.15 This is clearly in order to encourage US business and industry, but according to critics, it has devastating effects on the TK of other nations.1

#### Thus, we affirm – the member nations of the World Trade Organization ought to end the use of intellectual property protections by non-Indigenous groups for medicines derived from Indigenous knowledge.

#### Indigenous peoples have made it clear— settler use of IPR is an active threat to traditional medicine which treats natives as an expense rather than a priority. Prefer Indigenous scholarship—conversations over IPR on traditional knowledge have actively and historically excluded native voices which ignores the material implications they have on the lives and livelihoods of natives.

IPCB et al. 06 [The IPCB is organized to assist indigenous peoples in the protection of their genetic resources, indigenous knowledge, cultural and human rights from the negative effects of biotechnology. Llamado de la Tierra is comprised of indigenous peoples throughout the world who are experienced in cultural and intellectual property policies and laws in the context of the indigenous struggle for de-colonisation and self-determination. The International Indian Treaty Council serves as an advocate for the human rights of Indigenous Peoples locally, nationally, and internationally.] “Joint Statement of the Indigenous Peoples Council on Biocolonialism (IPCB), Call of the Earth/Llamado de la Tierra (COE), & International Indian Treaty Council (IITC)”, International IP Policy News, 6-12-06, <https://www.ip-watch.org/2006/12/06/inside-views-indigenous-groups-tell-wipo-dont-patent-our-traditional-knowledge/> //SLC PK

Mr. Chairman, we have some general comments regarding document 10/5 on traditional knowledge. As we noted yesterday, TCEs cannot exist without TK, therefore, the comments we gave yesterday regarding TCE’s also apply to this agenda item. And in particular, we would like to reiterate that we qualify our comments on this document by the following understanding: our provision of comments on the Draft Objectives and Principles does not imply any ascension to the process or document as a whole. To be clear, it is entirely premature for our organizations to indicate a preference for a legally binding instrument based on this draft document.

Until the substantive provisions are entirely illuminated, it would be irresponsible of us to make such a commitment. Unfortunately, the Committee’s work to-date has been developed without the broad-based participation of Indigenous peoples. Until this process has much broader participation by Indigenous peoples, it would be inappropriate to endorse any standard-setting or legally binding instrument that would impact on all Indigenous peoples all around the world.

TK is a topic of utmost concern to Indigenous peoples because traditional knowledge, and more specifically, Indigenous knowledge, is all encompassing in that it represents the collective cultural heritage of our Peoples. IK is the foundation of Indigenous cultures, and therefore, any policy-related or standard-setting discussion about the protection of our knowledge poses significant implications to the lives and livelihoods of Indigenous peoples and are of critical concern.

Before discussing how the Committee can propose to protect TK, it is necessary to understand the different meanings of protection. Protection, from an intellectual property law perspective, means that the owner of a patent, a copyright, a trademark or some other IP has a legal right to exclude others from using or reproducing it. The IP forms of protection for intellectual creations and innovations are time limited, individualistic, monopolistic and exist for economic benefit.

By contrast, when most Indigenous peoples speak of protecting Indigenous knowledge, we mean it in a much broader sense that includes safeguarding its continued existence and development and protecting the whole social, economic, cultural and spiritual context of that knowledge. Indigenous peoples are seeking mechanisms that protect the holistic, inalienable, collective, and perpetual nature of Indigenous knowledge systems for purposes far more expansive than profit motives.

Any attempt to develop IPR-based mechanisms to “protect” IK actually poses much more threat to our knowledge, as a whole, than it can ever claim to prevent. Rather than protect, the imposition of IPRs over IK actually would serve to facilitate the alienation, misappropriation, and commercialization of IK.

Furthermore, dividing IK into artificial categories, rather than safeguarding its holistic and dynamic nature, poses a serious threat to its continued existence and development. It must be clear that any attempt to recast IK in IP terms fundamentally changes the nature of the IK from that of belonging to the cultural heritage of Indigenous peoples, to being private property in western law. Policy Objectives

With regard to the Policy Objectives, we have some general comments.

Regarding section (iii), in order to “meet the actual needs of holders of TK,” our rights must not only be respected, but more importantly these rights must be recognized.

Regarding section (vii), when referring to the specific intellectual traditions of Indigenous peoples, the term Indigenous knowledge (IK) should be utilized. IK is holistic in nature, and cannot be separated into distinct categories. IK is intrinsic to specific Indigenous peoples, and is fundamental to sustaining this distinct knowledge for future generations. As such, IK does not exist for the benefit of others but rather the Peoples to whom the knowledge belongs. Protection of Indigenous peoples’ rights over their knowledge should be a priority, rather than trying to balance the interests of users of IK at the expense of compromising the rights of IK holders.

Regarding section (xi), free prior informed consent of the affected Indigenous peoples must be ensured. Existing and developing national and international regimes governing access to genetic resources have not consistently recognized our right to FPIC, therefore, we expect the Committee not just be consistent with the other regimes, but to uphold the highest degree of recognition of our right to FPIC.

Regarding section (xiv), the list of means to preclude the grant of improper IP rights does not meet the needs and aspirations of Indigenous peoples. Disclosure of source and origin in a patent application and providing evidence of PIC and benefit sharing for the country of origin is insufficient. In fact, we believe patent applications that include or are based on IK should be specifically excluded from patentability. In IP terms, we’re sure you understand that these patent claims would fail to meet the test of innovation, novelty or inventiveness. But more importantly for Indigenous peoples, such patent claims should be denied because IK is in the Indigenous domain; that is, it is already under the jurisdiction of Indigenous legal systems, which protect the IK in perpetuity as the inherent and inalienable cultural property of Indigenous peoples. General Guiding Principles

IK belongs to the originators of such knowledge, as do the genetic resources originating from their territories. IK systems can best be protected by ensuring the right of self-determination of Indigenous peoples, including the right to territory and permanent sovereignty over natural resources. We are concerned about comments by some States that wish to strike any reference to the rights of Indigenous peoples in the Committee documents. We note with particular concern Canada’s intervention today that the language of the document should be changed to reflect only “IP rights.” The rights we are seeking here are far beyond IP rights; We seek recognition of our human rights to our self-determination, cultural heritage, and right of free, prior informed consent. Indeed, it is precisely these rights that provide the legal framework for the protection of Indigenous peoples’ TK, TCEs and genetic resources. Substantive Provisions

Some topics clearly fall within the purview of intellectual property, namely copyrights, patents and trademarks among others. IK is not one of them. Therefore, any comments on the substantive provisions would be premature. Conclusion

True protection of IK, responsive to the needs and aspirations of Indigenous peoples, is fundamentally based upon the recognition of the rights of Indigenous peoples, as established in international human rights laws. Given the mandate of WIPO to promote IPRs, and the fact that IPRs cannot adequately protect IK, perhaps this discussion should best be carried out in the human rights arena.

Thank you for your indulgence.

#### When biopiracy tries to patent Indigenous medicine, it also demonstrates a renewed interest in nature as co-constitutive with science. This interest destabilizes the nature/culture binary as fixed by the enlightenment, showing that nature is of value. This becomes a locus to debunk settler myths when weaponized through Indigenous resistance. Legal and political moves against biopiracy such as the plan are key to solvency—anything else fails to rupture the western representation of the helpless native which is necessary for real justice.

Curbishley 15 [Liddy Scarlet Curbishley in a Thesis submitted for the Masters of Humanities in Gender Studies at Utrecht University], “Destabilizing the Colonization of Indigenous Knowledge In the Case of Biopiracy”, August 2015 //SLC PK

Throughout this exploration of the colonization of indigenous knowledges through acts of biopiracy I have attempted to display how the Global North and its knowledge, science and wealth are the beneficiaries of the colonization of indigenous peoples (Smith, 2012: 118). The conditions for this exploitative relationship to occur in are carefully curated by a discourse of dominance, this discourse is supported by the legislation discussed and exemplified through the critical discourse analysis in chapter three and four. This discourse positions everything into binaries in order to maintain its superiority and control. Binaries such as male/female, nature/culture, modernity/indigeneity serve to create a grounds for acts of domination by the more privileged of the binary and their acts of domination, as was extensively discussed in chapter one. Such binaries create vast amounts of pain to both people and planet everywhere in a multitude of situations, the acts of biopiracy and the subject construction of indigenous peoples discussed here being just one example. The colonization of indigenous knowledges shows the Global North asserting it’s dominance over and against the indigenous Other, culture over nature, masculine over the feminine, modernity over indigeneity. The force of colonialism has been described as the rape of indigenous people and of nature because of their structural similarity (Gaard, 1997: 130). Biopiracy as neo-colonialism may not include sexual violence however the cultural and economic strangulation acts as a more subtle and covert form of violence hidden from the international arena.

However, the emergence of the TKDL shows resistance to this colonization. The act of biopiracy itself displays the true value of indigenous knowledges and nature, to which this knowledge attends, as that which is appropriated and commercialized is of high value, both in terms of knowledge and profit for the Global North. Destabilization of existing binaries occurs here. The TKDL and legal battles won against biopiracy dislodge the idea of the indigenous Subject and/or Global South as a victim unable to represent their own agency. The nature culture binary is dislodged in the act of biopiracy as nature is shown to be intelligent and of value. This destabilizes the assigned qualities given to nature as nature now comes to represent qualities attributed to culture by discourse. Destabilizing such binary thinking is of upmost importance in pursuing equality for all and environmental justice, debunking myths surrounding nature and culture can aid this process. The world is in crisis, wars against the Other and the environment are being waged in the name of modernity and civilization. Destabilizing binaries, disrupting the equation of modernity and the Global North equals worldwide enlightenment and showing how nature and culture are constructed as two separate entities when in fact they embody and intertwine with one another, are necessary for a more peaceful global existence.

Biopiracy as an act of colonization of indigenous knowledges poses a threat to the lives of indigenous peoples on a symbolic and material level. The lived experience of indigenous peoples was adversely affected by the paradigm shift in agriculture, the green revolution, which lead to farming no longer being viewed as an earth nurturing process to provide sustenance for those who depended on it to a masculinist approach where farming is equated with export and profit (Shiva, 1989: 97). Taking a scientific, corporate, production-focused approach to agriculture and resources, such as those discussed in the biopiracy case studies in chapter three, shifts the control of the food system and natural environment from indigenous communities to multinational corporations. The patenting and commercialization of resources creates economic deprivation and disconnects indigenous communities with their resources and food. Capitalist approaches to nature leads to the encroachment of local decision-making and local control of processes with regards to resources. Multinational corporations working in this manner reproduce colonialism, gender norms and the class system whilst intensifying local inequalities (Omvedt, 1994: 101). This approach to the environment erodes centuries worth of indigenous knowledges of land, resources and food, and reduces that knowledge to a homogenized reductionist pattern that damages the environment and those who depend on it. A commercialized approach to nature does not have the best interests at heart with regards to conservation, food security and preventing environmental damage. “The localities of third world communities have been pillaged, resourced and outsourced, as well as polluted and degraded in the process of globalization; ‘cosmopolitanism’ accrue primarily to the urban elites who benefit from globalization” (Gaard, 2010: 12) be they in the Global North or the Global South.

The act of colonizing indigenous knowledges through biopiracy exhibits the complex power nexuses and representational discourses that produce and reduce Subjects in order to allow for exploitation to occur. This thesis contributes to discussions of biopiracy by providing a different perspective to analyse the situation from. An alternative nuance embellishes arguments against biopiracy and is therefore instrumental in alleviating oppression of indigenous peoples and the environment. We must acknowledge nature and those with the knowledges of it as being diverse with great capacity to sustain life. Tackling the issue of nature and the natural in a feminist praxis must be done without fear of excommunication. Relations between people, place and nature should be maintained, for a whole-earth way of thinking has the capacity to combat the large-scale damaging effects globalization (Gaard, 2010: 13) has on vulnerable individuals and the environment.

#### Strategic weaponization and alterations of settler patent systems by Indigenous groups are valuable, even if those systems are flawed. The 1AC is part and parcel with a long legacy of resistance.

Younging 10 “Intergovernmental Committee On Intellectual Property And Genetic Resources Traditional Knowledge And Folklore” Seventeenth Session Geneva, December 6-10, 2010 Wipo Indigenous Panel On The Role Of The Public Domain Concept: Experiences In The Fields Of Genetic Resources, Traditional Knowledge And Traditional Cultural Expressions: Experiences From Canada Document prepared by Mr. Gregory Younging [Creative Rights Alliance, Kelowna, Canada, Opaskwayak Cree Nation-Canada] <https://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_17/wipo_grtkf_ic_17_inf_5_a.pdf> SM

The precept that all Intellectual Property, including TK, is intended to eventually enter the Public Domain is a problem for Indigenous peoples because Customary Law dictates that certain aspects of TK are not intended for external access and use in any form. As a response to this, there have been circumstances where indigenous people have argued that some knowledge should be withdrawn from circulation and that for specific kinds of knowledge, protection should be granted in perpetuity. 29 Examples of this include, sacred ceremonial masks, songs and dances, various forms of shamanic art, sacred stories, prayers, songs, ceremonies, art objects with strong spiritual significance such as scrolls, petroglyphs, and decorated staffs, rattles, blankets, medicine bundles and clothing adornments, and various sacred symbols, designs, crests, medicines and motifs. However, the present reality is that TK is, or will be, in the Public Domain (i.e., the IPR system overrides Customary Law.)

Certain aspects of TK should not enter the public domain (as deemed under Customary Law) and should remain protected as such into perpetuity, which could be expressed as a form of “Indigenous private domain.” (Younging 2007). Indigenous peoples’ historical exclusion from the broad category of ‘public’ feeds part of the differences in objectives. Indigenous peoples also present different perceptions of knowledge, the cultural and political contexts from which knowledge emerges, and the availability, or perceived benefits of the availability, of all kinds of cultural knowledge. 30

Copyright Case Study: The Cameron Case

In 1985 the Euro-Canadian author Anne Cameron began publishing a series of children’s books though Harbour Publications based on Westcoast Indigenous traditional stories. These books include: The Raven, Raven and Snipe, Keeper of the River, How the Loon Lost Her Voice, Orca’s Song, Raven Returns the Water, Spider Woman, Lazy Boy and Raven Goes Berrypicking. Cameron had been told the traditional stories by Indigenous storytellers and/or had been present at occasions where the stories were recited. The original printing of the books granted Anne Cameron sole authorship, copyright and royalty beneficiary, and gave no credit to the Indigenous origins of the stories. As the discourse around Indigenous cultural appropriation emerged in the 1990s, Cameron’s books came under severe Indigenous criticism; not only on the grounds of cultural appropriation, but the Indigenous TK holders asserted that some of the stories and aspects of the stories were incorrect.

This led to a major confrontation with Indigenous women authors at a women writer’s conference in Montreal in 1990. At the end of the confrontation Cameron agreed not to publish any more Indigenous stories in the series: however, she did not keep her word and the books continued to be reprinted and new books in the series continued to be published (Armstrong and Maracle1992). Some minor concessions have been made in subsequent reprints of books in the series and new additions. Reprints of the books that were produced after around 1993/94 contained the disclaimer: “When I was growing up on Vancouver Island I met a woman who was a storyteller. She shared many stories with me and later gave me permission to share them with others… the woman’s name was Klopimum.” However, Cameron continued to maintain sole author credit, copyright and royalties payments. In a further concession, the 1998 new addition to the series T’aal: the One Who Takes Bad Children is co-authored by Anne Cameron and the Indigenous Elder/storyteller Sue Pielle who also shares copyright and royalties.

Patent Case Study: The Igloolik Case

An example of the failure of the Patent Act In Canada to respond to Inuit designs is the Igloolik Floe Edge Boat Case.31 A floe edge boat is a traditional Inuit boat used to retrieve seals shot at the floe edge (the edge of the ice floe), to set fishing nets in summer, to protect possessions on sled when travelling by snowmobile or wet spring ice, and to store hunting or fishing equipment. In the late 1980’s the Canadian government sponsored the Eastern Arctic Scientific Research Center to initiate a project to develop a floe edge boat that combined the traditional design with modern materials and technologies. In 1988 the Igloolik Business Association (IBA) sought to obtain a patent for the boats. The IBA thought that manufactured boats using the floe edge design would have great potential in the outdoor recreation market. To assist the IBA with its patent application the agency, the Canadian Patents and Developments Limited (CPDL) initiated a pre-project patent search that found patents were already held by a non-Inuit company for boats with similar structures. The CPDL letter to the IBA concluded that it was difficult for the CPDL to inventively distinguish the design from previous patents and, therefore, the IBA patent would not be granted. The option of challenging the pre-existing patent was considered by the IBA, however, it was decided that it would not likely be successful due to the high financial cost and risk involved in litigation.

Trademark Case: The Snumeymux Case

As most Indigenous communities are far behind in terms of establishing businesses most trademarking of TK involves a non-Indigenous corporation trademarking an Indigenous symbol, design or name. Again, many cases could have been examined in this section but only two have been chosen: one case involving the Snumeymux Band trade marking petroglyphs through the Canadian Patent Office, and one involving an international corporation’s patent licence being the subject of an intense international Indigenous lobbying effort.

The Snumeymux people have several ancient petroglyphs located off their reserve lands near False Narrows on Gabriola Island, BC. In the early 1990s non-Indigenous residents of Gabriola Island began using some of the petroglyph images in coffee shops and various other business logos. In the mid-1990s the Island’s music festival named itself after what had become the local name of the most well known petroglyph image, the dancing man. The Dancing Man Music Festival then adopted the image of the dancing man as the festival logo and used it on brochures, posters, advertisements and T-shirts.

The Snuneymux Band first made unsuccessful appeals to the festival, buisnesses and the Gabriola community to stop using the petroglyph symbols. In 1998 the Snuneymux Band hired Murry Brown as legal counsel to seek protection of the petroglyphs (Manson-2003). At a 1998 meeting with Brown, Snuneymux Elders and community members on the matter, The Dancing Man Festival and Gabriola business’ and community representatives were still defiant that they had a right to use the images from the petroglyphs (Brown-2003).

On the advice of Murry Brown, The Snuneymux Band filed for a Section 91(n) Public Authority Trademark for eight petroglyphs and was awarded the trademark in October of 1998 (Brown2003). The trademark protects the petrogylphs from “all uses” by non-Snuneymux people and, therefore the Dancing Man Festival and Gabriola Island business and community representatives were forced to stop using images derived from the petroglyphs. In the Snuneymux case the petroglyphs were trademarked for “defensive” purposes. The Snuneymux case represents an innovative use of the IPR system that negotiated within the systems limitations and found a way to make it work to protect TK.

#### The battle for self-determination does not end with the 1AC, but you should refuse the seductive call to abandon the specific struggles against the theft of knowledge when faced with clear and attainable goals posed by activists

Whyte 16

(Kyle Powys – Potawatomi, Timnick Chair of the Humanities in the Department of Philosophy @ Michigan State University, "Indigenous Peoples, Climate Change Loss and Damage, and the Responsibility of Settler States", "Indigenous Environmental Movements and the Function of Governance Institutions." (2016): 563-580], JKS)

I understand indigenous peoples to encompass the roughly 370 million persons whose communities governed themselves before a period of invasion, colonization or settlement and who live within territories where nations, such as New Zealand or Canada, are more widely recognized internationally as sovereigns. Groups identifying as indigenous typically exercise political and cultural self-determination through their own laws, rights, and governing capacities—often having to navigate ongoing forms of colonialism, such as settler colonialism, colonial legacies, and numerous legal, political, bureaucratic, and social barriers imposed by nations, international organizations, subnational and municipal governments, corporations, and groups of private citizens (Anaya 2004; Cadena and Starn 2007; Larson et al. 2008; Niezen 2003; Sanders 1977). The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) articulates political and cultural self-determination as indigenous peoples’ being able to “freely determine their political status . . . and economic, social and cultural development” (article 3), exercise “autonomy or self-government” (article 4), and “strengthen their distinct political, legal, economic, social and cultural institutions . . .” (article 5) (United Nations General Assembly 2007). These articles express indigenous renditions of self-determination and cultural integrity in international human rights law. A significant part of indigenous political and cultural self-determination involves the operation of indigenous environmental governance institutions, which refer to systems ranging from customs to social orderings to decision-making processes that coordinate the achievement of environmental outcomes such as clean air and water, sustainable crop yields, and upkeep of culturally meaningful places. UNDRIP also enshrines such institutions by protecting “traditional subsistence economies” (article 20), “traditional plants, animals and minerals” (article 24), and “spiritual relationships with . . . traditionally owned or otherwise occupied and used lands, territories, waters, and coastal seas and other resources” (article 25) (United Nations General Assembly 2007). These institutions are often seen as the practical embodiments of indigenous cosmologies expressing webs of mutual responsibilities shared across human and non-human beings, entities, and collectives. As major architects of environmental movements, indigenous environmentalists advance important arguments about what the function, or purpose, of environmental governance institutions should be. Different from functions discussed by people of other nations and heritages—like creating trading markets that incentivize pollution abatement or synthesizing diverse scientific sources for climate change planning—many indigenous environmentalists argue that institutions should be structured to function as conveners, or orchestrators, of relationships that connect diverse parties (from humans to forests) as relatives with reciprocal responsibilities to one another. To make this case, I will provide an overview in the following section of indigenous environmentalism and the theory of institutions. Then, in the third section, I will identify a set of themes about the function of institutions in the communications of indigenous environmentalists. In the fourth section, I will analyze these themes as a framework of indigenous conceptions of the function of institutions. In the fifth section, I will describe in more detail two cases of how indigenous environmentalists have structured institutions that function in this way. I will conclude with some remarks on why indigenous institutional frameworks are important dimensions of political and cultural self-determination and should be at the table in academic and policy spheres. Indigenous Environmentalists and Institutions As a citizen of an indigenous nation, activist, and scholar, I have participated in and am aware of diverse indigenous environmental movements. The collective actions of these movements include declarations, public performances, direct actions, reformation of law and policy, court victories, and grassroots institution building. Numerous indigenous-led organizations spark these actions, such as networks, clubs, coalitions, nongovernmental organizations, governmental agencies and committees, intergovernmental or multiparty organizations, and research centers. Moreover, diverse persons in wide-ranging walks of life and professions are involved, including elders and youth, people of all genders, indigenous knowledge keepers and scientists, employees of indigenous governments, and indigenous activists/advocates, among many others. While certain literatures on indigenous environmentalism tend to focus on the appropriation of romantic or false conceptions of indigenous peoples’ cultures as rhetorical tools (Churchill and Jaimes 992; Harkin and Lewis 2007; van Ginkel 2004), I emphasize instead how indigenous peoples have taken on substantial intellectual and organizational leadership. Indigenous environmental movements have achieved too many outcomes to document here. For example, international activists shaped the environmental dimensions of UNDRIP, such as articles 23 to 25 (United Nations General Assembly 2007), and succeeded in ensuring the United Nations Framework Convention on Climate Change (UNFCCC) would include an International Indigenous Peoples’ Forum on Climate Change and support the Indigenous Peoples Biocultural Climate Change Assessment (2014). Indigenous environmentalists have pressed scientists to recognize indigenous peoples in assessment reports such as the Intergovernmental Panel on Climate Change reports, Arctic Climate Change Assessment, and US National Climate Assessment (Maldonado et al. 2013; McLean et al. 2011; Bennett et al. 2014; Smith and Sharp 2012). Idle No More, the Midwest Treaty Network, and the Indigenous Environmental Network have solidified both greater awareness of and concerted actions on significant environmental issues such as pollution, mining and extraction, deforestation, and removal (Idle No More Berry and Camacho 1998; Clark 2002; Gedicks 1993; Goldtooth 1995; Grinde and Johansen 1995, 2014; Igoe 2004; LaDuke 1999; Schlosberg and Carruthers 2010). Māori organizing, including the Waitaingi Tribunal and its report on the river claim, spurred New Zealand’s government to recognize the legal voice and rights of the Whanganui River (Te Aho 2010). Indigenous organizing in Ecuador motivated the government to recognize legal rights of tropical forests, islands, rivers, and air in its new constitution (Postel 2012; Pachamama Alliance 2008). Court victories, such as the Saramaka People v. Suriname in the Inter-American Court in 2009, or the Voigt decision in the Great Lakes region in 1983 by the US Court of Appeals, have served to protect, in certain respects, indigenous ways of life (Carlson and Coulter 2012). Western Shoshone grandmothers, Mary and Carrie Dann engaged in legal and direct actions at the US federal and international levels to resist gold mining and land seizure, achieving victories such as a 2006 review of their case by the United Nations Committee on the Elimination of Racial Discrimination, which decided against the United States (Fishel 2006, 2007). Indigenous peoples have repurposed (indigenized) non-indigenous legal and policy mechanisms by creating conservation easements (Middleton 2011), tribal national parks in the United States (Carroll 2014) and protected conservation zones (Corntassel 2008). In all these collective actions, indigenous environmentalists actively criticize, reform, envision, create, and participate in many environmental governance institutions. Specifically, environmental governance institutions refer to any systems of customs, norms, conventions, social orderings, and decision-making processes that function to coordinate various aspects of a society toward achieving certain environmental outcomes, such as pollution abatement or biodiversity conservation (Borrows 2002; Napoleon 2013; Richardson 2008; Shockley 2012). Institutions range from massive state actors such as the US Environmental Protection Agency (EPA) or Michigan Department of Environmental Quality, to networks such as Idle No More or the Coalition Against Tarsands, to civil society organizations such as the Sierra Club, to widely practiced cultural norms in some societies such as frugality or respect for non-human life. Theoretical debate in many academic, public, and private sectors occurs over what functions institutions should serve. I understand an institution’s function to refer to the purpose it should be structured to accomplish for achieving targeted outcomes such as safe air quality or forest conservation. The structure is made up of the specific ways in which customs, norms, conventions, social orderings, or decision-making processes are designed, articulated, and arranged strategically to carry out the function.

#### Forced binaristic choices are arbitrary and coercive —leaving multiple options for survival on the table is necessary for Indigenous people to effectively resist colonization

Grande 07

(Sandy Grande, Connecticut College education associate professor], Critical Pedagogy: Where are we now? By Peter McLaren, “Red Lake Woebegone: Pedagogy, Decolonization, and the Critical Project” p330, http://books.google.com/books?id=M97YKJdkJbcCandq=sandy+grande#v=onepageandq=grammar20of20empireandf=false, p.330, accessed 3-17-14)

Audre Lorde’s essay, The Master’s Tools Will Not Dismantle the Master’s House, is one of the most quoted essays in academic history and, I would also venture to say, one that needs rethinking. While it is self-evident that indigenous knowledge is essential to the process of decolonization, I would also argue that the Master’s tools are necessary. Otherwise, to take Audre Lorde seriously means to create a dichotomy between the tools of the colonizer and those of the colonized. Such a dichotomy leaves the indigenous scholar to grapple with a kind of “Sophie’s Choice” moment where one feels compelled to choose between retaining their integrity (identity) as a Naitve scholar by employing only indigenous knowledge or to “sell out” and employ the frames of Western knowledge. Does it signify a final submission to the siren’s son, seducing us into the colonialist abyss with promises of empowerment? Or is it the necessary first step in reclaiming and decolonizing an intellectual space – an inquiry rom – of our own? Such questions provoke beyond the bounds of academic exercise, suggesting instead the need for an academic exorcism. The demon to be purged is the specter of colonialism. As indigenous scholars, we live within, against, and outside of its constant company, witnessing its various manifestations as it shape-shifts its way into everything from research and public policy to textbooks and classrooms. Thus, the colonial tax of Native scholars not only requires a renegotiation of personal identity but also an analysis of how whole nations get trans- or (dis)figured when articulated through Western frames of knowing. As Edward Said observes, “institutions, vocabulary, scholarship, imagery, doctrines, even colonial bureaucracies and colonial styles” all support to the “Western discourse” (Said, 1985, p. 2). In other words, is it possible to engage the grammar of empire without replicating its effects? At the same time indigenous scholars entertain these ruminations, Native communities continue to be impacted and transformed by the forces of colonization, rendering the “choice” of whether to employ Western knowledge in the process of defining indigenous pedagogies essentially moot. In other words, by virtue of living in this world and having to negotiate the forces of colonization, indigenous scholars are given no choice but to know, understand, and acquire the grammar of empire as well as develop the skills to contest it. The relationship between the two is not some liberal dream of multicultural harmony but rather the critical and dialogical tension between competing moral visions.

#### Debate’s fixation on extinction narratives centers a notion of universal humanity that allows for dehumanization and erasure of native relationality to nature. Settlers attach themselves to the thrill of abjection in order to distance themselves from the violence of settler colonialism and the ethical imperative to work against it.

Mitchell 17 ““Decolonizing against extinction part II: Extinction is not a metaphor – it is literally genocide” Audra Mitchell [settler currently living and working on the Ancestral and Treaty lands of the Attawandaron (Neutral), Haudenosaunee (Six Nations of the Grand River) and Anishinaabe (Mississaugas of the New Credit) peoples. Prof. Mitchell holds the Canada Research Chair in Global Political Ecology at the Balsillie School of International Affairs], September 27, 2017, https://worldlyir.wordpress.com/2017/09/27/decolonizing-against-extinction-part-ii-extinction-is-not-a-metaphor-it-is-literally-genocide/ SM

Extinction is not a metaphor…

Extinction has become an emblem of Western, and white-dominated, fears about ‘the end of the(ir) world’. This scientific term is saturated with emotional potency, stretched and contorted to embody almost any nightmare, from climate change to asteroid strikes. In academic and public contexts alike, it is regularly interchanged with other terms and concepts – for instance, ‘species death’, global warming or ecological collapse. Diffused into sublime scales – mass extinctions measured in millions of (Gregorian calendar) years, a planet totalized by the threat of nuclear destruction – ‘extinction’ has become an empty superlative, one that that gestures to an abstract form of unthinkability. It teases Western subjects with images of generalized demise that might, if it gets bad enough, even threaten us, or the figure of ‘humanity’ that we enshrine as a universal. This figure of ‘humanity’, derived from Western European enlightenment ideals, emphasizes individual, autonomous actors who are fully integrated into the global market system; who are responsible citizens of nation-states; who conform to Western ideas of health and well-being; who partake of ‘culture’; who participate in democratic state-based politics; who refrain from physical violence; and who manage their ‘resources’ responsibly (Mitchell 2014).

Oddly, exposure to the fear of extinction contributes to the formation and bolstering of contemporary Western subjects. Contemplating the sublime destruction of ‘humanity’ offers the thrill of abjection: the perverse pleasure derived from exposure to something by which one is revolted. Claire Colebrook detects this thrill-seeking impulse in the profusion of Western blockbuster films and TV shows that imagine and envision the destruction of earth, or at least of ‘humanity’. It also throbs through a flurry of recent best-selling books – both fiction and speculative non-fiction (see Oreskes and Conway 2014; Newitz 2013; Weisman 2008). In a forthcoming intervention, Noah Theriault and I (2018) argue that these imaginaries are a form of porn that normalizes the profound violences driving extinction, while cocooning its viewers in the secure space of the voyeur. Certainly, there are many Western scientists, conservationists and policy-makers who are genuinely committed to stopping the extinction of others, perhaps out of fear for their own futures. Yet extinction is not quite real for Western, and especially white, subjects; it is a fantasy of negation that evokes thrill, melancholy, anger and existential purpose. It is a metaphor that expresses the destructive desires of these beings, and the negativity against which we define our subjectivity.

But extinction is not a metaphor: it is a very real expression of violence that systematically destroys particular beings, worlds, life forms and the relations that enable them to flourish. These are real, unique beings, worlds and relations – as well as somebody’s family, Ancestors, siblings, future generations – who are violently destroyed. Extinction can only be used unironically as a metaphor by people who have never been threatened with it, told it is their inevitable fate, or lost their relatives and Ancestors to it – and who assume that they probably never will.

This argument is directly inspired by the call to arms issued in 2012 by Eve Tuck and Wayne K. Yang and more recently by Cutcha Risling-Baldy. The first, seminal piece demonstrates how settler cultures use the violence of metaphorical abstraction to excuse themselves from the real work of decolonization: ensuring that land and power is in Indigenous hands. Risling-Baldy’s brilliant follow-up extends this logic to explain how First People like Coyote have been reduced to metaphors through settler appropriation. In both cases, engagement with Indigenous peoples and their relations masks moves to innocence: acts that make it appear as if settlers are engaging in decolonization, while in fact we are consolidating the power structures that privilege us.

In this series, want to show how Western, and white-dominated, discourses on ‘extinction’ appear to address the systematic destruction of peoples and other beings while enacting moves to innocence that mask their culpability and perpetuate structures of violence. As I argued in Part I of this series, extinction is an expression of colonial violence. As such, it needs to be addressed through direct decolonization, including the dismantling of settler colonial structures of violence, and the resurgence of Indigenous worlds. Following Tuck, Yang and Risling-Baldy’s lead, I want to show how and why the violences that drive extinction have come to be invisible within mainstream discourses. Salient amongst these is the practice of genocide against Indigenous peoples other than humans.

…it is literally genocide.

What Western science calls ‘extinction’ is not an unfortunate, unintended consequence of desirable ‘human’ activities. It is an embodiment of particular patterns of structural violence that disproportionately affect specific racialized groups. In some cases, ‘extinction’ is directly, deliberately and systematically inflicted in order to create space for aggressors, including settler states. For this reason, it has rightly been framed as an aspect or tool of colonial genocides against Indigenous human peoples. Indeed, many theorists have shown that the ‘extirpation’ of life forms (their total removal from a particular place) is an instrument for enacting genocide upon Indigenous humans (see Mazis 2008; Laduke 1999; Stannard 1994). Specifically, the removal of key sources of food, clothing and other basic materials makes survival on the land impossible for the people targeted.

Nehiyaw thinker Tasha Hubbard (2014) makes a qualitatively distinct argument. She points out that the Buffalo are First People, the elder brothers of the Nehiyaw people (and other Indigenous nations – see Benton-Banai 2010). Starting in the mid-1800s, the tens of millions of buffalo that ranged across Turtle Island were nearly eliminated through strategic patterns of killing carried out by settler-state-sponsored military and commercial forces. Their killing was linked to governmental imperatives to clear and territorially annex the Great Plains by removing its Indigenous peoples. As Hubbard points out, methods of destroying buffalo herds included large-scale killing, but also the disruption of their social structures, the destruction of the ecosystems on which they rely, and the removal of calves. These acts involve each of the components of the definition of genocide enshrined in the UN Genocide Convention:

(a) Killing members of the group;

(b) Causing serious bodily or mental harm to members of the group;

(c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part;

(d) Imposing measures intended to prevent births within the group;

(e) Forcibly transferring children of the group to another group.

From Hubbard’s viewpoint, rooted in Nehiyaw philosophy and ethical-legal principles, the systematic destruction of the buffalo is not like genocide, nor is it exclusively a tool for carrying out genocide against human peoples. It is genocide in its own right: an attempt to destroy a particular First People and the possibilities of its continuity. In other words, the deliberate and systematic attempt to eliminate the buffalo, enacted by settler states, simultaneously enacted genocide against Indigenous peoples and their nonhuman relatives.

Genocides of Indigenous peoples (human and otherwise) continue apace in contemporary settler states, transformed into multiple manifestations. For instance, they are integral to ‘biosecurity’ strategies designed to police the biological boundaries of these states and their citizens. Laced with racializing and xenophobic rhetoric (Subramaniam 2001), strategies such as culling or planned eradications are intended to remove ‘invasive’ or ‘foreign’ life forms in order to protect ‘Native’ ones. Many of the ‘invasive’ life forms targeted for destruction were transported to unfamiliar lands through colonial patterns of settlement and global trade flows.

However, this logic of elimination (Wolfe 2006) is often perverted, turned against Indigenous\* beings whose flourishing impedes the expansion or consolidation of the colonial state. For instance, Deborah Bird Rose (2011 a, 2011 b) shows how this form of violence is continually waged against flying foxes, who are framed by the settler state as “pest[s] whose extinction is [deliberately] sought”. This act of elimination involves explicit genocidal ideation, or the imagination of the destruction of a people. Rose characterizes it as a “matter of imagining a world without [dingoes or flying foxes], then setting out to create it” (Rose 2011a). The Australian settler state has used multiple tactics to induce terror and preclude flourishing amongst flying foxes, from the emission of high-pitched electronic signals to smearing trees with python excrement (Rose 2011b). Indeed, in 2014, I lived near to the roosting site of a group of flying foxes in Turrbal and Jagera Country (suburban Brisbane to settlers). Such nesting places are called ‘colonies’ , reflecting a Western scientific rhetoric that frames Indigenous peoples as ‘invaders’ of the settler state. The trees that housed the nesting site backed onto a municipal facility, whose fence had been covered with barbed wire, in which many of the bats snared their wings and starved to death. This ‘security’ measure – designed to protect the facilities relied upon by urban settlers from the intrusion of flying foxes – is a powerful weapon for precluding ongoing flourishing of Indigenous other-than-human peoples. I learned from neighbours that this ‘colony’ had previously been ‘moved’ from several other sites around the city, suffering significant declines in population each time. Indeed, despite reported declines of 95% in flying fox communities in Queensland and neighbouring New South Wales, the Queensland settler state legalized the shooting of the bats in 2012 by fruitgrowers.

Of course, in some cases, the elimination of life forms is not as targeted or intentional – it may take the form of land-based extractive violence, the creep of ocean acidification, the decimation of rainforests by climate change. Proponents of a Eurocentric definition of genocide could argue that these events lack intention. Indeed, within international law, intention to commit genocide is a necessary criteria for conviction. However, theorists of critical genocide studies have long argued that this definition is inadequate: it brackets out a great many of the acts, logics and structures that produce the destruction of unique peoples. According to Tony Barta, definitions of genocide that focus on ‘purposeful annihilation’, and in particular on physical killing, have “devalu[ed] all other concepts of less planned destruction, even if the effects are the same” (Barta 2000, 238). For this reason, he shifts the focus from ‘genocidal intention’ to ‘genocidal outcome’ – that is, from the abstract assignation of genocidal agency to the felt and embodied effects of eliminative violence. It is the focus on intent, he contends, that allows white Australians to imagine that their relationship with Aboriginal people is non-genocidal despite overwhelming evidence of systematic and deliberate racialized destruction over several centuries. In contrast, an approach based on ‘genocidal outcomes’ makes it possible to account for complex causality and weak intentionality – that is, for myriad acts mediated by subtle, normalized structures that, together, work to eliminate a people. I want to argue that the same logic applies to nonhuman peoples: the destruction of a life form, its relations with other beings and its possible futures is a genocidal outcome, whether or not intention can be identified.

Similarly, Christopher Powell (2007) argues that, since a ‘genos’ is a

“network of practical social relations, destruction of a genos means the forcible breaking down of those relationships…these effects could be produced without a coherent intent to destroy. They could result from sporadic and uncoordinated actions whose underlying connection is the production of a new society in which there is simply no room for the genos in question to exist. They might even result from well-meaning attempts to do good” (Powell 2007, 538)

As I have argued elsewhere, extinction is defined by the breaking of relations and the systematic destruction of the conditions of plurality that nurture co-flourishing worlds. Whether inflicted out as a deliberate act of extirpation, or as the convergent effect of eliminative logics expressed over centuries and enormous spatial scales, extinction is the destruction of relations and the heterogenous societies they nurture.

Understood in this way, ‘extinction’ is not a metaphor for genocide or other forms of large-scale violence: it is a distinct manifestation of genocide. Masking the genocidal logics that drive extinction involves several moves to innocence (Tuck and Yang 2012). Treating extinction as something short of genocide entrenches Eurocentric understandings of personhood that are limited to homo sapiens, which is itself an act of violence against these peoples. Ironically, the entrenchment of this dichotomy also enables the logic of ‘dehumanization’, in which human communities are likened to reviled nonhumans (for instance, cockroaches) in order to motivate violence against them. As I have argued elsewhere (Mitchell 2014), the logic of generalised ‘dehumanisation’ is uniquely effective in Western frameworks in which the lack of ethical status for beings other than humans removes obstacles to their mass destruction.

Within worlds in which human and nonhuman persons are linked through complex systems of law, treaties, protocols and long-standing relations, this claim is illogical. Within Western settler states, however, it functions as a means of justifying ongoing violence against Indigenous peoples and their relations.

In addition, by framing extinction as a problem for a universal figure of ‘humanity’ (more on this to follow…) mainstream discourses of extinction obscure its profound entwinement with race and racializing structures. These examples make it clear that eliminative violence is targeted on specific groups of people and their other-than-human relations, as defined by the aggressors. Indeed, patterns of genocidal violence extend racializing categories, hierarchies and eliminative impulses to other-than-human peoples. Just as approaching gender violence separately from race effaces their intersection, understanding extinction as distinct from race is deeply misleading. This is not only because racialized people are more likely to suffer from the effects of ‘extinction’ and other forms of environmental racism (which they are). It is also because the eliminative violence that drives extinction extend and enact race beyond the category of homo sapiens by defining particular groups against white settler norms and as threats to the settler society. To approach extinction separately from issues of race is, therefore, to miss one of its most defining features.

Extinction is not a metaphor – in many cases, it is quite literally genocide enacted against Indigenous peoples and their other-than-human relations. To treat it as a metaphor is to obscure and participate in the structures of violence that drive it. From this perspective, in addition to active decolonisation efforts, and the resurgence of Indigenous peoples, addressing extinction also requires attacking the genocidal, racializing, eliminative logics that are diffused throughout settler (and other) states. It also requires honouring the unique relations, worlds and peoples that are targeted by these discourses and practices.