

Resisting Intellectual Property

Debora J. Halbert

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Resisting Intellectual Property

Over the past decade, the scope of copyright and patent law has grown significantly, strengthening property rights, even when such rights seem to infringe upon other more basic priorities. This book investigates the ways in which activists, scholars, and communities are resisting the expansion of copyright and patent law in the information age.

Debora J. Halbert explores how an alternative framework for understanding intellectual property is being developed. This alternative, emerging through the work of legal scholars, social movements, the use of civil disobedience, and a struggle to control the public perception of intellectual property law, is a different analysis regarding how we *ought* to think about intellectual property. Each chapter in the book discusses how resistance is developing in relation to a particular copyright or patent issue such as:

- Access to patented medication.
- Access to copyrighted information and music via the internet.
- The patenting of genetic material.

This controversial book examines the ways in which the idea of intellectual property is being re-thought by the victims of an over-expansive legal system. It will appeal to students and researchers from a range of disciplines, from law and political science to computer science, with an interest in intellectual property.

Debora J. Halbert is Associate Professor of Political Science at Otterbein College, USA. She is also the author of *Intellectual Property in the Information Age: The Politics of Expanding Property Rights*.

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To Emily, Sam, Elizabeth, Tess, and Sabrina

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Series preface

The development of a legal apparatus for the protection of property rights has evolved in tandem with the evolution and expansion of industrial society. One aspect of this development has been the emergence of a legal apparatus for intellectual property protection – a notoriously vague and often intangible area, but one that nevertheless encompasses copyright, patent, and trademark law. This trend has seen not only the consolidation of intellectual property protection at the national level, but also the emergence of a transnational, and increasingly global apparatus. Regional and world organizations such as the World Intellectual Property Organization (WIPO), European Union (EU), World Trade Organization (WTO), and Organization for Economic Co-operation and Development (OECD) have played a key role in this transnationalization; and the rules negotiated under their auspices have been central to the globalization of particular systems of regulation.

The implications of this evolving legal apparatus are not, however, widely understood. Only in headline instances – such as in the tensions between the WTO's Trade Related Aspects of Intellectual Property Rights (TRIPS) agreement and the provision of generic antiretroviral drugs for those living with HIV/AIDS in sub-Saharan Africa; the corporate patenting of genetic material, plant and animal life; or the litigations leveled at individuals making available music files on the Internet, among others – have the consequences of a burgeoning intellectual property regime begun to encroach upon public consciousness. Even then they have been little understood; less obvious still have been the strategies with which intellectual property can be resisted.

Debora Halbert tackles this complex and highly legalistic area in the latest addition to the RIPE series in Global Political Economy. Her book, *Resisting Intellectual Property*, provides a great service to scholars and students of global political economy alike. Not only does she cut through the legalistic jargon to reveal the real consequences of a burgeoning transnational intellectual property rights regime, but she also illuminates the various ways in which the further development of this regime can be resisted. Halbert explores how the development of an intellectual property regime

constrains the flow of information, inhibits creativity, and garners suspicion. More importantly she reveals and assesses the various ways in which the creation and commodification of intellectual property is being actively resisted and alternatives envisioned. Halbert's exploration of the world of resistance to intellectual property unfolds through six substantive areas. Her work takes in the public domain, copyright law, filesharing, pharmaceutical patenting, biotechnology, and biopiracy and biocolonialism. Throughout she focuses on the construction of an intellectual property discourse, the moral quandaries generated therein, and the various forms of resistance.

This is a refreshingly critical, engagingly self-reflective, highly accessible, and timely work. It sits well alongside Chris May's earlier pioneering work on intellectual property rights, also published in the series. *Resisting Intellectual Property* deserves to be read by all interested in the changing contours of the global political economy and social justice in a global age.

Louise Amore, University of Newcastle, UK
Randall Germain, Carleton University, Canada
Rorden Wilkinson, University of Manchester, UK

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Numerous other commentators have responded to chapters as they were written and I am indebted to their help. I would like to thank Kathy Ferguson for her insights on the issues of patents and the human body. Also, thanks to Thomas Hawley for organizing one of the more interesting conference panels I have had the privilege to be on, where what has become Chapter 5 was initially presented. I would like to thank Austin Sarat and the reviewers at *Studies in Law, Politics and Society* for their excellent advice on what has become Chapter 1. The same is true for the editorial advice of Marianne Franklin on Chapter 3.

There is a wonderful group of critical intellectual property legal scholars who have invited me to participate in many of their conferences and panels that I would like to thank. Peter Yu has kindly invited me to his roundtable discussions and conferences on intellectual property at the Michigan State University College of Law. Llew Gibbons has done the same for the University of Toledo. For their help, advice, and conversation I would also like to thank: Margaret Chon, Ann Bartow, Dan Burk, Katherine Strandburg, Michael D. Birnhack, Niva Elkin-Koren, Sara Fatherly, Alan Story, Jacqueline Lipton, and the reviewers for Routledge – and to everyone who has ever had to listen to me talk about intellectual property issues.

I would like to acknowledge the following publications. An earlier version of Chapter 1 appears in “Theorizing the Public Domain: Copyright and the Development of a Cultural Commons,” *Studies in Law, Politics and Society*, 2003, 29: 3–36. A version of Chapter 3 appears in “Sharing as Piracy: The Digital Future of Music,” in *Shake, Rattle and Rap: On Music, Culture and Politics*, M.I. Franklin (ed.), New York: Palgrave Macmillan, 2005. An earlier version of Chapter 4 appears in: “Moralized Discourses: South Africa’s Intellectual Property Fight for Access to AIDS Medication,” *Seattle Journal for Social Justice*, 2002, 1(2): 257–95.

There is a considerable irony to publishing a book about resisting copyright and patent law while at the same time copyrighting the book. For those familiar with tenure and promotion criteria, my choices may seem more acceptable. While this book is not licensed under the creative commons license, I plan to support the cause and, of course, fully endorse their licensing scheme. Additionally, there are dozens of organizations dealing with different aspects of the intellectual property resistance in need of financial contributions. I will do my best to support these organizations as well.

Finally, I would like to thank Jim Prevost for his love and support. He is a constant source of inspiration.

Introduction

When I first became interested in copyright, I was a stranger to the many dimensions of intellectual property law. I had not read any Copyright Law; I didn't know the legal difference between a copyright and a patent, what and how things were protected, or how to define fair use. I understood plagiarism, having been well educated in the etiquette of source citation, but I did not understand the relationship between plagiarism and copyright violations. It had been the non-legal questions about the philosophical origins of authorship and how it was possible to own intangibles that piqued my interest in copyright.

As my interest in the subject matter grew, it became necessary to learn more about the legal parameters of copyright law specifically and intellectual property law more generally. Thus, I became interested in the ways copyright was being legally extended as it confronted the new technologies of the information age. As the bottle that protected creative work faded away, to use John Perry Barlow's metaphor, the content became less protectable.¹ However, even as protectability became increasingly difficult due to the digital nature of creative work, the laws were expanded to provide greater legal protection to those who argued they owned copyrightable content. The desire to own what only has value through circulation and to control every possible exchange of this information has led to ever larger circles of protection being drawn around copyrighted and patented work. While many advocate for the free flow of information and doubt that the law will ever be able to completely regulate this flow, new legislation giving copyright industries even more power, and recent arrests under that legislation, should make us worry about the depth to which the power of the state will be utilized in an *attempt* to stop the unregulated flow of information.²

As I learned more about the subject, I gradually came to understand the language of the law. While it was still possible to think outside the law, I found myself increasingly developing my critique based upon the law. I could easily identify copyright violations where before I had been more interested in the philosophical implications posed by defining a creative work as property. In other words, I became co-opted by the law. The more I read the case law and law journals, the more I came to speak from a position

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inside the status quo. My ability to critique the law became increasingly bounded by the law itself and the language used by those within the legal profession to discuss issues of intellectual property. I began to speak in terms of incentives and public goods. I began to start any discussion of intellectual property by defining what was and was not allowed under the law. It became clear that the very act of studying the subject had transformed my standpoint from an outsider to an insider.³ I even thought about going to law school. While I remained critical of the over-extension of property rights that has been going on for the past decade, I also found myself highly sensitized to violations of the law, even as I felt much of what constitutes intellectual property law was unjust and unfair.

My own co-optation corresponds with the process I see individuals go through as they begin to learn about their “rights” under copyright law. Initially, most folks have little or no awareness of copyright and patent law. They probably do not read the copyright notice prior to watching a movie or feel guilty about sharing music with friends (or strangers). Most people do not know that everything they write down is automatically copyrighted, nor do they probably see their own writing as having much worth, in the monetary sense of the word. Most people remain outside the boundaries of copyright law in terms of their own cultural creation and only enter the framework of the law as consumers and possible copyright infringers.⁴ Thus, to them, it isn’t controversial to photocopy an article or make a copy of a CD they “own” – these things seem like “rights” that should be associated with the purchase of a product. However, to intellectual property owners who wish to control the use of an item even after its purchase, there are multiple ways a person can break the law and everyday consumers are now viewed as pirates and thieves. Defining the balance between the rights of consumers and information owners is a constant struggle over what activities are moral, legal, deviant, criminal, and appropriate. While there is no question that information owners have successfully lobbied Congress for comprehensive protective laws and have had some success in defining the notion of intellectual property, there is also evidence pointing to a growing resistance to these rhetorical and legal strategies.

As people make the transition from consumer to producer of copyrighted material, they too undergo the transformation of being co-opted by the law. Suddenly, what had been something they wanted to share with others becomes property. Instead of being concerned with the impact or reach of their ideas, they become concerned with issues of “theft,” “misappropriation,” and “rewards.” Certainly, nobody wants their ideas taken and used by someone else without acknowledgement, but once within copyright or patent law, the discourse of property becomes overwhelmingly powerful, at least for some. The more money involved, the harder it is to remain above the claims of the law. Once creative work is put within the copyright framework, its legal status as property in need of protection becomes of utmost concern. The work, and the author, can be paralyzed by questions of what

constitutes fair use, and what, if anything, can be borrowed, appropriated, or used from others without their permission. People also gain a heightened concern for what others can borrow, use, and appropriate without permission from them. Creation becomes even more difficult as everyone starts worrying about property and not about sharing the results of their intellectual or creative work. These problems are compounded by the very real problem of theft that accompanies high-stakes research and popular commercial products. However, the lines between theft and cultural exchange are thin and easily confused.

Concerns about ownership reach an almost hysterical pitch when the Internet is brought into the picture. After all, how do you protect anything on the web? How will you get paid? How do you stop others from taking your work without permission? The solutions become increasingly draconian with each new lobbying round by major intellectual property interests. Once the framework of property is introduced and people become suspicious of how their work will be misused instead of used, progress in the arts and sciences is not the product; territorial boundaries are. Concerns about property protection do not enhance the free exchange of ideas. The result of these multiple concerns is an interrelated matrix of property rights discourse, commodification of culture, debates over the scope of ownership, and claims about theft.

As a result of the deep suspicions that surround the “theft” of “intellectual property,” we have reached new heights in the protection of copyrighted and patented works. Congress has reacted to these changes in the innovative landscape by passing legislation that attempts to provide even stronger protective measures for copyright and patent owners.⁵ At the behest of the entertainment industries and their lobbyists, copyright has been especially targeted. Copyright terms have been increased by twenty years and the Digital Millennium Copyright Act (DMCA), passed in 1998, was Congress’s attempt at updating the copyright law for the digital age. At best, however, it could be said that the DMCA balances the rights of one industry with the rights of another. For example, the DMCA provides the entertainment and publishing industries with enormous power to pursue copyright violations over the Internet. However, it also has provided “safe harbor” provisions for Internet Service Providers who lobbied heavily for such protection. While each industry sought protection of their individual interests, nobody was voicing concern for the public interest or asked critical questions about why copyright owners needed so much more power in the first place. The DMCA clearly illustrates a more general point about the law – that it is not a neutral body of abstract principles, but instead tends to be the codified will of those with economic and political power.

Now more than ever, companies are using intellectual property law as a club to retain monopoly control over an industry or technology. Scores of web crawlers have been hired to troll the web looking for potential violations. Cease and desist letters go out indiscriminately to websites hosting

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illegally copied MP3s and to 13-year-old girls hosting Harry Potter fan sites.⁶ Arrests have been made when computer programmers attempt to describe their work, and threats of lawsuits are made when academics seek to publish their research on circumvention devices. Only negative publicity seems to restrain corporate aggression, as illustrated when the legal response to the Harry Potter fan sites was made public and teenagers around the world initiated a boycott, or when the public outcry surrounding the arrest of Russian computer programmer Dmitry Sklyarov at the insistence of Adobe under the DMCA became so overwhelming that Adobe had to back off their aggressive position on anti-circumvention devices.⁷ Copyright law has turned protection for civil liberties upside down. Free speech exists only to the extent it doesn't violate the desires of a copyright owner.⁸

The world of patent law is no better. As the Human Genome Project evolves, so do the numerous patents on gene sequences. The genetic gold rush means the vast majority of the human genetic structure will be privately owned before accurate knowledge of what each gene does is fully known. In addition to the negative consequences of patenting the inventions derived from the human body, pharmaceutical companies have placed profits before lives as they aggressively litigate to halt the unauthorized production of drugs used to fight HIV and AIDS. As biotechnology brings us transgenic animals and hybrid foods, patent laws become even more important and the implications more dire.

With each new law, however, the process of adjusting to new levels of property ownership moves forward. The language of "theft" and "piracy" is commonly accepted as the bedrock for new legislation that gives industry even more power to pursue possible copyright infringements. Even more importantly, intellectual property and its enforcement has been globalized. The globalization of intellectual property has taken on legal form in the World Trade Organization (WTO). The Trade Related Aspects of Intellectual Property Rights agreement (TRIPS) ensures that all countries party to the WTO must establish a minimum level of intellectual property protection or face trade sanctions under the rules set forth by the WTO. While countries in the global South were given additional time to implement the TRIPS agreement, it still represents an enormous cost to most of the developing world. These countries must not only develop appropriate laws, but also methods for enforcing the laws and punishing violators.

The process of globalizing intellectual property rights does little to help the global South pursue an agenda of development. Rather, these laws (the lack of which are called trade barriers by developed countries) act as a tax on the global South by richer countries. Of course, as with globalization generally, the process of acclimatizing the world to a specific business ideology is more successful at the elite level of society. Governments pursuing a neo-liberal trade model can be persuaded to sign TRIPS even as many of their citizens develop the language of biocolonialism to describe the

process. Thus, state actors and citizens often diverge over how protection of intellectual property should go forward, sparking domestic and international resistance.

The facet of globalization that allows for some members of society to benefit more than others means that there will be individuals in the global South who benefit monetarily from stronger intellectual property regimes. However, as with globalization more generally, the benefits are not distributed equally, nor do these benefits successfully address the larger issues of poverty and unsustainable development. Basically, by making the world safe for Disneyland and Microsoft, TRIPS does little to really assess the needs of the vast majority of the world's population in terms of access to affordable food and medication. Instead, TRIPS makes it easier for those who wish to appropriate the knowledge of many and translate it into the patentable property of a few to do so.⁹ It is no coincidence that intellectual property laws have been resisted by the global South with accusations of biopiracy and biocolonialism. For those who have any sense of history, there is a chilling sense of familiarity to modern treaty negotiations. Globalization, in itself, is not a bad thing. However, globalization that does not actively facilitate reciprocal relationships in which the good of the larger world is held as its highest goal will only result in a world flattened of its richness and depth.

What is perhaps most frustrating about the globalization of intellectual property rights is the unwillingness on the part of the USA and its negotiating partners to understand and be sensitive to the possibility of multiple protective mechanisms for intellectual property attuned to the needs of individual countries. Rather than look for alternatives to protecting knowledge resources that don't translate them into private property, the USA aggressively asserts an intellectual property discourse that must be accepted as a condition for trade. As will be discussed in the following chapters, there are numerous examples of incentives to create that do not rely on rigid property protection. TRIPS is shortsighted in that it assumes creation stems from the chance of monetary rewards. Instead of taking advantage of the opportunity to learn about alternatives to intellectual property, TRIPS, as used by the USA, seeks to eliminate possible alternatives by privileging private property rights. As the ideas of money and property enter realms where they have not yet tread, those realms are changed forever and we lose our chance to seek out alternatives.

Seeking out alternatives is a crucial avenue of investigation at the current moment. I cannot help but think something has been lost when the world embraces the idea of private property as the dominant paradigm to control all aspects of our creative lives: when everything becomes a commodity and everyone becomes a consumer. But this commodification is not happening without resistance.¹⁰ The work of asserting alternatives to intellectual property is an interpretative battle. Intellectual property remains in the process of definition – there is a struggle to define the

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scope and meaning of the law, and it is this struggle that is the central focus of this book. Part of the interpretative battle for alternatives takes place within the framework of copyright and patent law. It is necessary to interpret the law in such a way that exchange of ideas remains central and possible. However, alternatives can (and should) be sought outside the law. These alternatives include: developing and protecting non-Western property systems; articulating rights that transcend property rights; perhaps even embracing the idea of no ownership at all.

Having taken the journey towards understanding intellectual property as a system, I still try to resist the over-expansion of intellectual property rights whenever possible. I try to keep my own sense of ownership over intellectual work to a minimum and focus on the intellectual rivers that make my own work possible. I am not alone in trying to resist the expansion of property rights. The chapters in this book document a growing level of resistance, both theoretical and practical, to the over-expansion of intellectual property rights. Small and large resistances to our current intellectual property path are emerging every day. Resistance ranges from academic scholars who advocate minor repairs to the copyright code to transnational activists engaged in a reconstructive narrative of human rights that could lead to paradigmatic shifts in the way we create and protect work. These alternatives, through their very existence, debunk the intellectual property ideology that so loudly asserts we need strong intellectual property laws to ensure people create. Many people create all sorts of things without understanding intellectual property law. What the language of intellectual property masks is the global political economy of highly concentrated copyright and patent ownership where corporations, not people, are the beneficiaries of the system. Slowly, resistance to the expanding idea of property is developing as people begin to reimagine cultural work outside the language of property and rights. This reimagining is crucial, I would argue, to the development of a human culture beyond corporate culture and to the protection of people who may not have access to the benefits of a neo-liberal economic model.

A speculative historian might look at the past and wonder what the world would look like if we had chosen a different path of development. Nothing is inevitable in the choices we make, though at times it seems as if there is only one possible path to choose. History shows that at any given point there were numerous possible paths of development, but the choice of a specific path closed off or restricted the alternatives. The ability to choose and close off alternative choices is a function of power. Those with the power to do so control the way in which choices are defined and offered. Defining future choices is in part a narrative process where the language of intellectual property is used to render possible alternatives as “idealistic,” unworkable, or impossible. By closing off alternative paths, even given the evidence that these paths are viable, the interests of those who have defined the discourse are served. However, it is important to assess who wins and who loses with

every ideological system, as well as to objectively determine which systems are better than others.

Just as one can look to the past and suggest that a different decision could have changed the world, I think we must now look towards the future and understand the choices available to us as we enter the digital age. The power to define the ideological conditions under which we will enter this historical moment has been given (or taken) by the major corporate players. They have already decided the type of future property model that should be used. Corporate entities, with their monopolistic control over content and increasingly over the vehicles through which that content is provided, are the ones creating a vision of the future. In their world, all possible futures where sharing and exchange of information exists outside the framework of profit are “utopian.” However, and this is essential, there are people around the world who have developed their own ways of dealing with what we call intellectual property. These parallel systems, alternative paradigms, and small resistances prove that we do have a choice in how the future develops. We have a choice in what type of framework we want to establish for the next century and these choices are far more diverse than the corporate vision of the future would have us believe.

In order to understand that the future is not an inevitable path towards more centralized ownership of innovations and ideas, this book wishes to excavate the alternatives to intellectual property available to us. Central to defining the alternatives is to understand how individuals, groups, and communities develop a narrative of resistance to current intellectual property discourses. The narrative project before us will focus on reimagining the extent to which copyright and patent law will govern creative and innovative work and under what conditions copyright and patent laws ought to be utilized. It is very important to preserve alternatives to intellectual property that still might exist around the globe, and also to actively participate in envisioning new ways to think and act towards what we now call intellectual property. The language of property is a powerful one, especially when it is combined with the language of rights. However, it is necessary to step outside the boundaries of this language in order to assess the best possible future for the way we create and exchange knowledge. The following chapters analyze different ways in which people resist and envision alternatives to intellectual property.

Speaking of alternatives makes it easier to discuss the issues, but not all alternatives assume that copyright and patent law should cease to exist. The types of resistances range from theoretical to concrete; in some areas alternatives have been articulated, while in others they are still nascent. Often, the type of resistance that exists is merely a new and more complex rendering of the status quo. While it may be important to develop a way of thinking that bypasses the idea of property altogether (and some chapters will certainly take up this issue), simply pointing to the spaces within the already existing law where a balance can be struck can also be a radical step.

By describing the types of systems that have already begun to develop and contrasting them to the current trajectory of copyright and patent law taken by the American Congress, the WTO, and the major corporate players in the world, we can begin to develop the possibilities of alternatives. Each chapter marks out the struggle between those forces seeking to increase intellectual property protection and those seeking to resist this expansion. My underlying argument is that this process is ultimately a narrative one where the struggle is to define meaning and control the discourse. Within this context, each chapter seeks to, at a minimum, clarify where the language of resistance is located and to (hopefully) better articulate the complexities of this language. Each chapter evaluates a different aspect of the resistance and illustrates that there are numerous choices from which the future can evolve.

Chapter 1 begins with the neglected and increasingly circumscribed part of the already existing copyright law – the public domain. The original intent of copyright law was to ensure that creative work entered the public domain so that it could be used as a creative pool from which to draw new ideas. This chapter will examine how we came to understand the idea of the public domain and how its early conceptualization was woven into an understanding of copyright law. By theorizing about the public domain we can better articulate what is important about the idea of a “public” as contrasted to the special and private interests of individuals acting to assert their personal will over the legislative process. Perhaps by rejuvenating our understanding of the public we can retain much of what the original copyright law was designed to do and thus provide for alternatives within the already existing law of copyright. The reconceptualization of the public domain has primarily been carried out by academics interested in resisting the over-expansion of copyright and patent law.

Chapter 2 focuses on the use of shrinkwrap licensing agreements as a mechanism to solidify ownership that transcends copyright law and then turns to the increasingly popular use of copyleft/General Public License (GPL) licensing options. Copyright law is a public law designed to protect copyright owners, but also to provide the public access to the use of copyrighted works. Companies use restrictive licensing agreements to provide themselves with more protection than what is given them under the copyright law and to deprive consumers of their rights under the copyright law. Most importantly, the intent of these licenses is to transform the relationship of the copyright owner to the content consumer from one of sale of a product to licensing of a product. This chapter will evaluate the implications of shrinkwrap licensing agreements in the context of copyright law and then turn to perhaps one of the most successful (so far) resistances to the expansion of copyright within the world of computer technology. Richard Stallman’s copyleft model and the GPL was conceived as an alternative to the excessive protection granted software writers under the copyright act. His GPL has been used by other groups seeking similar protection and has developed into the open-source movement.¹¹ The open-source movement is a paradigmatic

alternative to intellectual property in the digital age. The open-source movement is revolutionary, not only for the product that has emerged as a result of the work, but also as a viable alternative to the restrictive proprietary system currently understood as copyright law. Open source fundamentally challenges the assertions regarding creativity and quality that accompany copyright. The open-source movement also illustrates with great clarity how those with the power to define the narrative operate to close off possible alternative models before they even have the opportunity to develop.

Chapter 3 evaluates peer-to-peer networking. The continued popularity of filesharing, despite the music industry's best efforts to shut it down, suggests that this technology has the potential to develop around the issue of cultural sharing. The Napster litigation illustrates the threat perceived by the music industry, and by the entertainment industry as a whole, as the world begins to have access to digital materials. What model ought to govern the future of entertainment? Despite the demonization of Napster by the industry, it has been a model with vast consumer appeal. Additionally, numerous recording artists have recognized the power of a filesharing network and have used the emergence of Napster and MP3s to publicly criticize the manner in which the industry treats artists. Napster and the surrounding controversy highlights the important dimensions of how copyright intersects with artistic activity. While people engaged in filesharing have not understood their activities as explicitly political to date, the combination of activist musicians and consumers has the potential of challenging the way music is produced and distributed. Finally, this chapter discusses the power of disintermediation as an alternative to centralized property control.

Chapter 4 shifts gears to evaluate the discourse of morality surrounding the patent fights over access to affordable HIV/AIDS drugs. The debate over access to life-saving medication highlights that in some cases what is needed is a new paradigm from which to discuss rights more generally. Prior to the controversy over access to HIV/AIDS medications, drug companies had been very clever at monopolizing the discourse on morality. They successfully labeled anyone making drugs that violated patent rights as "pirates" and "thieves," and utilized the international system of trade sanctions to punish possible infringers. The AIDS crisis in South Africa was an event that made it possible to challenge the discourse of morality created by the pharmaceutical industry. When the South African government was sued by a conglomeration of international pharmaceutical interests for trying to provide affordable access to AIDS medication, the morality of access to life-saving medicines became a central issue. The emergence of a transnational activist network dedicated to resisting the pharmaceutical narrative of property over lives successfully changed the nature of the debate. The moral discourse shifted in favor of the pirates and the drug companies lost some of their ground. In this chapter, I will trace the process of creating a viable discourse of health care as a human right to help highlight what narrative strategies are necessary in shifting the discourse towards the public interest.

Chapter 5 also evaluates the world of patent law, focusing specifically on the human body. Biotechnology research, the Human Genome Project, and the Human Genome Diversity Project have all focused upon understanding what constitutes a human being at the genetic level. Since the early 1980s in the USA it was understood that life could be patented and the patenting of life has moved from bioengineered organisms to human genetic material. The quest for scientific understanding is linked to the lucrative possibility of monopolizing ownership of important genetic information. There has been a rush to patent human genetic material that raises important concerns over the ethical nature of this process. The race to own the human body is perhaps one of the more sinister expansions of property rights made possible by the classical Lockean language of property as the product of labor. This chapter attempts to uncover the theoretical assumptions in patent law that become dangerous when applied to humans and human body parts. Critiquing the underlying theoretical assumptions of intellectual property law is an essential part of building resistance and developing alternatives. This chapter offers such a critique and posits an alternative paradigm through which to view scientific research focused on the human body. By better understanding the way in which we describe a body part as private property, we may be able to develop alternative metaphors that avoid the dehumanizing impact of owning the body.

Chapter 6 investigates the harms of biopiracy and biocolonialism, and the possibilities of traditional knowledge systems to construct alternatives to the prevailing international system of intellectual property. Biopiracy has emerged as a serious threat to those living in the global South whose knowledge has become a raw material for Western exploitation. The availability of marketable products that can be appropriated by Westerners from the global South illustrates that there are viable innovative strategies, some of which have existed for centuries that can serve as alternatives to the Western paradigm of intellectual property. Unfortunately, these systems are being exploited by those who embrace the property regimes of the West. Additionally, the global rush to develop TRIPS as the only viable protective model for intellectual property arrogantly assumes that the intellectual property models developed by Europe and the USA are the best and only methods by which to protect creative work. This chapter will focus on existing systems for protecting traditional knowledge. It is important to evaluate and understand these other orientations towards knowledge and the politics of assuming one way of using knowledge is better than another.

Chapter 7, by way of conclusion, tries to draw together some of the themes that have developed throughout the book. It has been ten years since TRIPS entered into force and in that time not only have numerous countries agreed to adhere to TRIPS, but a worldwide resistance has also emerged. The struggle to define and reinterpret TRIPS is an important ongoing struggle that will ultimately impact us all. The final chapter attempts to pave the way for future discussion about the importance of resistance.

Throughout this book, I use the concept of “intellectual property” very tentatively. I agree, for the most part, with Richard Stallman that the concept of intellectual property is not appropriate.¹² In part, this is true because it tends to lump together very different types of legal regimes under the same category and thus obscures the differences between copyright, patent, trademark, and trade secret law. However, the idea of intellectual property also conveys a much more powerful meaning upon the works protected by copyright and patents. It gives copyright and patent law more conceptual power than would otherwise be conveyed by using the words copyright and/or patent. Intellectual property conveys the sense of absolute property rights whereas copyright and patent seem to convey the notion of complex legal regimes. Property is too often interpreted as being an absolute right (even though it is certainly not). To use the word property already skews the debate away from the complexity of balanced rights.

Perhaps the most disturbing thing about having to use the idea of intellectual property is that there is no viable alternative term in our modern world that can be used to describe creative and innovative work besides describing it as someone’s property. To discuss this topic it is inevitable that one uses the language of rights and property, and this, I would argue, is part of the problem. In many ways, then, it is important to dig into the roots of the logic of the property system itself, a problem that is threaded throughout the book and one I briefly address in Chapter 5. Ultimately, while I am very critical of the idea of intellectual property and would like to seek alternatives, I find myself using the term because alternatives are scarce and it is easy to use intellectual property to lump together very disparate things. However, as will become clear throughout this book, even the words we choose need to be examined and perhaps rethought.

All told, this book takes the study of intellectual property into a new direction. For me, it is part of a struggle to escape from the law that has now bounded my reality. It is my attempt to move beyond the law into spaces that can be possible without recourse to “rights” or “property.” I am not alone in my criticism of these types of laws. There is a growing network of critical intellectual property scholars who are worried about the future of intellectual property law. Most people who fall into this camp understand that there are some valuable benefits from the law, but that it poses grave dangers to our traditions of privacy and freedom of expression. There are also people who feel we should do away with intellectual property altogether. These voices are helping to create alternatives and need to be heard. The worst possible future will be achieved if only one voice – a corporate voice – is heard. I hope this book will help create a future more sensitive to the public interest. Ultimately, it is important to realize, as the Zapatista slogan points out, that another world is possible.

1 Theorizing the public domain

Copyright and the development of a cultural commons*

The temptation to share is overwhelming.
(Zygmunt Bauman, *Modernity and Ambivalence*, Ithaca: Cornell University Press, 1991, p. 245)

When the US Congress passed the Sonny Bono Copyright Term Extension Act (CTEA), all copyrighted works were given an additional twenty years of protection before they would enter the public domain.¹ By extending copyright protection, the CTEA stopped the flow of copyrighted material into the public domain for the immediate future, a restriction many legal scholars found troubling.² Continuing with the practice that began when the USA became a part of the General Agreements on Tariffs and Trade (GATT), the CTEA also pulled many foreign works that had entered the public domain in the USA, but not in their country of origin, back under the protection of copyright law in the USA.³ While the entertainment industry generally, and Walt Disney specifically, benefit from the new law, the losers are less well defined. After all, people can still read books, use the Internet, and watch Mickey Mouse; these works simply remain protected by copyright law for a longer period of time.

One loser who depended upon the public domain was Eric Eldred. As an online book publisher of works in the public domain, the CTEA made it impossible for Eldred to publish new material. Works that had been ready to enter the public domain were no longer available for publication and a valuable literary resource was taken out of public control. In response, Eldred sued, arguing that continued congressional expansion of copyright interfered with the constitutional mandate that copyrighted works only be protected for a limited time.⁴ Additionally, providing retroactive protection for works that had already been published under earlier copyright laws did nothing to provide incentives to create new works.

Eldred was unsuccessful in rescinding the twenty-year extension to copyright,⁵ but the controversy surrounding the CTEA created the opportunity to clarify and assert the value of the public domain. Despite continued relative

* An earlier version of this chapter appeared in Austin Sarat and Patricia Ewick (eds), *Studies in Law, Politics, and Society* 29: 3–36.

obscurity of the public domain, Eldred's suit became a focal point for those concerned with the trend towards expanded domestic and international copyright power. Many argue that the public domain is crucial to the circulation of ideas, a concept closely tied to democratic theory and theories of the public sphere. It can be argued that without a balance between the ownership and exchange of ideas, we lose a vital public space from which new innovation can emerge. Laws like the CTEA shrink the scope of the public domain and ultimately reduce the resources available for innovation that can happen outside the intellectual property system.⁶ The CTEA is one example of a larger press to expand property boundaries in the information age. The USA seems to be leading the movement towards greater privatization, but the shrinking public domain is an international phenomenon as laws are passed and the system of intellectual property comes to be understood as the "natural" method for protecting original work. The property language itself contributes to an international shrinking public domain because it establishes new assumptions about what should be shared and what can be owned. Ultimately, exchange becomes a matter of commercial property enforced by government regulation with significant repercussions for public information.

The expansion of copyright and the shrinking of the public domain did not begin with the Internet, but the Internet exacerbated the problem. The threat posed by networked and digital technology to the ownership and control of information has led industries to obtain increasingly absolute protection over their "property."⁷ As James Boyle eloquently points out, we are witnessing a "second" enclosure movement.⁸ This second enclosure uses the same justification as the first, the Lockean argument that by enclosing a "wasteland" one can use the land more productively, thereby increasing the benefit for all. By privatizing creative work, so the argument goes, the creator will have an incentive to create additional goods that will ultimately benefit society. Within the logic of enclosure, little thought is given to the idea of a general public that transcends the interests of any given individual. As copyright and patent law expand their protective wings, the obvious victim is the public domain, and by extension the public more generally.

In part, the public suffers because the idea of the public domain is an indistinct concept of little concern to most people. Illegal exchange is the norm, not because the world is filled with pirates and thieves, but because most people have only a vague idea of what copyright protects and have not been involved in the formation of the abstract and intangible concept of intellectual property the laws have been designed to protect. As a result, it has been easy for special interests to pass legislation that benefits copyright owners at the expense of the general public.⁹ However, even if the general public does not perceive an immediate threat from the extension of copyright law, the expansion of these property boundaries will ultimately affect us all. The shift from understanding people as political citizens to under-

standing them as “consumption units in a corporate world” substantially harms our ability to envision a public.¹⁰ As the enforcement of copyright law becomes prioritized and sharing becomes illegal, the public will lose a freedom they may not even realize they had.

The public domain’s lack of a theoretical core and a limited advocacy network has allowed it to be easily overridden by those who claim private property is the best way to protect the public. The public domain has always been assumed to exist beyond the borders of private property, but because private property is the key unit of analysis, the public domain is easily ignored or marginalized.¹¹ Christopher May defines the public domain as the residual after all private rights have been enacted: not a very powerful place from which to protect work.¹² In fact, almost by definition, the public domain is that area which does not need protection because it is a residual and thus unworthy of protection (an idea that is being contested).

In response to the over-emphasis of private property rights, legal scholars argue that the public domain needs to be revitalized conceptually (or vitalized) to balance property and access.¹³ Developing a vibrant public domain is essential for balancing public interests with private property interests in the information age. As Bollier suggests in his recent book *Silent Theft*, we “must begin to develop a new language of the commons. We must recover an ethos of the *commonwealth* in the face of a market ethic that knows no bounds.”¹⁴ A substantial intellectual effort to invest the idea of the public domain with meaning began in the early 1980s.¹⁵ However, it remains a “concept which is in many ways in crisis.”¹⁶

The argument of this book is that the articulation of alternatives to the continued expansion of intellectual property rights is desperately needed. While there is no coherent resistance to the expansion of intellectual property rights, pockets of resistance are emerging around issues of copyright and patent law. Each of these smaller resistances has begun to envision an alternative way to exchange information or to think about intellectual property that transcends the private property rhetoric of the contemporary debate. These resistances to intellectual property take place at both theoretical and practical levels as an effort is made to re-imagine intellectual property. This re-imagining will ultimately, it is hoped, help establish a counter-discourse to the language of private property that has been overwhelmingly accepted as truth in the past few decades.

In this chapter I will investigate the theoretical work being done to invigorate the idea of the public domain and suggest that developing the public domain as an alternative to the self-interest of private property ownership is a crucial first step in developing a resistance to the expansion of intellectual property rights. Furthermore, developing the public domain as a counterpoint to copyright and patent law is vital to an energized public sphere and, by extension, a democratic system. Only a vibrant public domain, with the associated commitment to a general public, will withstand the overwhelmingly powerful pressure to privatize. At the center of this argument is a

struggle over the idea of a “public” itself and how the idea of a public might be used in a democratic manner.

Whether by design or default, the idea of the public domain is woven into the fabric of copyright and patent law, and needs to be reinvigorated in order to serve a larger public purpose. The underlying assumption of this chapter should be clear: that the expansion of private property rights is detrimental to the free flow of ideas and the ability of a democratic people to exchange ideas and creative work in a meaningful way. By re-imagining the world and opening up the possibility of alternatives where none were seen before, we can make an impact on the future of innovation and creativity. It is essential to illustrate that choices other than the expansion of the property rights discourse exist. Developing a democratic public domain is crucial to creating alternatives to intellectual property.

The idea of the public domain and the idea of the public sphere are connected. Both are central to the assumption that the free flow of information and the development of a public are important for democracy. I argue that a viable public sphere only exists when a vibrant public domain exists. It is worth investigating the possibilities of the public domain as a democratic space within the discursive paradigm of the public sphere established by Jürgen Habermas.¹⁷ Because the idea of the public domain emerged within the legal tradition of copyright and patent law, it has not explicitly been linked to the larger theory of the public sphere. Additionally, theories of the public sphere have not spent much time discussing the idea of the public domain. Instead, public sphere theory tends to take the circulation of ideas as a given. I believe it is possible to make these links explicit and in doing so to help develop not only the justification for preserving the public domain, but also to understand why the public domain is important.

First, I wish to sketch the boundaries and dimensions of the idea of public domain. Second, it is important to recognize the connection between the public domain and the public sphere. In other words, what public, or “people,” are served when discussing issues of the public domain? How does the idea of the public sphere connect to the public domain and what are the ramifications of that connection? Third, it is essential to uncover how the expansion of intellectual property harms the public domain. Finally, I will evaluate the contemporary movement to reinvigorate and develop a viable public domain that will serve as a counterweight to the over-emphasis of intellectual property.

Intellectual property and the public domain

While it is important to evaluate the public domain historically, it is also important to realize that there is no historical site that can serve as a foundation for a modern interpretation of the public domain. The evidence suggests there has never been an adequate theory of the public domain, thus

retreating to some past conception of the idea would not be productive. As James Boyle points out, the debate has been:

framed as criticisms of intellectual property rather than defenses of the public domain or the commons, terms that appears rarely “if at all” in the debates. There is no real discussion of the world outside of intellectual property, its opposite, whether in conceptual or economic terms.¹⁸

Thus, the idea of the public domain must take on new meaning in the twenty-first century.

The public domain has been conceptualized in many different ways.¹⁹ One conceptualization is as a system of property; both English common lands and the US west have been understood as public domain lands.²⁰ The development of the paradigm of private property (which justified the enclosure of the English commons and the privatization of the US west) frames the emergence of copyright law. Mark Rose argues that developing the language of the “estate” to describe literary work became the most compelling method for protecting literary work as “original” property.²¹ While earlier metaphors had attempted to equate the literary work with a child, and the author as “shepherd, tiller of the soil, vessel of divine inspiration, magician, and monarch,” each of these metaphors lacked the compelling language of private property.²² Rose’s insightful analysis focuses on the construction of a property right and does not spend much time on the idea of the public domain.

Other scholars have provided different perspectives on how the idea of the public domain becomes important. First, the French term, *domaine public*, gained international recognition with the passage of the Berne Convention at the end of the nineteenth century.²³ Second, Ross argues that copyright and patent created a public domain by default when statutory copyright displaced the idea of perpetual rights in eighteenth-century English law.²⁴ The US constitutional provision to protect work for a limited time also reflects the limits of copyright and patent law, and thus the space of the public domain beyond. Despite the different ways in which the public domain can be said to have developed, the common theme is that the public domain coexists with, and may replace, or be replaced by, private property.

The relationship between property and the public domain suggests that the public domain has always had contested, politicized boundaries. For example, eighteenth-century rural booksellers broadly defined the public domain in order to compete with the Paris and London bookselling monopolies.²⁵ Publishers considered works that were not subject to early copyright laws, had fallen outside the law, or were claimed to be unfairly owned, as fair game. In response to the broad interpretation of the public domain, city booksellers claimed that the rural printers were “pirates” engaged in the theft of property. “Pirates” then and now claim a much larger public domain that increases their access to works otherwise considered private property.²⁶

The language of piracy indicates that those with the power to define property and theft construct the public domain by creating lines of demarcation between the public domain and private property. These lines are intensely political and the struggle over protecting the public domain is in some very real ways about who controls the definitions of property and piracy.

As becomes clear when one begins to examine the idea of the public as it relates to intellectual property, it cannot be assumed that the idea of the “public” has a stable meaning either. Carol Rose in her insightful work on property rights describes the differences between “organized” and “unorganized” publics as constituting different rights and access to property.²⁷ An “organized” public, like the government, acts much like a private property owner. When governing property, the state acts as an agent of the “public.” Such “‘publicly’ owned property, so understood, still has a single owner and speaks with a single voice; this corporate body can manage, buy, sell its property just as any other owner does.”²⁸

The “unorganized” public, by contrast, does not act through the voice of a “single” government body. The unorganized public is the public at large and property rights for the unorganized public, while more difficult to protect, exist. Common law, in both the USA and Britain, provides protection for unorganized publics.²⁹ Public “trusts” and the legal doctrine of custom both infer property rights in a more general and unorganized public.³⁰ Additionally, there is legal support for the transfer of private property to the unorganized public if sustained public use of the land is documented.³¹ Thus, the idea of an unorganized public holds some legal power over the division of property into public and private bundles.

The problem with the unorganized public is that it is not sufficiently structured to serve as a property owner.

For a time, it was said that no one could make a gift to the public because “the public” was an insufficiently specific donee. This amounted to saying that the general public was not competent to act as a property owner: property had to be managed by particular, identifiable persons.³²

An organized public understood as the government provided a solution to the problem of property ownership of a disorganized public. However, despite the prominence of the public as represented by the government, the legal system recognizes two types of “publics,” according to Rose – an organized and an unorganized one.³³

There is a politics to the location of property rights in one public over the other. If, as common law suggests, there are property rights held in common by an unorganized public, these rights bypass the government’s regulatory abilities. The unorganized public, in other words, as an “owner” of property, threatens the state because it undermines the assertion that the government speaks for the public. However, if a state can be described as an agent for the “public,” then the state can assert control over what comes to be defined

as “public.” If an unorganized public had different interests than the organized “public,” who claim to represent “the people,” the very idea of representative authority is undermined. Thus, it is in the interest of the state to extinguish any vestiges of an unorganized public’s rights and assert the sole claim of being able to speak for “the public good.”

What is in the interest of the “public” becomes politically contested territory. For example, a representative acting in the interest of the “public” can shift “unorganized” public lands into the hands of private individuals in the name of serving the “public” interest. While public goods may emerge from private property, it does not follow that the government agent worked in the interest of the general public, or preserved a public domain. The conceptual shift from an unorganized public to a state representing the public was at the heart of the practice of distributing territory in the US west. The “public domain” as conceptualized by the US government was distributed as quickly as possible into the hands of private individuals.³⁴ For the US government, which claimed to be acting on the behalf of “the people,”³⁵ the best and most “public” use of the property was to grant this land to private owners who could utilize it as they saw fit. In fact, this private definition of public good was (and is) at the heart of the idea of US “democracy.” However, this individual and private definition of the public good is certainly a politically contested one.

In both the US example and Carol Rose’s framework, the lines are not drawn between public and private ownership, but between the unorganized public and organized property ownership. Early legal cases like *Delaplace v. Crenshaw & Fisher* helped define the state as a necessary protector of property. As Rose points out, unorganized publics became a threat to representative power. “Indeed, if the customary acts of an unorganized community could vest some form of property rights in that community, then custom could displace orderly government.”³⁶ The politics of the idea of the public, then, resides in the assertion of who can “speak” for the public.

This division of the public into organized and unorganized ones helps clarify some of the confusion over the concept of the public domain. Specifically, one of the conceptual problems with the public domain is that privately owned material also functions as public domain material. The vast amount of material circulating at any given time is under copyright or patent protection. The categories of organized and unorganized publics articulated by Carol Rose help clarify the property dimension of the public domain. Both organized and unorganized public domains exist. The organized public domain is the world of creative and innovative work under copyright and patent protection that can be considered the private property of individuals. The government, speaking for the organized public, establishes the limits of these property rights to balance the rights of authors/inventors with the rights of the public. The public domain of property rights is state-regulated to best facilitate the transfer of information between organized publics. In the USA, “fair use” is used to bypass the property boundaries of copyrighted

works in order to allow ideas to circulate.³⁷ In addition to fair use, the Internet has allowed the “commercial public domain” to expand by providing easy accessibility to copyrighted works that otherwise would have been difficult to obtain.³⁸ Beyond the organized public domain of intellectual property, an unorganized public domain exists. When copyrighted work “falls” into the public domain, it enters the world of the unorganized public, open to anybody without permission. Works with expired copyrights and patents are in this public domain. Government documents and other public records may automatically be in the unorganized public domain. Other works may have been explicitly placed there. Anything that exists in the unorganized public domain can be appropriated, used, and built upon without worrying about the ownership of the original.

Pamela Samuelson has developed a multifaceted and layered mapping of the public domain where public domain materials flow from the surrounding domain of intellectual property.³⁹ Samuelson’s idea of flow is essential to a viable public domain. If the flow were to stop, then the public domain, much like a stream, would dry up. However, it is also important to recognize that the surrounding “private” property is also subject to the flow of the public domain. The line between copyright and patent law and the public domain is blurred by the public nature of intellectual property.⁴⁰ Thus, drawing from Rose, it is important to retain a concept of an “organized” public domain when discussing the circulation of ideas and the public domain. In essence, it is important to expand the idea of the public domain instead of allowing it to be contracted without resistance. These two different public domains, one “organized” and regulated through intellectual property law, the other unorganized and unregulated, each play a role in the circulation of ideas.

The process of describing public domain categories tends to render the domain rigid by implying that only these categories exist. Instead, it is important to visualize the public domain and its relationship to the public sphere as fluid, constantly changing, and invigorated by the circulation of texts. Maps, with their rigid boundaries, cannot totally depict the flow of ideas to and from the public domain. However, maps are helpful as long as the fractured and multifaceted nature of the public domain is kept in mind.

Building upon Samuelson’s mapping of the public domain, the public sphere itself can be divided into a variety of different publics, all of which draw from different public domains. There are academic publics, consumer publics, middle-class publics, subaltern publics, and traditional knowledge publics. A less unitary public domain allows for varying degrees of property protection depending upon the use and the type of work produced. It seems that a complex and interwoven public domain best reflects the type of information society we have constructed.

As Samuelson points out, there is a public domain in facts, information, data, knowledge, ideas, concepts, theories, hypotheses, scientific principles,

theorems, mathematical formulae, laws of nature, and statistical techniques to name just a few.⁴¹ In addition to these layers of the public domain it is possible to add laws, regulations, judicial opinions, government documents, and legislative reports.⁴² The boundaries of the public domain constitute a gray area of public uses. These gray areas include a variety of uses that may suggest that even some private property is subject to public use. For example, fair use gives the public access to copyrighted materials, many commercial texts are widely usable without restrictions on their use, and the open-source movement provides free access to software code.⁴³ According to Samuelson, the borders of the public domain shrink and expand based upon court decisions and legislation.⁴⁴

The idea of copyright and patent law is intrinsically linked to the idea of the public domain, but the property side is given preference over the public domain side of the equation. The conventional story in the USA holds that copyright and patents balance the private interests of authors and inventors, and the interest of the public in accessing this information. Thus, private property rights provide public benefits by inspiring creative people to continue creating. It is assumed that the organized public domain as defined by copyright and patents is the only public domain worth protecting. Additionally, it is assumed that more expansive rights will be better than fewer. The unorganized public domain is ignored. However, both dimensions of the public domain are important and in order to understand why both public domains are important it is necessary to further excavate our definition of the “public.”

The “people,” the public sphere, and the public domain

Like the construction of the public domain, the construction of the idea of “the people” has political origins. Historian Edmund S. Morgan argues that the idea of the “people” was imagined by the English parliament in order to assert their power of representation against the King’s representative power.⁴⁵ In essence, imagining the “people” was a power struggle to replace the sovereign body of the King with the sovereignty of an elected body of “representatives.” As Morgan puts it.

It would perhaps not be too much to say that representatives invented the sovereignty of the people in order to claim it for themselves – in order to justify their own resistance, not the resistance of their constituents singly or collectively, to a formerly sovereign king. The sovereignty of the people was an instrument by which representatives raised themselves to the maximum distance above the particular set of people who chose them. In the name of *the* people they became all-powerful in government, shedding as much as possible the local, subject character that made them representatives of a particular set of people.⁴⁶

Following this line of analysis, the idea of the “people” has always been a political force between two different bodies of elites asserting their definition of popular identity over others. According to Morgan, the idea of “the people” emerged through an elite power struggle over who gets to define the public interest. The idea of democratic representation was not intended to extend power to the “people,” but, rather, to get the many to submit to the few – simply a different elite few than existed under monarchy.⁴⁷ The people were considered too disorganized to speak for themselves; representatives must do it for them.

Although the new ideology might safely encourage a greater degree of popular participation in government than the old, its purpose remained the same, to persuade the many to submit to the government of the few. It would not do to encourage the unruly to shelter under an illusion that they were the people. Mere people, however many in number, were not *the* people, and the sovereignty of the people must not be confused with the unauthorized actions of individuals or of crowds or even of organized groups outside Parliament.⁴⁸

Rose’s unorganized public combined with the critique of popular sovereignty developed by Morgan creates a distinctly anti-democratic vision of representative democracy. It would seem there has long been a tension between representatives of the “public” and those masses of people who make up the public.

The public, outside the confines of elite representation, especially if seeking to develop their rights, have often been defined as “mobs,” “masses,” or “the rabble,” all incapable of self-government.⁴⁹ Thus, the generalized and unorganized public could not be representative. Instead, only a state could adequately speak for the people. Perhaps custom as manifested in common lands and the idea of an unorganized public are manifestations of a democracy that does not rely upon the fiction of representation. Such a form of democracy is a radical threat to the organized public of the state and the elite representatives who suggest they are the only ones who can speak for “the people.”

The discussion so far suggests that a suspicion of an unorganized public/people has long been at the heart of any discussion over what a public should be. Only through state control do “the people” take on the characteristics of a well-ordered citizenry. Both “the people” and “the public” serve as unifying concepts with unitary meanings. In neither term is there room for diversity or alternative ideas. Such diversity would disrupt the concept of “the public.” Only specific types of “publics,” preferably a collection of property-owning individuals, can be trusted. In both intellectual property and land, there is only a minimalist understanding of a public that transcends the interests of the individual and in both cases elites who claim to be acting in the best interest of “the people” control access to property. It is necessary to understand how “the people” come to be understood

as a “public” and ultimately how these entities help create democratic politics. Thus, I will turn to theories of the public sphere and the relationship of the idea of the public sphere to the idea of the public.

Jürgen Habermas’s theory of the public sphere is the starting point for a contemporary examination of the concept. Important for our discussion is the recognition that the public sphere described by Habermas and the idea of the nation articulated by Benedict Anderson both hinge upon the circulation of texts.⁵⁰ Habermas writes,

There was scarcely a great writer in the eighteenth century who would not have first submitted his essential ideas for discussion in such discourse, in lectures before the *academies* and especially in the *salons*. The *salon* held the monopoly of first publication: a new work, even a musical one, had to legitimate itself first in this forum.⁵¹

The act of publication was integrally linked to the creation and constant redefinition of the public. The public nature of discussion meant that the value of the text increased through circulation.⁵² In fact, as Habermas’s discussion of the emerging bourgeois public sphere suggests, a work began its life as a public work and could only then develop value as a private commodity. Literary property played an important role in the construction of national identity and the circulation of ideas facilitated even more creativity and innovation.⁵³ As the public grew in scope, print media, especially journals, became the way in which communication could be continued across geographical boundaries.⁵⁴ As the idea of the nation developed, so did the idea that cultural property was a national treasure, understood as important national property.⁵⁵ The circulation of ideas, especially cultural texts, helps construct identity at both individual and national levels. While this type of nationalism has often hindered the circulation of texts and innovations across national borders, it has helped define an idea of “the people” within national borders.

It is perhaps no coincidence that the circulation of texts critical to the development of a viable public sphere became the subject of legal regulation during the eighteenth century. If a public sphere premised upon the circulation of texts is essential to building democracy, it is logical that the texts would become valuable. However, English law during the eighteenth century was designed to protect the book trade and it was not until the nineteenth century that copyright came to be understood as authorial entitlement.⁵⁶ Thus, the public sphere of the eighteenth century was possible because the circulation of texts remained relatively free from copyright. Cultural goods, as Nicholas Garnham points out, “tend towards the condition of a public good”⁵⁷ and the creation of a public sphere through the circulation of texts is an example of a public good.

The public sphere as developed by Habermas is subject to significant criticism. First, the public that makes up this space is abstract. As Michael Warner

points out, “the moment of apprehending something as public is one in which we imagine – if imperfectly – indifference to those particularities, to ourselves.”⁵⁸ The abstract nature of the public means that the public sphere becomes a phantom with no actual people within the concept.⁵⁹ Jodi Dean goes further to argue that there is no public sphere at all. Instead, the public sphere “provides democratic theory with the reassuring fantasy of a unitary site and subject of democratic governance.”⁶⁰

A second critique is that the bourgeois public sphere has “fundamental undemocratic tendencies” that emerge from “the fusion of consumption with a notion of human freedom.”⁶¹ In part, these anti-democratic tendencies may stem from the fact that the public sphere can create the conditions of domination. Warner states, “The rhetorical strategy of personal abstraction is both the utopian moment of the public sphere and a major source of domination. For the ability to abstract oneself in public discussion has always been an unequally available resource.”⁶² Again, Dean weighs in on the subject to point out that Habermas’s original public sphere was actually groups of private (elite) individuals meeting in secret, hardly a model for modern democracy.⁶³ These undemocratic tendencies must be overcome with any new theory of a public sphere.

Third, the Habermasian public sphere embraces a monolithic notion of the “public” while ignoring the existence of competing and alternative public spheres outside those of the bourgeoisie.⁶⁴ Fraser argues that a unified public sphere never actually existed. There were always competing public spheres that were rejected by the dominant bourgeois class. These additional public spheres, or subaltern counter-publics, are vital to the idea and strength of a theory of the public sphere.⁶⁵ It is in these counter-publics, both in the eighteenth century and today that subversive ideas and alternative discourses can be located. Each counter-public develops its own literature and circulation of ideas, often by using mainstream cultural icons as a ground for satire and critique.⁶⁶ The public sphere must be recognized as multiple spheres, some in direct conflict with the predominant view of the bourgeois public sphere. Each sphere rests upon the circulation of texts that may flow between spheres, but can be interpreted differently by each one.⁶⁷

The development of multiple public spheres is premised upon the understanding that the construction of space is political. Harvey notes, “Spatial and temporal practices are never neutral in social affairs. They always express some kind of class or other social content, and are more often than not the focus of intense struggle.”⁶⁸ The public sphere and the public domain are sites of such struggle. Each concept has remained elitist and undemocratic in part because “the people” and the public sphere have never been agents for anything more than private interests. Even the development of a theory of multiple public spheres is critiqued as ultimately reinforcing the “priority of an official public sphere as the goal, arbiter, and ideal of inclusion.”⁶⁹

One final critique important to discuss here is Dean's argument that the public sphere has been co-opted as the ideology of the information age. She argues, "If the information age is the new political hegemony, its ideology is the public sphere. The presumed value of information – the public must know – morphs political action into compliant practices of consumption: good citizens must have magazines, televisions, Internet access."⁷⁰ The circulation of texts, texts owned and operated by a corporate elite, becomes the expression of the "public." To be a good citizen one must be involved in the consumption of these texts. Dean argues,

Capitalism in its information mode functions as communication, as the circulation of messages and information. To fail to criticize this circulation, to fail to politicize communication as an ideal, results in the acceptance of global corporate power. Perhaps paradoxically, the very means of democratic publicity end up leading to its opposite: private control by the market.⁷¹

Welcome to the world brought to us by copyright and post-industrial capitalism; one where the circulation of texts is the control of power solidified by intellectual property rights. It is hard to act as a public in such a privatized world.⁷²

These criticisms and alternatives suggest the very real struggle over how the public sphere should and ought to be defined, or if it even exists. I tend to agree that the public sphere, and by extension the public, are phantoms. However, these phantoms have been inscribed with meaning and become the foundation for the modern information society premised upon intellectual property rights. Monopolizing property rights discourse is justified because of the benefit it will bring to "the public." Thus, the problem is not that the public sphere is a phantom, but that the phantom has been brought to life to serve the purposes of a powerful elite. Giving up or abandoning the idea of the public sphere does not seem like a viable option. Instead, a conceptual battle to gain control over the idea of the public sphere must be fought.

Fortunately, numerous theorists are interested in articulating a democratic public sphere.⁷³ To redefine the public sphere as a democratic space it is necessary to recognize that people tap into what they understand to be the public domain in order to use cultural work to define their identities. The goal of a democratic public space is to ensure that the circulation of texts necessary to create public connections can happen outside the boundaries of private property enforced by copyright law.⁷⁴ In other words, the circulation of texts, even pirated ones, in many directions between multiple individuals is important to developing a non-commodified public sphere that might operate in a more democratic fashion. It is also necessary to recognize that centralization of the media and aggressive use of copyright law disrupts the democratic public sphere by limiting the circulation of texts and the creation of new ones,⁷⁵ an idea I will return to later.

Building upon the work of contemporary public sphere scholars, it can be argued that the democratic nature of the contemporary public sphere must be pluralistic and multifaceted, and ultimately it must (and will) transcend national boundaries. A public sphere where the circulation of texts creates multiple publics must have a rich public domain, a public domain that allows for texts to fall outside the corporate ownership of copyright and patent law. Instead of a “one-size-fits-all” public domain, we need a fractured, multifaceted, public domain. As it becomes more complex, the public domain needs to expand instead of shrink. Importantly, both the public domain and the public sphere need to be redefined as transcending the private property rights of individual actors while not falling prey to the abstract phantom of a public sphere without agency. The interests of the public must be recognized as distinct from the interests of individual property owners.

Additionally, while private property can lead to some public goods, it is necessary to recognize that a public beyond the individual must also be protected. As long as the public can be reduced to individual rights, the public domain will always lose to individual property claims simply because there are no real individuals within the public domain to resist the colonizing forces of individual interest. For this reason, developing a multifaceted and rich public domain is essential for ensuring the circulation of texts necessary to facilitate the democratic growth of multiple public spheres. Diversity of ideas is democratic and the original bourgeois public described by Habermas is only one part of a pluralistic democratic picture.⁷⁶ The public sphere and public domain should be confusing, they should be rich, they should transcend the language of individual rights, and they should rely upon the disorganized public discussed by Carol Rose much more than the organized publics of representative governments and corporate elites.

Public domains are important for individuals in the realm of everyday life. People make connections with creative work and spin them into their own personal stories. New creative venues, new cultural identities, and new forms of expression emerge from these everyday practices. People draw from culture generally, much of which is now privately owned, to create their understandings of the world and to communicate with others. As people interact with each other using shared cultural images they begin to form publics, a process that we can only hope will help solidify democracy. Democracy is built upon shared publics and shared culture; the public sphere must not be understood as only the exchange of political information, but instead the development of cultural connections.

Each public and public domain overlaps and shares common texts with other publics and public domains. Public domains operate symbiotically as each person constructs identities and communities in reaction to, or by embracing, the cultural artifacts made available to them. The importance of the public domain is the ability to draw freely from cultural life. The public

domain is more than useless information; it should be regarded as “a device that permits the rest of the system to work by leaving the raw material of authorship available for authors to use.”⁷⁷ Additionally, as Litman points out, because it is difficult to ascertain where individual originality begins and the ideas of others end, the public domain plays a crucial role in creative progress by providing a buffer between ownership and creation.⁷⁸

Historically, “the people” have been a fiction of elite representation, while the public domain has been devalued in relation to private property ownership. Privatization in the name of the public good is possible because only a superficial sense of a democratic “public” that transcends the interests of individuals exists. Should the interests of a more generalizable public be articulated, we will see whether the state can be energized to protect this larger understanding of the common good.

For the time being, however, our attitudes towards public domain lands and public domain ideas are going in opposite directions. With the exception of the contemporary Republican push to privatize all public lands in the USA, there is a general understanding that their value exists *as a public resource*. Intellectual property, in contrast, is now the domain of unscrupulous property speculators. Everything is to become private. The privatization of intellectual property is justified as ultimately providing for more public goods in the long term. However, the trend towards privatization not only halts the flow of ideas into the unorganized public domain, but also severely restricts the types of exchange that may take place in the organized public domain. If, as many theorists argue, a vibrant public sphere is essential to a vibrant democracy, the threat to the public domain will have lasting impacts on the future of democratic society.

The enclosure of ideas

The age of information technology and the Internet has brought with it a profound increase in the exchange and production of information and creative work. One only needs to surf the World Wide Web to see the vast amount of information available, placed there by individuals or organizations that are actively participating in the production of knowledge. Some of these websites are explicitly protected by copyright, but the restrictions placed upon the use of material are minimal. The World Wide Web is one of the best examples of how the public domain can work. There are varying degrees of protection sought by people placing their ideas online, but the assumption that exchange of ideas is valuable remains paramount. Property rights have not yet trumped the public exchange of information on the Internet.

Paul Starr outlines several important elements of the new “electronic public domain” made possible by the Internet and electronic communication. First, the Internet makes it easier to access already existing public domain materials like government documents and agency reports that have

always been “public,” but difficult to find. Second, he argues that there are incentives for commercial users to provide free or cheap information on the web in what he terms the “commercial public domain.” Third, the Internet makes it possible for people to bypass the traditional gatekeepers of publication and produce their own works on the web. Finally, the World Wide Web has become an important innovative tool as people use it to connect with others and develop new types of networks.⁷⁹ These activities suggest that the public domain is healthy, alive, and thriving. In fact, some might argue, the problem is too much information, not lack of access to information. In light of what seems to be the development of one of the largest public domains ever, why are so many scholars claiming that the public domain is under threat?

While no empirical studies have been done on how much the public domain is shrinking, the contemporary struggle is over how the Internet and the World Wide Web will be defined in the future.⁸⁰ As commercial interests commodify the Internet, laws are passed and boundaries built to ensure their dominance in the electronic world. The prevailing trend is towards strengthening property protection online. In other words, the threat to the status quo by digital technology has led to new laws designed to limit the circulation of ideas.⁸¹

The debate over the “shrinking” public domain is a struggle over the *future* definition of the public domain as tightly controlled or freely accessible. The traditional definition endorsed by private property interests argues that only when private property rights are firmly entrenched can the public interest be served. Such a definition retains the elitist interpretation of the public domain discussed earlier. Texts will inevitably circulate. The struggle now defining the public domain is a struggle over how the circulation of texts will be interpreted. The general understanding of textual circulation today is that mass numbers of Americans are engaged in piracy and copyright infringement. Transforming people into pirates and making their actions illegal does not halt the exchange of information, but it does infuse the exchange of information with an anti-democratic quality.

Many copyright and patent owners attempt to claim that unauthorized use of their “private” property constitutes a form of piracy that must be halted. The classic example of privatizing a public domain and then transforming the original creators into pirates can be found in the history of computer software. As computer programs began being treated as property, hackers who had been utilizing these products as a source of public innovation were transformed into criminals.⁸² While conveniently ignoring the importance of the free flow of information absent the barriers of property, software owners began to assert property boundaries that locked up code into the hands of concentrated monopolies. The beneficiaries of the new definition of property were clear – software owners. The law was utilized to shift computer programs from a public domain into a system of property protection and the unorganized public of the hacker community was trans-

formed into a den of thieves. However, as Eric S. Raymond has argued, software design operates much like a gift economy and, despite the tendencies towards powerful narratives of private property, the “bazaar,” or gift economy, is making a comeback.⁸³

Without a concerted effort to define and develop a democratic public with a public interest that transcends the interest of intellectual property owners, the type of exchange possible will be circumscribed. Peter Dahlgren points out,

That much public space and interaction is dedicated to consumer practices and discourses becomes significant for the public sphere, since the role of the citizen is displaced by that of the consumer; the cultural assumptions surrounding shopping malls, for example, do not make them prime settings for the public sphere.⁸⁴

The transformation of a public domain into a privatized space ultimately harms democracy, or at the very least inhibits the ability to develop a non-commodified public space. The question before us is whether the politics of the public domain should focus not only on protecting the idea, but also on resisting the extension of private property rights and the logic of radical individualism into the few areas of democratic community that remain.

The politics of the public domain is about how we want the future of innovation and development to look. Will the future be one where centralized content owners erect barriers to control the circulation of ideas? According to industry trends, nothing will be free in the future.

The biggest change is that the information you get over your laptop, Palm or pen probably won't be free. And if it is free to peek at, you probably won't be able to copy and paste it, print it, or look at it a second time, or store it on your hard drive in any way – unless you pay for the privilege.⁸⁵

The alternative of the privatized future is a future where the type of public domain created by the Internet is preserved and enhanced. It may be impossible to eliminate the type of exchange that people seem to find so important, but, as Napster illustrates, it is certainly possible to criminalize that exchange. However, the threat has moved beyond the construction of the narrative defining our actions in the public domain. We can also track various threats through the organized and unorganized public domains.

The organized public domain of copyright and patent law allows for ideas to circulate while ensuring that the creators of ideas are recognized and possibly rewarded for their contributions. The logic of extending private property rights to preserve the public good is the foundation upon which current threats to the public domain rest. The over-extension of copyright and patent law at the expense of public exchange has been well documented,

and the constant trend towards increased protection is easy to track.⁸⁶ As Siva Vaidhyanathan put it, the USA “has jeopardized the idea/expression dichotomy, public domain, fair use, open access to information, and the ability to freely satirize, parody, or comment on an existing work.”⁸⁷ As the law of copyright expands, the depth of the public domain, in terms of public performances, derivative works, and fair use, shrinks.

Within the realm of the organized public domain, Vaidhyanathan argues that the USA has surrendered four important copyright safeguards. First, with the passage of the Digital Millennium Copyright Act, Congress surrendered the balance between the copyright owner and the users of copyrighted material. Second, private interests have eclipsed the public interest. Third, by signing the Trade Related Aspects of Intellectual Property Rights agreement (TRIPS) and joining the World Trade Organization, Congress abdicated its policy-making power to a non-democratically elected international organization. Finally, the Digital Millennium Copyright Act, through its anti-circumvention clauses, replaces democratic negotiations with a “surrender of culture to technology.”⁸⁸ The US surrender displaces the public and threatens the public domain as a place of exchange. The US surrender reflects the global state of the public domain as well. The capitulation to the TRIPS agreement forces countries to harmonize their intellectual property laws and places the rights and interests of a corporate elite above the articulation of a global public domain.⁸⁹

Controversies surrounding the use of copyrighted material abound. In the USA, for example, important literary and fictional characters used to be treated like ideas that entered the general flow of cultural exchange.⁹⁰ The lines between copyright violation and satire have since been drawn to protect property owners.⁹¹ Presumption has shifted from the defendant in disputes over cultural appropriation to the plaintiff, which has serious ramifications for the depth of the public domain.⁹²

Any unauthorized use of copyrighted work is subject to legal action as young fans of Harry Potter discovered. Warner Brothers sent cease and desist letters to numerous youngsters around the globe who had constructed unauthorized fan sites.⁹³ The fan sites were only able to remain online when the negative publicity became so bad that the aggressive and hard-line copyright approach became a public relations nightmare.⁹⁴ Despite the fact Harry Potter fans were able to “win” their battle, this example illustrates the length to which copyright policing is happening on the World Wide Web. The ramifications of these types of cultural policing are important to consider. An important avenue of cultural identity and exchange is lost when cultural communication is prohibited. Additionally, when only commercial interests have the power to construct the images we see and authorize their uses, the ability of a non-privatized democratic public sphere to exist is undermined.

The shifting definition of a public performance also has serious implications for the public domain. According to John Kheit, the US courts have

never systematically defined the public space in which a public performance occurs.⁹⁵ Recently, a public performance has been expanded to include webcasting and storing music in an online music locker.⁹⁶ By broadening the idea of a public performance it is possible to shut down public exchange, or sharing. At the very least, a broad definition of public performance ensures that the only type of exchange allowable is commercial and privately owned.

While limitations on what can be considered fair use and public performances primarily affect works in the organized public domain, the law extending copyright length for an additional twenty years has implications both for the organized public of copyright and the unorganized public of the public domain. For copyright, tighter control will exist for an even longer period of time. The threat to the unorganized public domain is larger, however, because the CTEA halts the flow of information that could become publicly available for twenty more years.

The unorganized public domain is under even greater threat. Recently, commercial publishers gained a substantial portion of the public domain as their private property when they successfully closed down PubScience, a research database supported by the Energy Department that provided free government-funded information and data.⁹⁷ Articles that used to be available for free at PubScience must now be paid for using a commercial database. Commercial publishers argued that the free public information was a form of unfair competition and intend to use this argument to shut down other free government websites.⁹⁸ It is unclear how such a move does anything but further the private interest of large multinational media conglomerates. Certainly, it was in the public's best interest to have free access to information researched and paid for by US taxpayers.

Lobbying for database protection at both the national and international level is also threatening the public domain in facts.⁹⁹ The US Supreme Court has held that compilation of facts cannot be copyrighted because they do not meet the minimum bar of creativity necessary to deserve protection.¹⁰⁰ A database may receive some copyright protection for creative elements in its construction.¹⁰¹ The European Union has developed database protection that extends to the data and "provides a *sui generis* right that protects the contents of a database that may or may not exhibit such creative arrangement or selection."¹⁰² While the USA has yet to pass this legislation, significant effort has been put into trying to extend protection to databases. Database protection as currently defined in US legislation may have a negative impact on the progress in the arts and sciences.¹⁰³

Even if works have already entered the public domain, copyright and patent owners attempt to obscure the entry or define the public in such a way as to limit their access to public domain works. Here again, our theory of the public as a unitary and elite idea renders access to the circulation of texts less possible. There is often uncertainty about when a work enters the public domain. If newer edited versions of a public domain work claim

copyright protection, it becomes possible to trick people into believing the work is still protected when it is not. For example, the music industry affixes a copyright symbol to public domain sheet music and other musical scores based upon trivial changes, thus implying there is a copyright where one does not actually exist.¹⁰⁴

Publishers change titles without modifying lyrics or melody. They may claim full originality when they are really only “finders” of public domain songs. They register copyrights to such songs, claiming they are “original” works, and fail to set forth accurately the limited amount of any new material. They thereby falsely and unfairly obtain the benefit of the Copyright Act provision that places on an unauthorized user the burden to prove the invalidity of a certificate of copyright registration.¹⁰⁵

Such parasitical behavior reduces access to public domain materials and limits the ability of citizens to use these materials or create new derivative works.

Museums also are guilty of limiting access to the public domain by refusing to allow photographs in galleries, despite the fact that most collections are public domain material.¹⁰⁶ In part, these prohibitions exist in order to retain the integrity of the original work. It is thought that a reproduction may not accurately reflect the original and the museum’s job is to preserve the original for the public.¹⁰⁷ Because the museum sees itself as a steward of the public, it carefully preserves the works under its protection from misappropriation by that very public.¹⁰⁸

For museums, there are a variety of “publics” that need to be serviced – commercial interests, artists, the general consuming public, and academics all constitute a different dimension of the public with an interest in public domain artwork.¹⁰⁹ Museums divide the public into the discerning public of art appreciation and the less educated “masses” who would prefer refrigerator magnets to masterpieces. Such a distinction helps validate the elitist assumption that a museum must carefully guard the public domain of art in order to educate “the people” instead of letting these public domain works circulate freely in whatever form might be considered appropriate by the less discerning public.¹¹⁰ While there is a legitimate concern of art becoming appropriated and commercially exploited, there is also an implicit fear of the larger “public.” To put it another way, the public of the museum is different from the public of the refrigerator magnet.¹¹¹

There are several reasons more attention is paid to copyright law than other forms of intellectual property when discussing issues regarding the public domain. First, recent legislation focused on extending rights in copyright law have garnered wide publicity. Second, because copyright deals with material considered important for creative work, the ability to draw upon other people’s ideas is very important. Third, copyright does not protect a

work absolutely during the copyright term, which makes the balance between public use and private control more controversial. Trademark issues as they relate to the public domain are also important to investigate, but go beyond the scope of this chapter.¹¹² Patents also raise public domain concerns, some of which will be discussed below. Patents, by law, extend protection to an invention for twenty years with an extension possible under limited circumstances.¹¹³ After twenty years, the invention, much like copyrighted material, becomes public domain material.

As might be imagined, patent holders seek to retain rights to their invention (meaning primarily the right to exclude others) for as long as possible. As long as the patent owner has an exclusive right to sell a product, they can control the price. Once a patent enters the public domain, it can be utilized by anyone without paying a licensing fee or gaining permission from the inventor. It is the availability of the public domain, for example, that makes the production of generic drugs possible. However, the pharmaceutical industry is perhaps the most successful at manipulating patents to ensure that their protection will continue as long as possible. Henry and Lexchin point out that,

The techniques they use are known as “evergreening,” and include: introduction of new formulations (including fixed combinations), which are marketed heavily before the generic version of the drug is released; second-medical-use patents for drugs nearing the end of their basic patent life; repeated patent infringement suits, which trigger an automatic 24–30 month delay in processing of the generic product claims in Canada and the USA; and collusion with generic manufacturers to keep products off the market. Also, a company can manufacture and patent a near-identical product that has no real therapeutic advantage over the original agent – for example, esomeprazole, an enantiomer of the top-selling proton-pump inhibitor omeprazole.¹¹⁴

Recently, AstraZeneca was able to extend its patent on Prilosec by changing its chemical makeup slightly to create Nexium.¹¹⁵ As a result, AstraZeneca was able to successfully sue several generic drug manufacturers who had developed generic versions of their patented product.¹¹⁶ Additionally, while not a patent issue, pharmaceuticals are claiming that pill shape and color are also proprietary, another tactic to keep generic brands off the market longer.¹¹⁷

While these tactics enhance profits, they do little to help the millions around the globe who might benefit from cheaper access to medication made available by generic manufacturers. However, the existence of compulsory licenses that can be imposed in times of significant health crisis can serve a public domain function. In the case of pharmaceutical products, a compulsory license requires the patent owner to license the patented drug so that it can be produced at affordable prices and in quantities necessary to

resist a health threat. The tension between patented medication and compulsory licenses will be discussed in greater detail in Chapter 4. There is a growing international movement to ensure that life-saving medication is made accessible to the world's poorest people and compulsory licenses are one way to achieve this goal. While not specifically a public domain issue, the availability of compulsory licenses does broaden public accessibility to patented medication and as such is worth mentioning.

These examples only begin to scratch the surface of the public domain threat. The internationalization of intellectual property rights, or what Frow calls the new world order in knowledge, extends the power of property to the global level. This expansion of the property paradigm is especially damaging for the developing world. As John Frow points out,

One effect of this shift in the legal status of organic matter is that the world's germplasm resources, largely clustered in the Third World and which have traditionally been considered to belong to the "common heritage of mankind," are being appropriated at little cost from the world's poorest nations, developed by genetic hybridization, and resold to the source countries as commodities that are not only expensive in themselves, but are bred to be reliant upon chemical fertilizers and pesticides manufactured by the agrochemical corporations.¹¹⁸

Internationalizing the system of intellectual property has had significant impacts on the developing world by forcing a Western property model onto previously understood public domain material. The impact of patent expansion has been especially harmful for developing countries.¹¹⁹

The problems outlined above illustrate the concerns scholars have regarding viability of the public domain if the ideology of property completely colonizes it, in effect creating an anti-commons.¹²⁰ Private property rights devoid of any ethic of sharing will kill the free flow of ideas and replace exchange with the barriers of copyright and patent. The success of the private property ideology makes it difficult for the idea of the public domain to compete. The possible incentives of private property, not to mention the power of excludability, make its logic compelling for self-interested actors who privilege the individual over the public. A property paradigm transforms sharers into owners and creates a feeling of victimhood when something previously thought to be common property is "stolen."

To suggest that the public domain is important is not to suggest that copyright law or patent law has no place in the future. However, a balance between the benefits of copyright and patents and benefits of the public domain must be sought. It is clear that the movement to privatize everything from the code to the content of the information society will have a detrimental impact on many while facilitating a system of creative production that is highly centralized.¹²¹

In the example of the US west, we can see where recognizing the exploitation created through privatization led to changes in how the federal government perceived its role in relation to public land. At the end of the nineteenth century, when government agents recognized that a few powerful corporations would soon monopolize public resources, they began to take action to avert the destruction of what had been the public domain.¹²² Many argue that the tragedy of the commons is responsible for resource overuse in the US west.¹²³ Others argue that it was not the tragedy of the commons that destroyed the public domain, but the “pressures of capitalist agriculture upon coincident use-rights, together with the sheer political power of the landholding class, rather than with competition on an equal footing between isolated individuals” that was responsible.¹²⁴

Interestingly, only when the public domain began to shrink towards the end of the nineteenth century did the conservation movement emerge.¹²⁵ Writing in 1910, Robert Tudor Hill identified the threat posed by radical individualism and began articulating a larger definition of social interest: “A confident recklessness has robbed the soil of fertility, cleaned out the forests, wasted oil and minerals and turned huge sections of Public Domain into private lands with no thought of social interests or of future welfare.”¹²⁶ Hill’s words illustrate the tension between individual and collective action, and how it is possible to develop a language of a democratic public domain. The curious notion that extracting natural resources from public land for private profit was beneficial to the public was slowly replaced with a philosophy of conservation and preservation.¹²⁷

The lessons learned from the enclosure of public lands suggests that while there may be instances of the tragedy of the commons, there are at least as many instances of the tragedy of the private. Conversely, there are aspects of common property that are more valuable because property is held in common. First, it may be cheaper to regulate some forms of property as commons than to police it as private property.¹²⁸ More importantly, Carol Rose suggests that it is important to invest the “public” with a vibrancy that transcends private property rights. She calls this the “comedy of the commons,” also described in the common vernacular as “the more the merrier.”¹²⁹

In the comedy of the commons, “increasing participation *enhances* the value of the activity rather than diminishing it.”¹³⁰ Rose concludes by suggesting that some things must belong to the public because the public creates their value. Examples include dances in the public square and the traditional marketplace. It is unclear why a private property owner should profit from value created by the very public nature of the event. In the world of copyright one might ask why Disney should profit exclusively from its appropriation of Snow White, Cinderella, or any other public domain story it now claims to own. Additionally, if there is to be a role for government, it ought to be to protect the public nature of the comedy of the commons. It is this idea of “the more the merrier” in public property and the commons that is best analogized to intellectual property rights.

While it is important to note that ideas cannot suffer from too much use, but instead too much legal protection, Garrett Hardin's argument has valuable implications for our understanding of the role of government. Hardin assumes that any unorganized public will ultimately destroy that which they hold in common. However, despite the dim picture Hardin paints of the unorganized public, he argues that a government, or "organized" public, can function like a private property owner to protect the commons.¹³¹

It may be possible to reconstitute an organized, or "represented," public that transcends its elitist heritage and operates to preserve a "public domain" (or multiple public domains) by going beyond the protection of individualizing private property interests. To put it another way, a democratic government with a rich understanding of public domains might also work to protect and represent the public. As Algis Mickunas puts it,

This domain is the most basic political institution on which all other political institutions – including specific constitutions – rest. Unless all members of society are able to enter the public domain as an autonomous source of rules, the meaning of the political disappears.¹³²

One significant alternative is to vitalize and protect the already existing world of the public domain. The final section of this chapter will turn to actions that can be taken to preserve the public domain. This reconceptualization of the public domain begins with the understanding that this concept is at the heart of a democratic political system.

Resistance and alternatives

The battle over the public domain is waged on two fronts. The first is the world of the regulated public – texts and inventions under the control of intellectual property protection that serve a larger social function. The second front of the public domain battle deals with the unregulated public domain. This world of public domain materials demands a different type of attention, one that aims to resist further expansion of monopoly rights and perhaps even retreat from the over-expansion of rights that has already occurred. Advocates of the latter position believe that laws such as the Digital Millennium Copyright Act ought to be reconsidered, and additional legislation aimed at expanding the realm of private property ought not to be passed. Within the public domain of intellectual property law, meaning the way the public uses the works protected by copyright and patent law, it is necessary to open additional space for the public circulation of ideas. For example, Keith Aoki suggests that perhaps we should think of some types of intellectual property as a form of public trust and/or grant "easement" rights to users, especially those in the developing world.¹³³

These two fronts may be best addressed within James Boyle's framework of environmentalism for the net. Like the environmental movement, resis-

tance to the damming of the public domain can take many forms. As Mark Hostler of Negativland suggested at a conference on the public domain held at Duke University, “if Jamie Boyle is the Sierra Club of the intellectual property movement, then Negativland is the Earth First!”¹³⁴ Where Negativland “illegally” appropriates copyrighted works to highlight the problematic nature of property rights in creative work, other activists work at the conceptual and legal levels. There are options ranging from the civil disobedience of Negativland to the growing idea of a viable public domain, to placing your work within the public domain itself.

The first level of resistance must be theoretical and definitional. The debate over copyright law is usually framed to exclude the alternatives. As Christopher May points out,

If it is suggested that commodification still produces a less than optimal outcome, a comparison is drawn between IPRs [Intellectual Property Regimes] and no protection at all to suggest that the alternative is unthinkable. While there may be problems, this is the best method available for the reward and stimulation of knowledge production.¹³⁵

However, there is a growing body of literature that illustrates there are many “thinkable” alternatives to strong intellectual property protection, and these alternatives will be further explored.

The trend towards over-expansion of property protection is not inevitable. Jessica Litman provides the example of early moviemakers that rampantly stole plots and movie ideas from each other. While there was evidence to suggest that the piracy of themes and plots was overt, the courts opted to place these ideas in the public domain rather than enforce private property rights. By providing a framework for the public domain within the boundaries of the copyright law, the courts were able to eliminate piracy in the movie industry – by defining what constituted public works very broadly.¹³⁶ While the industry seems to have recovered from this early expansion of the public domain, the lesson is an important illustration not only into the politics of definition, but also into how one might revitalize the public domain that falls within the boundaries of copyright law.¹³⁷ Because the lines are political, arbitrary, and subject to redefinition, it is possible to legally change the course of over-expansive protection.

Introducing the public back into the theory of the public domain is an essential political move. The public that needs to be introduced however is not the public of one stable public sphere, but a vibrant, flexible, and democratic public. The public that needs to be introduced is one where the whole is greater than the sum of its parts because the parts are layered and multiple. Public domain theory needs a public that cannot be reduced to the individual, but also retains a level of concrete reality that takes the needs of the social body into account.

Additionally, the public domain needs advocates,¹³⁸ people who will speak for the importance of protecting the public. These advocates are quickly emerging and are widespread. For example, before closing its doors, the Center for the Public Domain sponsored numerous projects that created public domain spaces on the Internet.¹³⁹ Legal scholars supported Eldred's challenge to the over-extension of copyright and the simultaneous destruction of the public domain.¹⁴⁰ Librarians have been transformed into activists because more than any other group they are threatened by recent intellectual property decisions. Recent courtroom battles, like the one over *The Wind Done Gone*, have helped highlight the cultural implications of strict protection and the corresponding loss of fair-use privileges.¹⁴¹ Additionally, legal scholars have begun to illustrate how copyright law is running up against the first amendment and needs to be considered against the threat of censorship.¹⁴²

There are also organizations creating and extending the public domain and the public's access to public domain works. Harvard University has created a new Open Law resource that is dedicated to developing open legal and technical resources for the general public. George Soros has developed the Open Society Institute and in order to offset the high cost of journal subscriptions has begun work on an open-source e-journal. There are movements to create "countercopyright" protection, to expand the idea of open-source technology to other academic works, and to provide an Internet space for people to actively dedicate their ideas to the public domain.¹⁴³

Conceptual transformations must also occur. First, the language of "falling" into the public domain must be replaced with something that does not indicate the public domain is somehow inferior to copyright law. Perhaps works can be considered "freed" into the public domain, or perhaps we should think of reintroducing our "captive" ideas into the wild where they can reproduce and grow without control. The greater the wild space of the public domain, the more likely it is that new cultural and creative forms to facilitate the development of our culture and science will emerge.

Second, perhaps we can change our property language as well. Christopher May, for example, suggests that we conceive of intellectual property as a form of leasehold in order to better balance the rights of individuals with the public.¹⁴⁴ May's point is that we need to loosen the tightly controlled idea of property to provide room to understand the creative process. Another way to change our language about property would be to begin with the rights of the public instead of the rights of the author, as argued by Marlin H. Smith:

Rather than a conventional system of private property ownership, copyright is more properly understood as a system of gatekeeping, a regime for controlling how and when creative works are ceded – and elements of production returned – to the public domain. An analysis of copy-

right begins not with the rights of the author or owner against others, but more properly with public rights to creative works even as they are protected under copyright. Fair use is the repository of public rights in works that are still under their statutory term of copyright protection. The rationale is not so much a forced sharing of works otherwise exclusively created and owned as an insistent reminder that creative works do not arrive *sui generis* from the depths of the author's imagination, but are always already imbedded in the social conditions of production and consumption. Authorship of "original" works is a legal fiction, albeit a necessary one. Ownership is the site of alienable property exchange; fair use is its limit.¹⁴⁵

Ultimately, how we reconceptualize the language of property is not as important as developing alternatives for what we think of as intellectual property. Perhaps, we should eliminate the language of "intellectual property" from our discourse altogether.¹⁴⁶ The more diverse the alternatives, the less likely we are to understand privatization as the only viable method.

Third, Jessica Litman suggests that we need a different understanding of the author. Instead of seeing the author as an original creator of new ideas we could more accurately portray the author as a person with an astigmatic vision. "The metaphor suggests that transformation is the essence of the authorship process. Some of this transformation is purposeful; some of it is inadvertent; much of it is the product of an author's peculiar astigmatic vision."¹⁴⁷ Rosemary Coombe goes even further and suggests that a public domain must be reconsidered that goes beyond the boundaries of the author. She states, "A vibrant cultural domain will also require consideration of means to maintain cultural diversity and ongoing dialogue across and between cultural traditions."¹⁴⁸

It is the process of transformation, however warped, that is important for creativity. Creative transformation does not happen in a vacuum, but instead relies upon the vast sea of regulated and unregulated public domain material surrounding us every day.¹⁴⁹ The larger idea of the public domain is lost when the focus becomes the original author. Additionally, modern corporations completely disregard their own appropriation from the sea of ideas in creating their intellectual property products. The contemporary movie industry is especially at fault for remaking old movies to exploit the nostalgia of consumers.¹⁵⁰ A cynic might suggest that the over-extension of copyright makes it easier to use movies where the rights have already been secured than to create new works. In this way, copyright actually decreases originality and creativity. "Progress" becomes recycling.

One final aspect of the public domain must be discussed – the appropriation of traditional knowledge and culture termed biocolonialism and/or biopiracy.¹⁵¹ The relationship between traditional knowledge and intellectual

property rights is the subject of considerable international debate, a subject I will return to in later chapters.¹⁵² As Vandanya Shiva argues,

Through patents and genetic engineering, new colonies are being carved out....These new colonies are, in my view, the interior spaces of the bodies of women, plants, and animals. Resistance to biopiracy is a resistance to the ultimate colonization of life itself – of the future of evolution as well as the future of non-Western traditions of relating to and knowing nature.¹⁵³

Traditional knowledge tends not to meet the legal standards established for patent or copyright protection and has thus been subject to appropriation for commercial purposes. Traditional knowledge has been termed “the common heritage of mankind,” raw material ready to be appropriated by Western interests.¹⁵⁴ However, while many Indigenous groups freely share knowledge and thus illustrate the possibility of innovation outside the boundaries of Western property systems, it is also important to recognize that numerous property arrangements exist to protect traditional knowledge. Unfortunately, Western agents seeking patentable inventions ignore these property systems. The resulting appropriation of traditional knowledge as public domain materials is another form of colonization.¹⁵⁵

As Marie Battiste and James (Sa’ke’j) Youngblood Henderson note, traditional knowledge is not lacking rights. These rights are simply defined differently:

Indigenous knowledge is ordinarily a communal right and is associated with a family, clan, tribe, or other kinship group. Only the group as a whole can consent to the sharing of Indigenous knowledge and its consent must be given through specific decision-making procedures, which may differ depending on whether songs, stories, medicines, or some other aspect of heritage are involved. In whatever way consent is given, it is always temporary and revocable; heritage can never be alienated, surrendered, or sold, except for conditional use.¹⁵⁶

Graham Dutfield further argues that the diversity of possible ownership models available within Indigenous knowledge systems “make patents seem like a blunt inflexible instrument[s] by comparison.”¹⁵⁷

There is an important point to make regarding the public domain status of traditional knowledge and culture. Most of what is classified as public domain knowledge is not public domain at all and it is a mischaracterization to claim that traditional knowledge, if it has not been copyrighted or patented, should be free for the taking. As Dutfield claims, there are multiple private domains as well, some of which reflect property rights that should be given to traditional knowledge.¹⁵⁸ Essentially, what emerges from

Dutfield's analysis is a series of property models, of which the Intellectual Property Regime (IPR) of the West has become predominant.

It is perhaps this point – that one type of IPR system is being universalized and prioritized to the exclusion of all others – that causes most of the concern, especially among those peoples and communities that cannot benefit from what is to them an imposed system.¹⁵⁹

What is important to recognize, however, is that there are alternative models of property ownership as well as multiple public domains. While the problem of traditional and Indigenous knowledge has often been conceptualized as a problem of the public domain, it is in fact a problem of refusing to recognize alternative systems of property rights.¹⁶⁰ Thus, vitalizing the public domain also means recognizing and preserving multiple property models as well.

Conclusion

The idea of the public domain remains ingrained in intellectual property law, a small kernel from which an alternative future to privatization can be grown. The idea of the public domain, while confused, is not dead, and may yet serve a revolutionary function. Developing the idea of the public domain, however, will be a difficult political struggle. As increasing numbers of people become aware of the way in which intellectual property rights are used to limit the free flow of ideas, it becomes easier to challenge the expansion of private property rights by asserting a more general public right.

As stated in the introduction, the development of the idea of the public domain may be critical for imagining a democratic space defined by a democratic public. The content and definition of the public domain is not so important as the existence and diversity of the idea itself. In fact, I would argue that the more complex we can make the public domain, the less likely that it will be destroyed by the push to privatization. As with Boyle's environmentalism of the Net, we need a diverse number of groups who overlap in their understanding of the public domain, but who collectively inscribe the idea with meaning.

If appropriately balanced, the idea of the public domain could serve a genuine public purpose that would translate into more creativity instead of less. Even if authors and owners do not wish to enter the public domain directly, a philosophy that would help reduce the restrictions on the use of a work could help free the organized public domain of copyright law. For example, allowing for greater public performances and derivative works does not negate the control of copyright, but it does allow us to recognize the public nature of copyrighted works.

Ultimately, it is important to remember what is at stake in this debate. The concept of the public domain is more than a theoretical construction; it

has implications for creativity and progress. The politics of definition ensure that the struggle over the meaning of the public domain will continue. However, the advantages stemming from a more democratic vision of the public would, I think, outweigh the disadvantages of alleviating some of the restrictions on already protected works. Lawrence Lessig is correct when he states that the current debate is about protecting the old against the threat of the new. However, it goes beyond the dichotomy of old versus new; it also includes a preference for the type of culture that should be embraced. One is a centralized, commodified, and privately owned corporate culture; the other a much less easily defined community culture. The one asserts ownership rights; the other borrows to perpetually redefine itself. The Internet has become a vehicle for both, however the desire for corporate culture to own everything threatens the existence of the democratic public domain. If we are to make a concerted effort to define, develop, and protect a democratic public domain we must be ready for the struggle ahead. This new public can have a profound impact on creativity and the progress of the arts and sciences, if it is allowed to grow relatively unharmed. The threat to the public domain is real. However, resistance is growing and there is hope that another world is possible.

2 Licensing and the politics of ownership¹

End user licensing agreements versus open source

Free software is a matter of freedom: people should be free to use software in all the ways that are socially useful. Software differs from material objects – such as chairs, sandwiches, and gasoline – in that it can be copied and changed much more easily. These possibilities make software as useful as it is; we believe software users should be able to make use of them.

(Richard Stallman, Free Software Foundation,
<http://www.gnu.org/philosophy/philosophy.html#AboutFreeSoftware>)

Matthew Zeidenberg bought a personal copy of ProCD's Select Phone database for around \$150.² The copy Zeidenberg purchased came inside a shrinkwrapped plastic covering that contained a licensing agreement describing the manner in which the database could be used. ProCD used this shrinkwrap license to bar the use of a personal copy of the database, like the one Zeidenberg had purchased, for commercial use. ProCD spent \$10 million compiling contact information from over 3,000 telephone directories across the USA with the goal of selling commercial copies of the database for a price significantly higher than \$150.

Zeidenberg used the data from Select Phone and another database called Phonedisc to create his own database that he uploaded to the Internet. Zeidenberg did not use the search engine created by ProCD, but created his own search engine for use with the data he had selected. Zeidenberg felt that he had not violated the licensing agreement because he had not used the copyrighted software that came with ProCD's Select Phone database.³ ProCD argued that Zeidenberg ignored the shrinkwrap license attached to his copy of the software when he started Silken Mountain Web Services, Inc. to sell the information compiled by ProCD at a cheaper price.⁴ ProCD sued Zeidenberg and Silken Mountain Web Services, Inc. for violation of the licensing agreement that barred Zeidenberg from making commercial use of the software he had purchased. The US District Court held that buyers did not have to obey the terms of shrinkwrap licenses, but the US Court of Appeals for the Seventh Circuit found that unless the terms of the license are unconscionable, or otherwise excused by contract law, and these terms were not, then the buyer was required to honor the terms of the license.⁵

Thus, ProCD successfully argued their SelectPhone database was protected by the shrinkwrap license attached to the product.

The applicability of shrinkwrap licensing agreements was also an issue in the Washington State Supreme Court case *M. A. Mortenson Co. v. Timberline Software Corp.*⁶ After the installation of a new operating system rendered their old bidding software inoperable, Mortenson purchased an updated version of Bid Analysis.⁷ Mortenson contracted with Timberline Software to install Bid Analysis, a Softworks product, on their Bellevue machines. The parties dispute the facts surrounding who actually opened the software when it was delivered to Mortenson's Bellevue offices. Regardless of who opened the boxes with the license attached, Mortenson claims they were unaware of the terms of the license because it was installed by Timberline.⁸

After the installation of the software, Mortenson used Bid Analysis to bid on a project for Harborview Medical Center.⁹ During the bid preparation, the software malfunctioned multiple times and was ultimately responsible for an underbid of around \$1.95 million, a fact Mortenson only discovered after winning the contract as the lowest bidder.¹⁰ Mortenson sued, claiming "breach of express and implied warranties."¹¹ An internal memo from Timberline suggested they knew that the software was flawed and had sent updated copies of the software to some customers, but not to Mortenson.¹² Instead, Timberline claimed the shrinkwrap license that had accompanied Bid Analysis limited liability related to failure of the product and thus neither Timberline nor Softworks were responsible for any loss attributable to the software under the terms of the license agreement. The Washington State Supreme Court agreed with Timberline and Softworks, applying the rule that, "it is not necessary for Mortenson to actually read the agreement in order to be bound by it."¹³ The court also found that the waiver of liability for design flaws in the software was neither substantively nor procedurally unconscionable.¹⁴ In part, the court was lenient because of the "innovative" nature of computer software.¹⁵ The court ignored the fact that evidence existed suggesting the design flaws could be remedied. The court found that the license included with the software packaging waived liability for the problems with the software, even though Mortenson had not been provided with the necessary updates to make the software run properly.

In addition to illustrating the power of the shrinkwrap license, both cases illustrate the use and abuse of software licensing. In the first case, while Zeidenberg's actions may be construed as unethical, he had attempted to avoid violating ProCD's copyright by only using the underlying data in Select Phone and not their copyrighted software. Using *Feist v. Rural Telecommunications*, where the Supreme Court decided that compilations of facts are not protected under copyright law because they lack the necessary originality to meet the standard for copyright,¹⁶ Zeidenberg's use of the underlying data in Select Phone should have been legitimate. ProCD's license was designed to provide protection on a difficult to protect product

that went beyond copyright law. Regardless of how one feels about the facts, the decision sets a precedent for the future enforceability of shrinkwrap licenses. Utilizing the analysis of the ProCD court, it may be possible to find the terms of any shrinkwrap license enforceable, a move that shifts protection away from the consumer and towards the producer of software.¹⁷

The second case illustrates how shrinkwrap licenses can be abused. Claiming a shrinkwrap license absolves a company from liability caused by design flaws in their software is not a responsible business practice. Even though the Washington State Supreme Court validated shrinkwrap licenses, the specific clauses regarding waivers of liability should be inspected more carefully. In this case, Mortenson faced substantial losses because of software Timberline knew was flawed. At what point does a company become liable for the damages caused by their product? For a software product where the code is copyrighted and unavailable to the buyer of the software, is there an expectation that the program will work as advertised without additional modification? This question is especially important when commercial software may, as in Mortenson's case, disrupt business dramatically. When it became clear that Firestone Tires were responsible for the injury and death of numerous people, there was widespread public outrage at the unwillingness of Firestone to accept responsibility, especially when evidence surfaced that they had known about the problem and had done nothing. However, when it comes to computer software, a company appears to be able to license away liability for flawed software without raising any controversy.¹⁸

Both these decisions highlight the trend towards using licensing agreements that provide stronger protection than copyright law. The ProCD decision indicates a willingness to accept the idea of shrinkwrap licenses. However, shrinkwrap licenses create a catch-22 for software purchasers. One must usually open the wrapping to see the full terms and conditions of the licensing agreement. However, by opening the wrapping, the software buyer has already agreed to the terms and conditions of the license. There should be some question about how enforceable shrinkwrap and click-on licenses can be when the software buyer must either accept the license or return the unopened software package for a refund. However, questions regarding the use of shrinkwrap licenses continue to exist. While some cases have found parts of shrinkwrap licenses invalid, other cases have upheld these licenses.¹⁹ The case law is not uniform and no national-level mechanism exists for enforcing licenses.

Neither case discussed here deals specifically with the relationship between licensing agreements and copyright law, but the link between the two is important to investigate because licensing agreements are designed to extend protection for the software producer beyond that offered by copyright law.²⁰ Copyright is a public law designed to balance the interests of the general public with the copyright owner. However, many copyright owners wish to enhance their ownership rights and have begun to turn to

shrinkwrap licenses as possible mechanisms for further solidifying their ownership in the information age. Companies that sell their products primarily in a digital medium are especially concerned about protecting their rights from possible user infringement because of the ease of duplication of digital products.

In reaction to the ease of copying, the software industry and the electronic publishing industry have turned to shrinkwrap and clickwrap licenses, or end user license agreements (EULAs), to shore up the protection offered by the copyright structure. Most computer software buyers may be surprised to know what they have contracted to do when they open software to install on their system. For example, many shrinkwrap licenses claim that the product has been leased, not purchased, making the resell of software subject to the conditions of the license and bypassing the first sale component of the copyright law. Shrinkwrap licensing is another way property rights are expanding in the information age.²¹ While licenses can have positive effects as will be discussed later, the licenses being developed to protect digital content are very expansive.

The uncertainty over the scope of shrinkwrap licenses and the problems of enforceability of copyright in the digital age led the computer industry to push for the development of rules that would make shrinkwrap licenses legally binding in the USA. The result was the Uniform Computer Information Transactions Act (UCITA), an act that would have provided legal enforcement for shrinkwrap licenses if passed in all fifty states. UCITA met with immediate controversy and after three years had only passed in two states. The political controversy surrounding UCITA finally convinced the National Conference of Commissioners on Uniform State Laws (NCCUSL) to halt their support for the measure, an act that will sufficiently limit UCITA's ability to be passed in any additional states.²² The "defeat" of UCITA suggests that active resistance and articulation of a counter discourse to over-expansive laws is possible, but it is a time-consuming and lengthy process. Additionally, the fact that Virginia and Maryland passed UCITA legislation means that it will continue to impact the way in which the law evolves in the world of licensing agreements. The debate around UCITA and the expansive use of EULAs suggests that we must also consider the licensing counterparts in the open-source world – the General Public License (GPL).

While the software industry would have us believe that there is no possible alternative to strong copyright and licensing protection, there is an alternative licensing model that has spawned very successful computer software growth. That alternative is open-source software and the corresponding licensing that makes open source possible. Open source, much like UCITA, builds upon copyright law.²³ However, where UCITA attempted to close off all possible uses not authorized by the copyright owner, open source uses the copyright law to encourage the exchange of information to facilitate the development of better software. The demands of traditional EULAs seem

excessive and a case has been made for the GPL model. Open source, many would argue, is a preferable mechanism for protecting software. The open-source movement has created a viable alternative to contemporary licensing trends by more closely considering the balance between the public and the producer. Open source also provides us with the opportunity to rethink copyright law and its relationship to licensing.

In this chapter I will evaluate the promise of the open-source model as a viable path that moves beyond current copyright dilemmas, a movement that has emerged from the active resistance to proprietary software. First, I will look at the types of licensing agreements that come with computer software today. Second, I will describe the UCITA model for licensing and the resistance that kept UCITA from becoming a universal reality in the USA. Finally, I would like to evaluate the open-source movement's use of licensing agreements as a potential alternative to the licensing model associated with EULAs and UCITA.

While the focus of this chapter is on laws passed in the USA, the issue of software licensing and the open-source movement are important internationally as well. The fight against the open-source movement and litigation surrounding the accessibility of open-source code may be taking place in the USA, but the threat will impact the world as a whole. The struggle over EULAs and the relationship between licensing and copyright law will define the trajectory of copyright and patent law into the future. As I will argue, the open-source movement has enormous potential for the developing world as an affordable way to develop a computer infrastructure in the future without restrictive licensing agreements and cost-prohibitive software products. Additionally, software is an international product and while the central fight over the legality of shrinkwrap licenses is US-based at the moment, these licensing agreements can be asserted as legally binding everywhere software is sold. Additionally, as database protection continues to be of major international concern, the ways in which facts and data are protected internationally into the future will be decided based upon the outcome of this struggle.

What your software license says

Software is increasingly distributed as a download from a website where a tangible product never changes hands. However, for those more comfortable with the purchase of a tangible product, one can still buy software that will contain a CD-ROM version of the program along with documentation on the installation process. It is generally accepted that no one actually reads the software licenses that appear either on the back of the software package, on the inside of the software package, or immediately prior to installing the software on a computer. However, it is not necessary to read the license to be held to the terms of the license. Where the license appears on the back of a shrinkwrapped disk the buyer may see the terms, but has no opportunity

to view the software and/or content prior to accepting the terms of the license. In other instances, the license may not appear until the installation process has begun. In any case, the buyer is put into the position of accepting the terms of a license without having seen the product it will cover. It is very likely that the consumer will not read the license because they have already bought the software and returning the package unopened without installing the program on a machine would defeat the purpose of the initial purchase.

Contracts, it would seem, fall outside the realm of original authorship, since nearly all software licenses are not only substantially similar, but also tend to use identical language. What this seems to indicate, besides the possibility that all software companies use the same law firm, is that there is a general industry standard for what ought to be protected. The licensing standards are bound by the copyright law, but in several interesting ways go beyond it. For the purposes of this chapter, I examined fourteen different software licenses to get a sense of what the language of contract was, and exactly what consumers were agreeing to when opening or installing a digital product on their computer.²⁴ Some of these licenses were for educational software and some were for commercial software. Some of the software I looked at was given away for free, and others were very expensive. There was remarkable uniformity between the licensing agreements for all of these types of software. It did not matter if the software was free, for educational purposes, or a commercial product; the terms were surprisingly similar.

The licensing agreement is attached to the software and becomes binding in one of several ways. First, there is the shrinkwrap license, like the one used by Houghton Mifflin's Interactive History CD-ROM, which lists on the outside of the software package the licensing agreement and has a small sticker that states, "Breaking this seal indicates your acceptance of the license agreement on the back of this package."²⁵ According to these shrinkwrap licenses, once the plastic wrap has been removed from the software, the buyer has agreed to the contents of the license. The only way to reject the license is to return the CD without opening the shrinkwrap, meaning that investigating the content of the CD in order to make an informed choice is impossible.

Second, the license may appear on the inside of the packaging and state that installing the software implies acceptance of the license. The WordPerfect Suite 8 uses such a license. Their terms are written on the inside of the CD jacket cover. To read the licensing agreement the software owner would have to open the CD and pull out the jacket cover. For this product, installation or use of the software package activates the contract.

Third, if you download software from the Internet, the first thing that will appear during the installation process is the license with a button at the bottom that asks you to accept the terms of the contract. If you click on the button to proceed, you have agreed to all the terms listed in the contract. The only other option is to disagree with the license terms and abort the

download. At no point will any license, either shrinkwrap or electronic, give you the option to negotiate the terms of use. It is an all or nothing bargain that has been written to provide the software creator with as many rights as possible over the product and the software user with as few rights as possible. Additionally, you must accept the license prior to viewing the software, an issue we will return to later. Commercial interests and libraries may have more leeway in negotiating the terms of their licenses. Any time a license covers more than one user, the number of machines the product may be installed on and the number of users authorized to use the product at any given time must be negotiated with the software company.

The license, or EULA, may include statements that will come as a surprise to many software owners. First, in virtually all cases, the end user has not bought computer software, but has licensed it from the software company. The Adobe EULA makes this clear in Section 2 of their license on Copyright, "This Agreement provides the terms and conditions under which you are licensed to use the Software. It is not an agreement for the sale of the Software to you."²⁶

So, what exactly is bought when a person purchases computer software? The Corel WordPerfect Suite 8 license agreement clarifies what the software purchaser has actually bought, after highlighting in capital letters that "this is a license not a sale." They state in Section A under License: "COREL provides you with storage media containing a computer program which may also include 'online' or electronic documentation, license, and other printed materials and grants you a license to use the Product in accordance with the terms of this License."²⁷ Thus, Corel has provided a storage unit, presumably a CD, which the consumer owns, but the content remains the property of Corel. Apple Computer, Inc. makes the ownership rights clearer. They state, "You own the media on which the Apple Software is recorded but Apple and/or Apple's licensor(s) retain title to the Apple Software."²⁸

Because the software owner is only licensing the product, and not selling it, there are other associated rights that have not been granted. For example, the copyright act recognizes that it would be too unwieldy to control copyrighted works after the initial sale in part because the bureaucratic apparatus necessary to manage all the pre-owned products would be enormous. Thus, the first-sale doctrine provides the purchaser of a copyrighted product with certain rights over the product once purchased. While the owner of a book cannot make a derivative work from the book, the owner can lend the book to a friend or sell it to a used bookstore. The first-sale doctrine allows libraries and used book and record stores to exist without paying royalties because royalties are not acquired from any sale but the initial one. The first-sale doctrine is an important part of the balance between the rights of the general public and the rights of the copyright owner. However, the first-sale doctrine only partially applies to software. As software became more important, software rental companies were developed that rented software to the general public. Because software

can be copied without the original copy leaving the owner, laws were quickly passed that prohibited the rental of computer programs and thus bypassed the first-sale doctrine for computer programs.²⁹

Licensing is a return of the concept of renting software, except this time it is the software developer that rents the program. When computer software is only licensed and not sold, the end user is operating under the conditions of a rental agreement rather than a sale. Under these conditions, the first-sale agreement will not apply because there has been no sale. There are restrictions on what you can do with software you have “bought,” much like you are prohibited from selling a leased car that reverts back to the dealer at the end of the lease. Unlike a book or magazine you have bought and can lend or sell, licensed software may carry conditions for how the product is exchanged after the “first sale.”

Many software licenses make it clear that the end user is restricted from engaging in behavior that would be legal under the copyright law. Adobe states in Section 3 on Transfer rights, “You may not rent, lease, sublicense, or lend the Software.” Microsoft uses virtually identical language, “You may not rent, lease, or lend the SOFTWARE PRODUCT.”³⁰ The Learning Company License Agreement, while making a concession to schools and libraries, something virtually no other software license I looked at does, prohibits the rental or lease of the software, “but schools and libraries may lend the Software to third parties provided the software is in CD format and each end user is given a copy of this License Agreement which will govern the use of such Software.”³¹ Even Netscape, a free open-source product, requires the user not to “sell, rent, lease, sublicense, or otherwise transfer rights to the Product...without Netscape’s prior written consent.”³² In each case the rights of the end user to use the product as they see fit have been limited by the license agreement.

Houghton Mifflin clarifies how you might be able to let another person borrow your software, or in their case, your electronic primary history sources.

You may transfer your license to use the product to another person as long as you permanently transfer the entire product (including all discs, all copies of the software program and all documentation provided in this package) without keeping a copy for yourself. To transfer your license properly, the recipient must first agree to the terms and conditions of this License Agreement. You may not otherwise license, sub-license, rent, or lease the product without permission from the Houghton Mifflin Company.³³

This process of transferring the software to another user may sound a bit awkward, but at least Houghton Mifflin allows the end user to transfer the software. The RealNetworks, Inc. End User License Agreement does not allow for the transfer of the software once purchased.³⁴

These agreements limit the end user's ability to do anything but use the software package. Of course, most licenses allow the user to transfer rights to the software under the condition that all copies of the program are transferred with the documentation and no copy remains behind. Thus, the language of the license is an attempt by the digital products industries to provide their products with the type of protection that is inherent in books. People rarely photocopy an entire book prior to lending or selling it to another person.³⁵ The music industry is currently moving in the direction of the software industry. Sony has begun experimenting with copy-protected CDs that would limit the flexibility of the CD and keep buyers from copying songs to another format.³⁶ Taking a page from the computer industry, the music industry now seeks to keep their products from entering the second-hand market and the only way to avoid this "problem" is to add additional licensing requirements (and technical protection) to the sale of the software.

While the EULAs tend to focus on controlling the multiplication of products, these agreements do allow the user to make a back-up copy of the program. This back-up is the result of negotiations over how digital products fit within the already existing copyright law. Users were concerned with the possible failure of their product and the digital lobbyists were trying to make all copies of software illegal. The compromise was that the end user would be allowed to make a back-up copy.³⁷ Copyright law provides standards for fair use that are not available under EULAs. Under fair use, multiple copies may be made under certain circumstances. For example, if the use is for classroom education it may be considered a "fair" use under the copyright act.³⁸

Another area covered by most license agreements is the idea of reverse engineering. Reverse engineering is the process of taking a finished product and trying to understand how the software code that creates the product works. Despite the fact that the copyright law allows for reverse engineering, EULAs tend to prohibit it. Even Napster, a software program downloadable for free, does not allow the end user to "decompile, reverse engineer, or disassemble, modify, or create derivative works based on the SOFTWARE or the documentation in whole or in part."³⁹ Many computer programmers have argued that the ability to reverse engineer or decompile a program, in other words, to get to the level of code to see how it works, is an essential aspect of innovation and future production. However, EULAs attached to most software specifically prohibit this process.⁴⁰

The licensing agreement does not stop with limitations on the use and sale of the product. There are several other sections of these agreements that should be highlighted. First, virtually all the agreements provide a limited warranty for the software product. These warranties are tricky in their wording and only apply for up to ninety days after the purchase of the software. The key aspect of the warranty agreements is that they only apply to

possible defects in the delivery mechanism of the product. Thus, if the CD upon which the computer program is written is melted or broken, then the product will be refunded. However, very few agreements extend a warranty to the software itself. The best licensing agreements use language something like Hoffman's: "HOFFMAN warrants that the Software will essentially conform to all material specifications in the documentation when delivered to LICENSEE and used in the manner licensed for a period of ninety days."⁴¹ This license does suggest that the software program ought to work as it has been advertised. Microsoft uses similar language: "Microsoft warrants that (a) the SOFTWARE PRODUCT will perform substantially in accordance with the accompanying written materials for a period of ninety (90) days from the date of receipt."⁴²

Some licenses are more restrictive in their warranty language. For example, Apple Computer, Inc. only provides a warranty on the CD upon which the program is written. "Apple warrants the media on which the Apple Software is recorded to be free from defects in materials and workmanship under normal use for a period of ninety (90) days from the date of original retail purchase." WordPerfect's warranty is similar. "We warrant that the storage media in this product will be free from defect in materials and workmanship for 90 days from the date you acquire it." Such a warranty provides no protection for the operation of the computer program; it simply ensures the program will not be sold on a damaged disk.

While there is some difference in what the warranty covers, there is general agreement upon what constitutes liability. Even though some companies will warrant that their product will work "substantially" like promised, nobody accepts any liability for problems emerging from the use of the product. Typical language is that of Adobe Systems, Inc., who state in their Adobe Acrobat Reader agreement that:

In no event will Adobe or its suppliers be liable to you for any consequential, incidental or special damages, including any lost profits or lost savings, even if an Adobe representative has been advised of the possibility of such damages, or for any claim by any third party.⁴³

The Acrobat reader license also clarifies that the product is being sold "as is," much like you would buy a piece of damaged furniture on sale at the outlet mall. The difference between the damaged furniture and the Adobe product is, of course, that Adobe makes assertions about how the product will work in the advertising associated with the product and the packaging surrounding the product. Adobe, it may also be assumed, is not selling used goods.

The "as is" language appears everywhere.⁴⁴ If the computer program you install on your system crashes the hard drive and causes you to lose a day of work, these license agreements claim that the software company is not

responsible. The License Agreement for Executive Software(r) International, Inc. perhaps says it most clearly:

ESI does not warrant the functions contained in the software will meet your requirements or that the operation of the software will be uninterrupted or error free. The entire risk as to the quality and performance of the software is with you.⁴⁵

Such a claim, that the quality and performance of a product is not the responsibility of the manufacturer, would make little sense in any other field. Can you imagine the same warranty attached to a Firestone tire? Or a baby crib? However, this software agreement, which must be accepted in order to use the program, contracts away liability on the part of the manufacturer for a defective product. If, for some reason, that product were to wipe out the memory of your office computer, there would be no remedy under the user agreement that was accepted when you opened the sealed package containing the software.

Second, these user agreements carry language about the termination of the contract. Generally speaking, if the terms of the agreement are violated in any way, the license can be revoked. This would mean that the user would lose the right to use the software they had purchased, or at least thought they had purchased. The issue of termination for license violations is, of course, difficult to enforce without a mechanism for continual oversight of the users and their uses. Thus, despite the fact that these license agreements create software as a leased product instead of a sold product and stipulate some very specific uses for the product, there has not been much in the way of enforcement. Software companies have gone after business owners who have violated their licensing agreements by having more people using the software than specified in the license, but the individual end user has been relatively insulated from this type of monitoring. However, the lack of oversight over end users is considered a flaw with the current system, a flaw that UCITA was designed to remedy.

As we have seen, the language of the user agreements tends to provide the software manufacturer with more protection than the end user.⁴⁶ If nothing else, EULAs are testimony to the power of contract. If one person writes terms and conditions that are accepted by another, the courts typically agree the contract is binding. There have been challenges to EULAs, specifically as unconscionable contracts of adhesion. However, for the most part these contracts go uncontested. The fact that the courts have not ruled definitively on the legality of EULAs led the software industry to evaluate an alternative, and more concrete, mechanism for protecting their products. In response to the instability of relying on the courts to protect their products, major industry representatives began to establish a legally codified contractual system that would become part of the Uniform Commercial Code for all fifty states. Not only would this provide computer software companies

with uniform coverage, something that is currently not available, but it would also ensure that the shrinkwrap contracts would have the force of law behind it. From this beginning, UCITA was born.

UCITA and licensing agreements

The Uniform Commercial Code provided uniform rules for the sale of goods in the USA. UCITA began as a revision to the UCC, Article 2. Article 2b began life in the 1990s to help update the UCC for the information age.⁴⁷ UCC Article 2b was initially drafted by the National Conference of Commissioners on Uniform State Laws (NCCUSL) and the American Law Institute (ALI), but was completed in July 1999 after the ALI dropped out of the drafting process due to “irreconcilable concerns and disagreements with fundamental aspects of the proposed law.”⁴⁸ UCITA was to be submitted to all fifty state legislatures for approval.

Prior to NCCUSL pulling its support for the legislation, only Virginia and Maryland had passed UCITA, while Iowa has passed “bomb shelter” legislation that would protect the state from UCITA.⁴⁹ The passage rate was dismal, in part because the ALI was no longer associated with the legislation, but also because strong and organized opposition emerged across the nation to lobby state legislatures to reject UCITA. While companies like Microsoft were strongly in favor of UCITA, most companies that are software consumers, like McDonalds and Nationwide Insurance,⁵⁰ had concerns about the impact of the legislation on their businesses. In addition to the resistance of many businesses, library associations, the Society for Information Management, and thirty-two state attorneys general condemned UCITA.⁵¹ The American Bar Association working group published a report finding that UCITA was unclear and should be rewritten.⁵² Because of these controversies, the NCCUSL pulled its support in 2003.⁵³ Thus, the active resistance from corporate and non-profit sources has effectively halted the UCITA process.

There were several sections of the draft legislation that bode ill for the general public. The first significant problem with UCITA was conceptual. UCITA, and EULAs more generally, signify a shift away from the public law of copyright to the private law of personal contracts. Privatizing how digital products are protected eclipses the balancing components in the copyright law. Under copyright law, once the item is sold, its use is determined by the scope of the copyright law. The first-sale doctrine and fair use become important avenues for balancing the rights of the content owner with the public. UCITA used the language of shrinkwrap licenses discussed in the first section of this chapter to define the scope of a *license*, not a *sale*. Thus, the product, having never been sold, may not be resold or lent, terms already existing in shrinkwrap licenses. One such right that could be contracted away under UCITA was the ability to criticize a product.

Offering criticism of a product may be prohibited by license, even though such a practice would be allowed under copyright law as a legitimate and necessary practice that benefits the general public. While the first amendment issues raised by limiting criticism are important and should be addressed, they are too broad to fully address here.⁵⁴

The shift to privatized agreements led to a second concern – the ability to use contracts as a form of censorship and anti-competition. For example, Netscape’s license specifically limits criticism without permission. They state, the “licensee may not...(v) publish any results of benchmark tests run on the Product to a third party without Netscape’s prior written consent.”⁵⁵ The clause in the Netscape contract suggests that even if it may be in the best interest of the public to know how Netscape performs, it is not necessarily in the interest of Netscape. Thus, the licensor can attempt to limit knowledge about the product through licensing restrictions. UCITA would have codified such censorship.

Prohibiting reverse engineering is another way licensors may attempt to limit competition. Current copyright law allows for reverse engineering, though the DMCA puts restrictions on the publication and reverse engineering of encryption devices. However, if a software engineer wants to find out how a piece of software is put together, much like one might want to see how a radio or an automobile engine works, it is legal for them to do so under the copyright act. UCITA made reverse engineering a violation of the license, again following the lead of the EULAs that currently govern computer software.

One implication of prohibitions on criticism and reverse engineering, while obviously being good for the licensor, is that competition can be limited and the rate of innovation might slow down. After all, one way innovation occurs is to build upon the ideas produced by others. UCITA attempted to limit the ability of one company to discover how the product of a rival company works.⁵⁶

A third contentious part of the original UCITA proposal was the electronic self-help clause. This clause codified the ability of software owners to create back doors in their programs that would allow them to remotely disable the software if the license was violated. Perhaps more than any other aspect of UCITA, the ability to remotely disable a computer became problematic. Not only did the software vendor become the judge of license violations without any neutral third party to assess the claims but also these back doors represented potential security threats to the companies relying upon the software. There was no guarantee once a back door was in place that it would only be used by the software licensor. Computer users with the skills to crack into the system may also use these back doors. Because of the controversy raised by the back door provisions, a ban on electronic self-help was proposed.⁵⁷ However, despite the minor repairs offered by critics, the controversy over UCITA was sufficient to keep it from fully realizing its goals.

A fourth concern regarding the use of UCITA was the legal backing it gave to shrinkwrap licenses, agreements that can be considered contracts of adhesion. Contracts of adhesion are agreements drafted by one party and offered on a “take it or leave it” basis. Regardless of the content of the contract, there is no room for negotiation. While some large commercial and library buyers may be able to negotiate the number of users each license will cover, the mass-market EULAs provide no room for negotiation. Generally, the courts have upheld the legality of contracts of adhesion unless the terms of the contract are unconscionable. An unconscionable license would have terms that are unreasonable or excessive. However, given that the Washington Supreme Court did not find the waiver of liability to be an unconscionable term, the scope of license power is very broad. There was no guarantee that if UCITA had become law in all fifty states that there would have been protection for consumers from contracts that take the terms and conditions of their agreement to extremes.

When one evaluates UCITA within the context of even broader copyright protection provided by the Digital Millennium Copyright Act, the argument that a property rights discourse has gone too far becomes clearer. The concerns about the future of copyright raised by UCITA are important to consider. UCITA and shrinkwrap licenses represent a paradigm for protection of digital works that claims property rights are absolute. There is no vision of public exchange, only private ownership. These licensing agreements represent a struggle over how information will be understood, created, stored, and exchanged. Thus, the concerns raised by UCITA are important to evaluate in order to understand how the ever-expanding world of intellectual property stakes out new terrain.

Active resistance to UCITA kept the law from being enacted in most states. It was possible that copyright law, being a federal law, might have preempted parts of UCITA.⁵⁸ However, if ProCD is a precedent, pre-emption was not considered a legitimate argument against the use of shrinkwrap licenses. The court reasoned that a copyright created “exclusive rights” that barred those who were strangers to the copyright owner. However, a contract does not create an “exclusive right,” but rather a specific limitation only on the parties involved.⁵⁹ While it might be possible that mass-market EULAs which affect thousands of people are more than individual contractual events, current law does not recognize the potential impact in terms of anything but the individual. Thus, copyright law and EULAs converge to provide a thicker blanket of protection to the copyright owner. UCITA, while not necessary to broader protection, would have established a clear trend away from protecting the public interest generally and towards protecting the private interest of copyright owners.

The vision of the future provided by those fighting to enact UCITA and to entrench EULAs is one of absolute ownership of information by the content producer and/or software author. As with other political battles to expand intellectual property, the argument by digital content owners frames

the issues in absolutist terms. This framework conceals the considerable power of copyright-related industries in the information age. UCITA was resisted because a few powerful corporations would have felt the negative implications of the law, but also because of the efforts of librarians who have turned into revolutionaries of the information age. It isn't the idea of a licensing agreement that should be resisted, but the form these license agreements take; any form that reduces public rights and control should be considered with suspicion. However, there is an alternative to the trend towards cementing copyright ownership with private licensing agreements that better balances the interest of the general public and software owners. This alternative licensing agreement is associated with the open-source movement and it is to this movement that we now turn.

GNU/GPL license

The primary license used to protect open-source software is Richard Stallman's General Public License (GPL). The basic idea behind the GPL is that all computer code designed under the license is available to all users.⁶⁰ Programmers can use the code, update it, improve it, or rip it apart; the user is given rights to improve the code to their own specifications. However, any and all improvements must be contributed back to the general pool of users. GPL is based upon the idea of share and share alike, a fundamental principle learned early in our moral development. The GPL ensures that a person cannot privatize portions of the code created by programmers under the GPL and then force others to pay them for use of the code.

If a person does not want to share their code, then they can write the entire program themselves. Nobody makes a programmer use GPLed code. Additionally, if a person wants to create a product that will remain proprietary, they should not use GPLed code. The GPL is designed to restrict the ability of proprietary firms to take publicly available code and use it to create private systems. Thus, a software program that is built upon code created under the GPL must also be GPL software. Essentially, Stallman has codified sharing in order to prevent profiteers from stealing from the public domain. The GPL cleverly uses the power of copyright law (which allows the author of the product to control its use and distribution) to provide software for free.⁶¹ In this way he transformed the rules of the game and redefined copyright (what he calls copyleft) into a tool that supports both the creator and users of software.

Stallman prefers the term free software to describe work protected by the GPL. It is crucial to remember that the word "free" in this context does not mean an individual must give away their software. Instead, the word "free" is intended to clarify the state of the computer code. The basic problem with proprietary systems in the minds of many programmers is the lack of access to the code. To a programmer, limited access to the underlying code is the same as prohibiting access to the engine of a car. Most people expect to have

access to the car engine in order to check the oil and do maintenance; so software engineers believe they should be given access to the source code of a computer program for very similar reasons. To be denied access to the source code is to thwart the programmer's freedom.⁶² In order to avoid confusion over what exactly the word "free" means, the term open source, which utilizes the GPL, has grown in popularity.⁶³

Open source as an alternative to expansive copyright protection

Open-source technology is based upon a fundamentally different set of principles from proprietary software. First, the building blocks of any open-source system, the source code, must be available to anybody. Second, if you use source code that is protected under an open-source license you must contribute your code to the community of users. Third, a business makes its money not from the source code, but from its product and the support that is provided for the product. Finally, intellectual property is not a part of the business model, so piracy is not an issue. By redefining the rules of the game, the "problem" of piracy is eliminated and the need for absolutist licensing agreements like those endorsed by UCITA becomes obsolete. In this section, I'd like to briefly outline open-source philosophy, explain its advantages and disadvantages, and why it offers a promising alternative paradigm for businesses and governments wishing to avoid the more stringent demands of intellectual property and associated licensing regimes. In evaluating the viability of an open-source model, it is important to outline the basic premise of open-source technology and discuss how the open-source movement creates an alternative to the mainstream method of protecting commercially created projects – primarily copyright law.⁶⁴

Open-source technology has a rich history and shares the philosophy of free exchange and development with many other models including Richard Stallman's GNU software, shareware, and public domain software.⁶⁵ Professors Josh Lerner and Jean Tirole break down the history of the open-source movement into three distinct phases, moving from the early days of the software industry when all programs were essentially free through to the late twentieth century when the Internet came to dominate and the Linux phenomenon emerged.⁶⁶ Originally, computer software was not proprietary. Instead, computer programmers, mostly working from their homes or universities, shared computer code as they collectively developed functional software. These original computer designers used the word "hacker" to describe their activities.⁶⁷ As computer technology and software developed into a profitable enterprise, much of what used to be traded and exchanged freely became the property of companies interested in making a profit on their computer code.

Open source recognizes that while programming is a creative art, it is based upon a process emphasizing efficiency and stability. If a person wants to write a program to complete a specific task, it makes no sense to have to

rewrite the code for that same task in a different program. Instead, it makes much more sense to copy the already existing code (or improve upon the already existing code) and use the copy in the new program. Copyright prohibits this functional approach by placing source code behind proprietary walls. As Steven Weber notes, “property in open source is configured fundamentally around the right to distribute, not the right to exclude.”⁶⁸ Open source encourages the idea that one should build upon what already exists – even if what already exists was created by someone else. Accompanying the source code is a list of contributors. Thus, open-source code can work in the same way as an academic bibliography that lists the many people who contributed their ideas and research to the final product, even if it was only a line or two. In many ways it reintroduces the idea of authorship to software creation.

While systems such as open-source technology, shareware, and public domain software all operate from the understanding that there is value in contributing to the public domain with or without compensation, there are differences in these approaches. Shareware programs are distributed for a contribution and/or registration fee.⁶⁹ This particular business model is premised upon trust – it assumes that ethical people will pay for the computer program, but doesn’t worry too much about people who don’t pay.⁷⁰ By eliminating the need for marketing and litigation, the programmer can focus on the quality of the program. Shareware programs tend to be smaller projects designed by an individual to meet his or her own needs and then publicized by word of mouth or the Internet to others with similar needs.⁷¹ They serve an additional function in that they help build relations of trust over the Internet and also provide the creator with recognition for the work they have done.

Public domain software is different than shareware. Shareware includes some sort of license agreement and copyright with the author. While copyright is automatically assigned to creative work fixed in a tangible form, it is possible to contribute a software program to the public domain. Public domain software is freely available to anyone to use as they see fit – and to appropriate into commercial and private projects that steal these programs from the public.⁷² The possibility that commercial interests will appropriate public domain software for their own use is part of the motivation behind the General Public License (GPL) and the Free Software Foundation.⁷³

Open source, while closely linked to Stallman’s GPL, has moved beyond the Free Software Foundation and is most closely associated with the Linux operating system. Linux began as many typical hacker projects – in the bedroom of its creator, Linus Torvalds. Torvalds’s project originated from his desire to better learn the capabilities of his newest computer. The earliest postings of Linux were rudimentary. However, Torvalds’s kernel began to develop a following of interested users. At first, there were only a few programmers who would email Torvalds their recommendations. However, as the project developed, additional programmers joined and helped with

different components of the code. Emails came in from all over the world. By the time Torvalds was ready to release the official Version 1.0 of his software, Linux was already an international phenomenon.⁷⁴

Torvalds took an academic approach to his work and he did not want to be paid for Linux. Instead, as he put it,

I felt I was following in the footsteps of centuries of scientists and other academics who built their work on the foundations of others – on the shoulders of giants, in the words of Sir Isaac Newton. Not only was I sharing my work so that others could find it useful, I also wanted feedback (okay, and praise)...Regardless, I didn't want to sell Linux. And I didn't want to lose control, which meant I didn't want anybody else to sell it, either.⁷⁵

Torvalds, in other words, did not oppose the idea of intellectual property. However, while wanting to protect the creation of his intellect, Torvalds was not necessarily motivated by monetary factors. His drive to create Linux did not come from a desire to become a millionaire (though he has become one), but rather from his quest for a better understanding of what he could make his machine accomplish.⁷⁶ Torvalds turned to Stallman's GPL license because he was interested in protecting his creation, but not tightly controlling it.⁷⁷ As a result, Linux source code remains open, but a variety of companies have built upon Linux to create their own products and enhance the options available to the larger public. In turn, they help improve the Linux source code through their own innovations. The system developed by Torvalds works because, instead of focusing on property rights, programmers work together to contribute to something larger than themselves.

The relative success of the open-source movement has led computer programming to come full circle since the early days of the software industry. Original adherents to the software-should-be-free "ideology" were marginalized as proprietary software came to dominate the market. The open-source movement is shifting these programmers back to center stage. While slow, success has been made possible through diligent work of those within the free software and open-source worlds. In part because programmers create software for more than the love of money, the open-source model has been unexpectedly successful. There are advantages to the open-source movement that should be seriously considered as an alternative to EULAS and as a supplement to copyright law.

First, and crucial to developing countries, open-source software is cheaper than proprietary software.⁷⁸ For example, some sources put the cost of Windows 98 in China at \$90 and the cost of Red Hat Linux at around \$10.⁷⁹ The cost difference makes open-source products more popular via legal avenues in China than Windows, especially given China's

desire to enter the WTO with less software piracy.⁸⁰ It makes economic sense to use an open-source model both as a means of developing an in-country software industry and as a means of having access to the best software and the best prices.⁸¹

A second advantage of open source is the ability of businesses and governments to tailor existing code to specific needs. Traditional software companies retain all rights over the code that makes the product work. If a specific feature does not work or tends to crash the machines, a business must wait for the next version of the software and hope the bugs are fixed. As computer journalist Mark Minasi notes in *The Software Conspiracy*, software companies feel the end users don't care about quality, only about features.⁸² They knowingly ship software with design flaws and bugs that end up costing businesses crucial down time as they attempt to make the new software work.

With a proprietary system, a company must wait for an upgraded edition to fix problems in the earlier version. A business using proprietary software cannot revise the source code to fix problems because the code is the property of the software maker. Eric Raymond highlights the problem with the proprietary model:

The brutal truth is this: when your key business processes are executed by opaque blocks of bits that you can't even see inside (let alone modify), you have lost control of your business. You need your supplier more than your supplier needs you – and you will pay, and pay, and pay again for the power imbalance. You'll pay in higher prices, you'll pay in lost opportunities, and you'll pay in lock-in that grows worse over time as the supplier (who has refined its game on a lot of previous victims) tightens its hold.⁸³

The open-source model, by contrast, allows the business to use the source code to build a better product. With open source, the building blocks are available and can be manipulated by the software owner (not copyright owner) to best suit their needs. Because software is created to be used, the ability to change the code is an important "right" that should be granted to the software buyer. Given that most users want workable software, open-source software provides more flexibility for the end user.

What open-source companies provide is support as you develop your products. Control over software reverts to the business owner instead of the software owner. As Raymond points out,

Contrast this with the open-source choice. If you go that route, you have the source code, and no one can take it away from you. Instead of a supplier monopoly with a chokehold on your business, you now have multiple service companies bidding for your business – and you not only get to play them against each other, you have the option of building

your own captive support organization if that looks less expensive than contracting out. The market works for you.⁸⁴

The open-source option can provide a comparative advantage to a business that needs specific software tailored to its needs. According to open-source advocates, at least 75 per cent of computer programming is done in-house when software engineers and systems operators do what is called “vertical maintenance” for their systems.⁸⁵ This type of work takes long hours and quite a bit of programming time. Open source provides all programmers with access to a vast toolbox from which to draw code when writing and revising software that will make any business more efficient.

Furthermore, unlike some proprietary packages with back doors that allow the software vendor to deactivate the program if they feel the licensing agreement has been violated, open-source software becomes the property of the company.⁸⁶ In return for the flexibility of the open-source system, the company must contribute its source code to the general community of users. The company also has access to the programs that can improve the functionality of their own systems.

A third advantage of open-source technology is that the resulting products are substantially more stable and bug free than their proprietary alternatives. Linux followed a truly revolutionary and anarchistic development model. Thousands of programmers around the world donated their time, creativity, and energy to the project. With thousands of programmers, each focused on the type of code that most interests him and/or her, the end result would inevitably be fairly stable. This code continually evolves as new uses are developed and as bugs are fixed. Torvalds remains involved in the decisions of what will be included in the operating system. However, he does so in a way that allows users to decide on the best features. Essentially, he lets the people who deal with the system on a daily basis decide what works best. The final result has been a stable and well-built system.

A fourth important advantage of open-source technology over the prevailing intellectual property paradigm is the fact that licensing is easier and facilitates the exchange of information and innovation of code. Major computer manufacturers in the USA have adopted Linux ports because the licensing is less difficult than with proprietary software. Additionally, contracts of adhesion that govern the proprietary software market in the form of shrinkwrap licenses are not part of the open-source paradigm.

Open source, with its less restrictive licenses and its collaborative framework, establishes an ideal setting for growth in software development in areas outside the USA that would like to remain independent of powerful US software interests. As the COO of MIMOS, a Malaysian computer company said, “In the Malaysian context, this translates into the enablement and propagation of creative and innovative software development activities in a collaborative manner over the Internet.”⁸⁷ In the words of

Rob Hart, an executive at Red Hat Asia-Pacific, "Open source levels the playing field by breaking down the entry barriers put up by proprietary software companies."⁸⁸

Finally, the open-source movement is an important alternative model to the global standards established by TRIPS and the WTO. The WTO and the private policing forces of the technology industry, like the Business Software Alliance (BSA) and the Software Information Industry Association (SIIA), are enormously concerned with intellectual property piracy. The SIIA's research suggests that 51 per cent of software in Singapore was pirated in 1999 resulting in US \$61,758 lost.⁸⁹ The total loss in the Asia/Pacific region, according to the SIIA, was US \$2,791,531. While the SIIA does not publish its methodology, it is clear that a significant amount of money is thought to be lost. Virtually all international agreements and organizations are devoted to stamping out piracy, a type of piracy that does not exist in the open-source model.

The elimination of piracy is perhaps one of the most interesting advantages of the open-source philosophy. It is only possible to "steal" information under open source if you fence it off and do not allow others to use it. Contrast this understanding of piracy with the more traditional definition – which defines any unauthorized use as an act of theft. When choosing a future path, it is best to choose one that will benefit society as a whole. There seems to be some evidence to suggest that open source is a viable and advantageous path to follow. As an alternative, the open-source model eliminates piracy without the huge build-up in police power necessary for the current anti-piracy campaigns.

Ultimately, the open-source movement provides us with an avenue to assess who benefits and who loses from contemporary intellectual property regimes. TRIPS was designed to benefit businesses in the global north, with the USA being the primary beneficiary.⁹⁰ If stronger intellectual property rights will help developing countries at all, it will only be when they have reached a sufficient level of development to support local industries. Until that time, developing economies will benefit more by being able to mimic and reverse engineer technologies from developed countries, both activities that have become much more difficult under contemporary international regimes.

The open-source alternative also helps illustrate the problems inherent in the proprietary system. Strong property barriers provide monopolists with the ability to charge the maximum amount for that property. However, open source is a philosophy that emphasizes the good of the community over the good of the individual. It recognizes that many creative people innovate for the challenge and willingly share their creations with others. This type of value system is the one that ought to be emphasized in the economic realms of technology. Thus, open source as a philosophy, while currently focused on software development, is a model that could be applied to a variety of structures. For example, it may be useful to apply an open-source model to drugs

necessary to halt the spread of AIDS. It is also very likely that music is an open-source community that contemporary intellectual property laws have forced into a proprietary model.

The open-source phenomenon is the beginning of a substantially different information technology future premised upon a non-proprietary model of sharing. Instead of centralizing ownership in the hands of a few wealthy individuals, open source decentralizes ownership and in the process builds upon the creative energy of thousands. Open source, because contributions must be made available to the larger community, serves a public function. Once part of the open-source community, contributions help everyone. Open source is not without problems that must be worked out. However, there is growing acceptance of the open-source model. Professor of Business, Debora L. Spar, notes that,

The ideas of copy-left, or of a more liberal regime of copyright, are receiving wider and wider support....It's no longer a wacky idea cloistered in the ivory tower; it's become a more mainstream idea that we need a different kind of copyright regime to support the wide range of activities in cyberspace.⁹¹

In response to the “threat” posed by open source, Microsoft has launched a full-fledged attack against the idea. In February 2001, Microsoft Windows operating-system chief Jim Allchin warned US lawmakers, “open source is an intellectual-property destroyer. I can’t imagine something that could be worse than this for the software business and the intellectual-property business.”⁹² He went on to say, “I’m an American, I believe in the American Way. I worry if the government encourages open source, and I don’t think we’ve done enough education of policymakers to understand the threat.”⁹³ In May 2001, Senior Vice President of Microsoft, Craig Mundie, took up the topic of open-source technology. He publicly denounced open-source software as instrumental in the destruction of many of the dot-coms, a security threat, and unsuitable for the mass market.⁹⁴ Additionally, the license agreement accompanying Microsoft’s Mobile Internet Toolkit software (in its second beta version) specifically prohibits the use of their software with any software licensed under the General Public License (GPL).⁹⁵ Microsoft calls all open-source software “viral” software and prohibits users of their new toolkit from developing programs that will contain open-source code.⁹⁶ Such statements from arguably the most powerful software company in the world are curious. Many people interpret Microsoft’s public comments to mean they are feeling the threat of open-source technology. This position is supported with evidence from Microsoft’s internal communications.⁹⁷

In part, Microsoft was responding to the growing popularity of open-source technologies. The Linux operating system and products using the open-source model like Apache and Red Hat are developing sizable market shares.⁹⁸ Red Hat has successfully negotiated agreements with IBM, Intel,

Dell, and Compaq, and now has an international presence with offices throughout the globe.⁹⁹ Additionally, the US President's Information Technology Advisory Committee recommended that the federal government back "open source software as an alternate path for software development."¹⁰⁰ Not only is Microsoft responding to the increasing popularity of the software, but also to the fact that it begins from a radically different set of assumptions about what motivates people to create, what makes a successful business model, and how to realize the best possible software.¹⁰¹

Conclusion

Despite the opposition from Microsoft, the idea of open source and the GPL has continued to gain power. Open source has become a worldwide phenomenon with countries around the world establishing their intent to shift government functions to open-source technology. It is yet to be seen how successful the open-source movement will be in reclaiming computer code as an intellectual commons, but it is clear that, as a pragmatic approach to future development, the method has much to offer.¹⁰²

The idea of open source has become popularized in a variety of intellectual property-related fields.¹⁰³ For example, Salon.net is publishing a book experiment following the open-source model where chapters are posted from a book on open source for outside criticism and discussion. The author of the book then uses the discussion when revising the chapters. Additionally, MIT has begun an experiment as an open-source university where all its curriculum and coursework is available online. One would not even have to be a student to learn at MIT. Other small experiments abound, like the music website where public domain beats and songs are available to future creation. Finally, numerous groups and individuals are working on licensing agreements that will protect copyrighted works as open-source works available in the public domain or as some sort of hybrid. Thus, the open-source idea is spreading and becoming popularized.

In creating a vision for a future that is not governed by the strict licensing agreements of shrinkwrap commercial software or some sort of corporate sponsored legislation like UCITA, open source is an important alternative. It has politicized and popularized the idea that sharing continues to have value in a world gone mad over property rights. As the world of intellectual property is rethought by its critics, the work of the open-source movement is a critical step in the process. While it may be impossible to reject the current trajectory of increased protection, resistance such as that created by open source is important.

3 I want my MP3s

The changing face of music in an electronic age*

The Revolution will not be televised. It will be digitized. Break free from the Matrix. The new music industry is here.

(Chuck D, formerly of Public Enemy, at *Rapstation.com*)

This is a very profound moment historically. This isn't about a bunch of kids stealing music. It's about an assault on everything that constitutes the cultural expression of our society. If we fail to protect and preserve our intellectual property system, the culture will atrophy. And corporations won't be the only ones hurt. Artists will have no incentive to create. Worst-case scenario: the country will end up in sort of a cultural Dark Ages.

(Richard Parsons, Time Warner CEO)¹

In 1994, Enigma produced the international hit album, *The Cross of Changes*, which sold over 6 million copies worldwide. The title song, "Return to Innocence," was integrated into numerous commercials and even played at the Olympics. Ironically, the popularity of the song meant anything but a return to innocence for several of the singers who found themselves singing on the internationally acclaimed single without their knowledge. Taiwanese Indigenous singers Difang and Agay discovered that their voices appeared on the "Return to Innocence" track without their permission. The singers, part of the Indigenous Ami tribe, had been recorded while giving a concert in France. In 1988, the Maison des Cultures du Monde (MCM) produced a CD entitled *Polyphonies vocals des Aborigenes de Taiwan*, on which the singers' "Jubilant Drinking Song" appeared. Enigma purchased the rights to use a recording of Difang and Agay from MCM. While permission for use of the musical material was granted, the French agency did not actually control the rights they granted and the folk singers were never asked for permission and royalties were not directed their way.²

In 1997, Difang and Agay (whose Chinese names are Kuo Ying-Nan and Kuo Hsin-Chu) sued in the US Federal District Court in Los Angeles over the unauthorized use of the "Jubilant Drinking Song," claiming that the recording had been made for cultural preservation purposes only.³ The case

* A shorter version of this chapter appears in *Resounding International Relations: On Music, Culture and Politics*, M. I. Franklin (ed), New York: Palgrave MacMillan, forthcoming 2005

was settled out of court for an undisclosed amount of money and the singers were credited in the liner notes. Difang and Agay have since produced their own record, *Circle of Life*, and these two singers, interested in the cultural survival of their tribe, see music as the way to convey their culture. "I want Amis music to be in every corner of the world and let everyone in the world know that there's an Amis tribe in Taiwan," Difang said – a message that perhaps music can accomplish.⁴

The Enigma story highlights the complexity of appropriation, piracy, the role of the commercial music industry on the international scene, and the importance of music to culture and individual identity.⁵ While the original "piracy" occurred in France, permission to use the recording was granted to the German branch of Virgin Records, and legal action took place in the USA. The US firm of Oppenheimer Wolff & Donnelly brought suit against a number of organizations, including Virgin Records, with the help of Taiwan-based attorney, Huang Hsiu-Ian.⁶ The world of commercial music is so interwoven that it can no longer be understood as a nation-based system. The musicians travel, with either commercial or cultural motivations in mind, on the international scene. The industry itself has merged to such a degree that the vast majority of music flows through five major corporations, all with US or European roots.⁷

As the Enigma example illustrates, the international political economy of music rests upon a definition of rights that benefits the music industry and those that work within its framework. Only after suing, for example, were the Indigenous singers able to get some recognition for their contributions to the "Return to Innocence" song.⁸ It is within this framework that the music industry has initiated a prolonged and heated battle to define global music piracy and outlaw methods for sharing music.⁹

While evidence suggests that the vast majority of musicians do not benefit from the current corporate musical system, the industry (until recently) has been able to control the discourse of music production, and the politics of music have remained under the radar. However, the emergence of filesharing technology and the recording industry response have dramatically transformed the musical playing field around the world. First, as a result of the draconian response by the Recording Industry Association of America (RIAA) and its international supporters, a growing discontent with the way the music industry operates is bubbling. Second, the Internet provides not simply a haven for pirates and thieves, but a legitimate avenue for musicians to begin the process of bypassing the industry and creating a future that may render the current industrial giants irrelevant. Thus, file-sharing and peer-to-peer networks need to be discussed within the context of global inequality, appropriation, and an understanding of music as cultural communication. It is important to recognize the political nature of the industry claims regarding piracy and the threat of filesharing, and the power relationships the industry attempts to obscure by portraying itself as the victim of pirates and music thieves. Additionally, the struggle to control the

way in which the industry is interpreted by music fans throughout the globe is at stake and the narrative of inequality and abuse on the part of the industry is finding a sympathetic ear.

Every possible way in which music can be found, distributed, and heard over the Internet is at issue in this debate. The struggle for control over the future of the music industry is an international struggle where the laws of the USA are employed to establish a standard of protection that can be applied throughout the world. The goal of the industry is to exert total control over every musical revenue stream through a web of intellectual property, new laws, and aggressive litigation. Public attention has focused on the litigation strategies, but the music industry is also seeking new licensing models that will apply to Internet webcasting. The RIAA's recent civil and criminal charges against individual music lovers who have downloaded music illustrate just how far the industry will go to protect what they call their property.¹⁰

The position of the industry could not be further from the standpoint of music fans and some musicians. Music transcends the framework of consumption created by the industry and is a crucial way in which we connect and build relationships with each other. The popularity of sites like Kazaa, Napster, Grokster, Aimster, and others, illustrates how willingly individuals ignore the laws that have been written to protect the music industry from its fans. As a result, growing numbers of people promote filesharing and attempt to reframe the legal discourse on copyright law to benefit the user over the owner.¹¹ These advocates argue that the future of the digital age is premised upon filesharing. The RIAA's short-term tactic of halting music piracy may backfire if currently apolitical music listeners backlash against the industry and through their sheer numbers help transform the future of music.

Changes in the way we protect, distribute, and own music are essential for a future of diverse creativity. An alternative based on filesharing is developing where a different type of creative world is envisioned. In this new music paradigm, artists will retain control of their creative work and the music industry will become irrelevant. The ramifications of these changes will be felt at both local and global levels. While usually not understood as an explicitly political system, peer-to-peer networking acts as a disintermediating force on an otherwise monopolistic enterprise.¹² How filesharing is defined – either as piracy or as a legitimate digital form of exchange – will determine the future commercialization of the Internet. Hence, the struggle is over much more than access to free music; it is over the future of music as creative work itself. Thus, the unintentional revolutionaries of the peer-to-peer networking system are creating an alternative system of music creation and exchange. The digital future of music is one way to examine how we might rethink copyright.

Most prominently absent in discussions of copyright is a serious consideration of the balance between ownership rights and the public domain, as

discussed in Chapter 1. While copyright owners may believe it is in their best interest to have expansive monopoly rights, such strong protection is not in the best interest of the general public or, I would argue, creative artists. The balance mandated by the US constitution assumes that intellectual work is not simply an individual right, but a social good. Music allows us to assess the links between public goods and private property. The digital future of music is one example of how we might rethink copyright.

In this chapter, I will first outline the expansion of copyright protection for music in order to identify the primary beneficiaries of the system. While the focus is on US law, the expansion of copyright law has happened internationally and impacts the global exchange of music. Second, I will look at the revolutionary potential of the digital world as exemplified by peer-to-peer networking and filesharing. The peer-to-peer litigation is interesting because it highlights the tension between the traditional industry and the potential of the Internet. Third, I will evaluate the arguments for strict copyright protection used to halt technological innovations such as MP3 and Napster. Finally, I will examine the ways in which music is being discussed in the digital future. This final section looks to those who would seek an alternative to the current balance of copyright power. This future is one that will hopefully balance the rights of the author with those of the public more fairly.

Copyright in music – a gradually expanding right

The gradually expanding rights in music can be traced through changes in US law over time. While the music industry was international in scope almost from its inception,¹³ the development of protective rights regimes in the USA has worked to help the industry grow into what it has become today. The global music scene is dominated by US and European actors, and the combination of their legal regimes is used to control the international market in music. While these major state actors can disagree (as will be illustrated below), for the most part the strong copyright protection articulated by the US law is the baseline to protect music worldwide.

The first US federal copyright law enacted in 1790 did not include protection for music. However, copyright in music has continually expanded in the USA since music was included in the copyright law in 1831.¹⁴ After 1831, published music was protected, but music could still be performed without violating the law. The courts affirmed this early interpretation of copyright and argued that, “a public performance of a drama or musical composition is not a publication.”¹⁵ In order to fill this loophole, a public performance right for music was added in 1897.¹⁶ This expansion gave rights to the composer of a song, who could now control the public performance of the work. The rights to public performance were not an issue until the popularization of radio, at which point rights in the public performance of music became more important.

Radio transformed the way people listened to music. Prior to radio, songwriters and music publishers made money primarily from the sale of sheet music. With the increasing popularity of radio, the sale of pianos, sheet music, and phonographs declined sharply. Finding methods to collect royalties from public performances became essential for copyright owners. Radio broadcasts were not considered publications or performances until the passage of the 1909 Copyright Act.¹⁷ The 1909 act allowed not-for-profit performances, but made commercial performances subject to copyright permission.¹⁸ Most importantly, the act broadened the definition of a public performance to include radio broadcasts. The new definition of a public performance redefined the act of listening to a radio program in the privacy of one's home as a public act.

The 1909 law made it possible for copyright owners to collect royalties from public performances, but there was no mechanism for collection until 1914. In 1914 the American Society of Composers, Authors and Publishers (ASCAP) formed to collect licensing fees from the public performance of songs owned by its members.¹⁹ ASCAP, in an early pamphlet describing the importance of copyright, calls music a "raw material" much like wheat or cotton on which the music industry depends.²⁰ This interesting metaphor establishes very clearly the hierarchy between musicians who create the raw materials and the industry that profits from the finished product – a relationship that has not changed substantially over the years. The pamphlet declares that all civilized countries have copyright laws and that these laws are essential for protecting the rights of composers.²¹ While the colonialist tone is quite clear, this early narrative of copyright is telling regarding the ways in which it constructs boundaries of culture, art, and property.

ASCAP quickly became a powerful force, winning many decisive court battles.²² In return for remuneration, songwriters granted ASCAP the rights to determine who could perform their songs publicly.²³ As ASCAP membership grew, it became capable of utilizing the copyright law to force radio stations to pay licensing fees for songs registered with ASCAP. Given the monopoly status as a licensing agency ASCAP enjoyed, it was able to charge any royalty amount it chose. In 1931, ASCAP increased its fees to radio stations by 300 per cent.²⁴ ASCAP continued to increase its profits by demanding 3- and 5-year contracts and increased licensing fees. In 1939 ASCAP sought to increase fees again and radio broadcasters finally revolted.²⁵

The Broadcast Music Incorporated (BMI) was established as a way to resist the monopoly power of ASCAP and its licensing power. On New Year's Eve, 1940, broadcasters announced a boycott of ASCAP music beginning on 1 January 1941.²⁶ The next day broadcasters began playing music in the public domain and music licensed through BMI. BMI began recruiting musicians from genres ASCAP tended to ignore such as blues, rock & roll, gospel, and Latin American music.²⁷ This resistance is crucial because, as Michael Perlman suggests, "in the end, then, a considerable

amount of popular culture may represent an attempt to circumvent the unduly restrictive powers of intellectual property.”²⁸ Thus, as the industry became too severe with its enforcement of intellectual property, it spawned a resistance that led not to the destruction of music, but the production and dissemination of new genres, more creative mixes, and a better musical scene.²⁹

ASCAP continues to lobby for an expanded definition of a public performance in an attempt to protect performance rights for copyright owners.³⁰ In fact, aside from the RIAA, ASCAP is perhaps the staunchest supporter of copyright and utilizes the legal system to assert its interpretation of copyright law.³¹ Throughout its existence, ASCAP has discovered new interpretations of the rights to own a public performance that must be litigated. ASCAP also “educates” new business owners regarding the rights of ASCAP members as they enter the market. ASCAP has agents in the field checking establishments for possible violations of their copyrights. If a violation is found, ASCAP sends a letter requesting compliance by paying a yearly licensing fee or facing legal action. In this letter, ASCAP includes a list of cases decided in its favor as proof that any business that fails to comply with its demands will suffer the same consequences.³²

Infringing practices are widespread. Potentially infringing uses include radio broadcasts, the use of jukeboxes, or live musicians, music played in a condominium clubhouse, or over a sound system in a health club. ASCAP argues that even a radio played in the background of a store or coffee shop constitutes a “public performance” that the business profits from by creating an “atmosphere,” essential to a successful business. This atmosphere is a public performance according to ASCAP for which it should be compensated.³³ In addition to its litigation strategy, ASCAP has been criticized for tactics that include, “burdensome and repetitive requests to prove music usage, confusing billing practices, solicitations containing misrepresentations and undercover surveillance tactics.”³⁴

Despite the fact that ASCAP has the law on its side, it is widely perceived as abusive and unfair. ASCAP collects licensing fees from the radio stations that play music and then again from businesses that play the radio. Forcing a business owner to license music they have already bought in the form of a CD or received via commercial radio is considered by some to be “double dipping.” Double dipping is one of several reasons why businesses think ASCAP is too extreme in its pursuit of profits.³⁵

In yet another act of resistance, restaurant and business owners lobbied Congress to address the unfair pressure by ASCAP. In response, Congress passed the 1997 Fairness in Music Licensing Act (FIMLA).³⁶ While Congress was passing some of its most restrictive intellectual property laws to date, FIMLA decreased copyright protection in the area of music licensing, suggesting that resistance via the legislative process is possible when one group of commercial interests are pitted against another. This new law provided small businesses with an exemption for ASCAP licensing fees if

“homestyle” equipment was used. The law specified the size of establishment that may be eligible for the homestyle exception.

However, control over music licensing is no longer a domestic matter. With the passage of the Trade Related Aspects of Intellectual Property Rights agreement (TRIPS), each country must meet the minimum guidelines established to protect intellectual property by the World Trade Organization (WTO). The FIMLA is a good example of how music licensing has gone global. The EU argued that the FIMLA removed adequate protection for European music played in the USA. The WTO agreed with the EU and claimed that the FIMLA violated the TRIPS agreement. In order to regain compliance with TRIPS, the USA must revise the FIMLA thus subsuming national sovereignty to an international legal regime.³⁷ The conflict over FIMLA suggests how internationally entrenched the strong protection of music licensing rights has become.³⁸ Additionally, it illustrates how today’s music and copyright battles transcend national discussion and must consider the global exchange of music as a commodity. It also suggests that even widespread resistance at the national level may not be enough to really effect changes in the copyright law.

Aside from the FIMLA, changes in the copyright law have primarily benefited the copyright owner.³⁹ The Digital Performance Right in Sound Recordings Act of 1995 (DPRSRA) creates an entirely new right for sound recording owners. It gives sound recording owners a public performance right that makes any digital “performance” of a sound recording subject to copyright law.⁴⁰ This law also allows recording artists to collect royalties from the digital sale of music.⁴¹ In the digital world, a licensing agreement must be worked out between the online music provider, the owner of the public performance right, and the owner of the sound recording rights.⁴²

Under the DPRSRA, any website wishing to distribute music online must acquire a license.⁴³ The DPRSRA creates three types of licenses that an online distributor needs before allowing music to be downloaded. These licenses cover the performance of the work, the distribution of the work, and the distribution of “phonorecords” online.⁴⁴ The system is complex, with different licensing agencies covering different types of licenses. ASCAP is also working on experimental licenses that would charge websites a flat rate based upon a percentage of their profits.⁴⁵

While many websites using digital music are radio stations that now offer webcasting, other music distribution sites, like MP3.com, do not fall under the traditional public performance right. MP3.com acts like a record store, where an individual can purchase or preview a CD or song. It is designed to allow a single listener access to recordings. ASCAP has reinterpreted the definition of a public performance to include any song that is online. They argue that online music is a public performance because many people, even millions, might listen to a song posted on

MP3.com. The public performance occurs despite the fact these potential millions of listeners may listen to the song hours or days apart.⁴⁶ Thus, ASCAP has successfully argued that everything but the private exchange of email constitutes a public performance.⁴⁷ That a public performance can now include playing a song in the privacy of one's home is an interesting expansion of copyright law that has happened without much controversy.

More general expansions of property rights also affect the music industry and music listeners. The much-criticized Sonny Bono Copyright Term Extension Act (CTEA) assures longer protection for all copyrighted works, including music.⁴⁸ The No Electronic Theft Act of 1997 (NET) increases copyright protection by making the distribution of over \$1,000 in copyrighted material a criminal offense regardless of profit motives.⁴⁹ Uploading a song, even if not for commercial gain, can be a violation of the NET Act.⁵⁰ The Digital Millennium Copyright Act (DMCA) is Congress's attempt to apply copyright law to the Internet. The DMCA makes it illegal to link to a site that may violate copyright.⁵¹ Thus service providers may be prosecuted for copyright infringement if they allow pirated materials to appear on their sites. The DMCA provides "safe harbor" protection for "unknowing" infringers, a phrase that became important in the Napster litigation. Critics contend that the DMCA ignores the public interest and is another step towards privatizing the Internet and allowing copyright to be used as a tool for censorship.⁵²

The end result of the legal expansion is a complex system of rights assigned to music. As Wendy M. Pollack points out,

The musical work copyright protects the music and lyrics themselves, whereas the sound recording copyright protects a specific recording of the song. Usually, the copyrights of musical works and sound recordings are shared between joint authors, consisting typically of the musical artists and the record-producing team. Along with copyright protection in a work comes a "bundle of rights" as set forth in the Act. Those rights include the right to reproduce copies of the original work, the right to prepare derivative works, the right to distribute copies, and for musical works, the right to publicly display the work and the right to public performance.⁵³

The system of rights worked out in the offline world is further complicated by the digital distribution of music and the multiple licensing agreements that now exist regarding online music distribution. With enormous profits at stake and the struggle to control the future distribution of music in the balance, a significant amount of lobbying effort has gone into ensuring that the future of music remains commercialized and monopolized by the music industry.⁵⁴ The trend towards increased rights that "protect" the commodification of music supports May's argument that the industry today is more

concerned with the production of rights than with product.⁵⁵ The clash of these values with a new paradigm can be seen in the legal actions taken against MP3.com and Napster.

The industry litigation strategy

MP3 technology became a hit sensation seemingly overnight in large part because of the interplay between the hugely popular Napster peer-to-peer networking program and the publicity surrounding the industry attempt to shut Napster down. The discursive strategies to define filesharing as the inevitable future of a digital revolution or as mere theft are at work in the litigation of the RIAA and the ways in which different individuals, groups, and organizations have staged resistances. There are no clear sides in this ongoing struggle. Musicians, independent labels, and to some extent even consumers, can be said to fall on either side of the debate. While the ultimate outcome of the litigation process has yet to be determined, the lawsuits, accusations, and the emerging alternatives all suggest that the struggle to control the digital future of music is well underway and that the music industry has not successfully gained control of the narrative. In fact, given the way in which the RIAA has pursued its customers, there is a growing public perception that they are in the wrong, despite the repeated arguments about copyright infringement and theft. In other words, their attempts to “educate” the public about copyright are failing to reach important segments of the population. The litigation strategy initiated by the industry is one tactic utilized in an attempt to control the exchange of digitized music, but a counter-discourse regarding the importance of filesharing is also alive and well.

The RIAA initiated a multi-tiered attack against technologies, companies, and organizations they identified as threats to their monopolies. The first strategy was to attempt to halt the technology necessary for making MP3s portable. The second strategy is the ongoing attempt to eliminate services that facilitate filesharing, like Napster, MP3.com, and Aimster. The third prong was to sue major universities, arguing that the bulk of illegal copying was being done at these institutions. Only after these strategies met with resistance and did not lead to a significant reduction in filesharing did the RIAA target individual users. Most importantly, the industry continues to “educate” people that filesharing is morally wrong and akin to shoplifting.

Using the Audio Home Recording Act (AHRA), the RIAA sued Diamond Multimedia systems, the producer of a portable MP3 player called RIO, to halt the spread of digital technology. Portable MP3 players are threatening because songs downloadable by computer become portable and can be listened to anywhere with a device the size of a small walkman and available for less than \$200.⁵⁶ The RIAA argued that RIO was a digital recording device that could be used to violate the copyright law.⁵⁷ Both the District and Ninth Circuit Court found that RIO was not a digital recording

device. Thus, it did not have to comply with the regulations governing the production and sale of digital recording devices under the AHRA.⁵⁸ Instead, the courts decided that RIO allowed users to “space shift” their music, much like VHS cassettes allowed viewers to “time shift” their television programs.⁵⁹ Furthermore, RIO made other legitimate uses, such as downloading music from unsigned bands or downloading music from Internet record labels, possible and the RIAA were unsuccessful in their attempt to halt the dissemination of this new technology.

The second prong of legal action was against peer-to-peer services, starting with MyMP3.com and Napster. MP3.com was at the forefront of developing innovative listening and distribution mechanisms for digital technology. MP3.com acts as an online record store where people can listen to tracks and purchase individual songs or entire albums. MP3.com developed “Mymp3.com,” a service that allowed members to store music online in a “music locker” and listen to it from any computer.⁶⁰ MP3.com bought and uploaded as many CDs as possible into their centralized storage facility to give listeners access to as many options in their personal collections as possible. MyMP3.com was sued by the RIAA for copying “the tracks from some 45,000 commercial CDs onto its computer server without proper authorization or license from the label copyright holders.”⁶¹ MP3.com argued their actions constituted fair use because both they and the music listeners owned copies of the songs, an argument that did not prevail in court. MP3.com settled most lawsuits, but lost to Universal Music Group and has been ordered to pay \$25,000 for each CD it copied.⁶² The MP3.com litigation continues on in ever more complex circles with licensing agencies initiating their own litigation against the company.⁶³ The status quo agencies have spent considerable time and money attempting to halt the operations of MP3.com and will continue, most likely, to do so in the near future.

Napster was also the focus of early litigation by the RIAA (and Metallica) in an effort to stop what they called music piracy.⁶⁴ Napster was designed by 19-year-old Shawn Fanning who created the program to search out MP3 files on the Internet.⁶⁵ Napster offered an alternative model for the digital future of music by operating as a search engine that connected members and created a vast filesharing network that made it easier to find and download music that existed on the hard drives of members. Napster is the digital equivalent of getting together with your friends and trading your favorite CDs, with the entire world capable of sharing.⁶⁶ The RIAA wanted to make it clear that peer-to-peer filesharing programs were a violation of copyright. They sued Napster for operating “a haven for music piracy on an unprecedented scale.”⁶⁷ It is important to note that labeling Napster a deviant service, an idea that will continue to exist long after the trial is completed, is as important as winning the case.

Perhaps not surprisingly, Napster lost.⁶⁸ In part, the problem for Napster stemmed from the existence of song names on the Napster server. This list, and the fact that Napster only posted a copyright notice in response to the

litigation, was enough to illustrate that Napster, as an ISP, was engaged in the facilitation of illegal copyright infringement. But even as Napster was closing the doors, other peer-to-peer programs were emerging.⁶⁹ As new programs emerge, the RIAA attempts to shut them down, but many of these new programs have been designed to avoid the flaws the court found in Napster.⁷⁰

The post-Napster world has seen an even more extensive assault on file-sharing and MP3 technology.⁷¹ Outside the spotlight of the early popular cases, the RIAA has used the DMCA and web crawlers to shut down over 2,000 sites offering MP3 files.⁷² To shut a site down, the RIAA first contacts the owner of the website. If the website owner refuses to co-operate, the RIAA can invoke the third-party liability section of the DMCA and ask the service provider to remove the offending website.⁷³ If the service provider refuses to co-operate, they can be held liable for contributory infringement. At no point is there evidence, other than the RIAA's assertion, that illegal material is present. However, the DMCA provides an organization like the RIAA with immense power to control the process. Because of the power of the RIAA under the DMCA, a service provider is likely to censor a website first and ask questions about legitimate material second. Many questions about fair use in the digital environment and what constitutes copyright infringement will never reach the court because the RIAA can use its overwhelming power to halt such action.

There are other key prongs to the recording industry strategy to wipe out filesharing. Besides attempting to shut down websites, there was an early and concerted effort to threaten colleges and universities into blocking peer-to-peer access to their students.⁷⁴ Many colleges and universities, instead of fighting potential lawsuits, have complied with these requests without assessing the ultimate implications. However, at least fourteen colleges and universities decided to resist the coercive tactics of the industry and refused to comply with requests to block Napster.⁷⁵ Such resistance rests upon the argument regarding the place of colleges and universities in an open society, and the values of exchange of information that are associated with institutes of higher learning. This resistance has led the industry to seek other options in halting piracy, including what they term "educating" the students and the public at large regarding copyright and theft.⁷⁶ There are numerous lawyers and intellectual property advocates loudly proclaiming the absolute nature of property in copyrighted works, a discourse that is slowly making its way into the common understanding. However, as this chapter and others throughout the book illustrate, there are competing discourses making it difficult for the property discourse to continue pushing forward without check.

Recently, the RIAA has met additional resistance to its war against Internet piracy when it was denied access to client lists from Verizon. The US Court of Appeals for the District of Columbia ruled that the RIAA did not have the authority to compel Verizon to hand over client lists for people the RIAA claimed violated their copyright laws.⁷⁷ In response, the RIAA

argued it would continue to pursue litigation against individual consumers, but instead of providing them with the opportunity to settle out of court, they would now be pursuing lawsuits based upon email names and only finding the names of the actual persons during the judicial process.⁷⁸ As of April 2004, the RIAA has sued over 2,000 individuals they claim have illegally downloaded music.⁷⁹

The RIAA continues to wield the law against smaller service providers who are more likely to censor a website first and ask questions about legitimate material second in order to avoid a costly lawsuit, despite the Verizon setback. Questions about fair use in the digital environment and what constitutes copyright infringement will never reach the court because the RIAA is using its power to halt such action. A study by the NBD Group, Inc. has found that lawsuits against individuals have led to an 11 per cent decrease in filesharing in the USA, but they have also fostered increasingly hostile attitudes towards the recording industry.⁸⁰

Even given the multiple tactics of the industry, filesharing is global, with people all over the world utilizing filesharing technology to share, download, and exchange music.⁸¹ Additionally, new filesharing services are global in scope and thus much less easy to sue. Kazaa is an example of such a global networking system. The company that distributes Kazaa according to Amy Harmon “is incorporated in the South Pacific Island nation of Vanuatu and managed from Australia. Its computer servers are in Denmark and the source code for its software was last seen in Estonia.”⁸² Such a global and decentralized distribution network will be difficult, if not impossible, to stop.

The assault on filesharing and the global exchange of music outside corporate control makes it important to frame how music is currently bought and sold. As different components of the music and technology industry merge to form larger multinational corporations who control larger segments of our cultural heritage, the future is not necessarily a bright one for creative work and the impact will go beyond music to all types of entertainment.⁸³ While use of peer-to-peer networking continues, the vision of the future generated by the music industry is one where they own all songs and all revenue streams flow back to the music industry. Vaidhyanathan encapsulates the industry position in no uncertain terms.

The music industry has been unsuccessfully trying to stall the expansion of unregulated distribution of content through litigation until it can establish a standard secure digital encryption format, which is an essential step toward a global “pay-per-view” system – a proprietary information ecosystem....The content industries have been clear about their intentions to charge for every bit of data, stamp out the used CD market, and crush libraries by extinguishing fair use.⁸⁴

The industry is not content to halt piracy, but wishes to create a world where everything is commercial and ownership is centralized. The lawsuits against

MP3.com and Napster are only the tip of the litigation iceberg. It is important to understand how the industry position might be criticized and then go beyond criticism to see what may become the digital future of music.

A response to peer-to-peer networking as a threat

One important argument used as justification for eliminating filesharing is that it harms industry profits necessary to recoup the costs of developing a band.⁸⁵ The RIAA argues that Napster and other peer-to-peer networks caused the industry to lose over \$2 billion from 1999 through 2002.⁸⁶ Other sources claim the loss due to piracy is closer to \$700 million in sales since Napster opened its doors.⁸⁷ One music executive claimed the music industry lost a million dollars a day to piracy.⁸⁸ While it is difficult to determine how these figures are produced, many numbers detailing losses are constructed by speculating on *potential* sales *if* every person who downloaded a song bought the CD. Such analysis does not consider the possibility that a person already owns the CD or will eventually buy the CD. There is no evidence that absent a free version, a person would purchase a \$15–20 CD. Additionally, it is important to recognize that while many use filesharing to access the newest hits, others utilize the service to find obscure songs, out of print music, and recordings from local bands that use the Internet to publicize themselves. Each of these possibilities suggests gray areas surrounding filesharing that have not been considered in declaring lost profits.

While the industry lays the blame of declining profits at the door of filesharing, recent evidence suggests that “losses” are perhaps due to a decline in production over the past several years. The industry only produced 27,000 titles in 2001, when at their peak in 1999 they produced 38,900.⁸⁹ Additionally, sales evidence suggests that, despite lower returns in 2002 and 2003 sales, the anomaly may be the unusually high sales in the 1998–2000 years instead of the lower sales that followed.⁹⁰ However, blaming pirates for the loss of jobs and the decline in profits allows the industry to avoid scrutinizing its own business practices in light of the networked world we now inhabit. Ultimately, the end of the industry due to piracy should be examined in light of the complex international production process.⁹¹ As an interesting comparison, instead of destroying the entertainment industry as critics of VCR technology predicted, VCRs increased box office revenues.⁹²

The claims about copyright infringement were personalized by heavy metal band Metallica and their aggressive actions in response to the Napster threat. Metallica’s drummer, Lars Ulrich, was quoted as saying, “it is...sickening to know that our art is being traded like a commodity rather than the art that it is.”⁹³ Metallica tracked their songs on Napster for a weekend and discovered over 300,000 illegal downloads. Based on this evidence, they argued that Napster was engaged in piracy and should be shut down. Additionally, anyone who had downloaded a Metallica song, they argued,

should be banned from the service – a request with which Napster complied. Given the hysteria generated by Napster, a deeper analysis of this 300,000 figure seems in order.

It may be the case that some of the 300,000 copyright violators Metallica identified already owned CD copies of these songs and had thus paid royalties to the band for their copies. Perhaps these fans wanted an MP3 version for their computer use, much like they probably have a portable version for their car. A popular use of cassette tapes before the availability of portable CD players was to make cassette copies of recordings for use in the car. Making such a tape is considered a fair use and most people would not buy two copies of the same CD. Without knowing how many users already own a given CD, or how many users purchase a CD based upon the MP3 song they download, it is difficult to calculate how much revenue has been lost.⁹⁴ While it is very likely that Metallica songs continue to be shared online, Metallica were successful in alienating their fan base, many of whom interpreted the actions of the band as greedy.⁹⁵

A second and third related argument associated with copyright infringement issues is that the artist is harmed and the incentive to create is destroyed. To respond to this argument, it is important to investigate the creative act in more detail. It is difficult to argue that copyright will destroy the incentive to create if there is evidence that people create artistic work for reasons other than profit and property rights.

The number of bands who have chosen to post their music online and are creating music outside the boundaries of the mainstream music industry seems proof that people will create without strong copyright protection. These bands may do so because they want their music “out there,” or they want to be discovered. Many people create because they have talent they express in music or dance or art. Many people create because they want to share something of their perspective with others. Musicians using MP3 technology fall into many categories. Whatever the reasons, the creative impulse cannot be reduced to economic incentives alone. In fact, as May points out, the music industry does not create “original” works, but must find music “unpolluted by the market system” to appropriate.⁹⁶ Thus, music exists well beyond the borders of commercialization and is produced by artists with reasons other than profit in mind.

Very few musicians become rock star multimillionaires. Courtney Love’s dramatic speech regarding the status of musicians helps provide some details. According to Love, there are 273,000 working musicians in the USA who average about \$30,000 a year and only 15 per cent work steadily in music.⁹⁷ There are numerous flaws in the industry system for accounting for royalties, resulting in unjust situations for many musicians.⁹⁸ From their portion of the royalties, the group are expected to pay the recording costs and business expenses of producing the CD. They may also be responsible for tour support and part of the cost of video production. These costs, if they are more than the initial advance, will be taken from future royalties.⁹⁹ In the

end, the band may owe the record company, even if the CD is a multimillion dollar hit. Even top-selling artists have difficulty paying the bills. For example, TLC filed for bankruptcy despite the fact that their CD made \$175 million.¹⁰⁰ While many musicians are driven by the chance of becoming famous, it is quite probable that many are drawn to music because they want to spend a part of their life creating.

It is also important to keep in mind that, despite the lip service to musicians, copyright owners are the beneficiaries of the system. Copyright rarely stays with the creator of a work. In a typical agreement with a recording company, a songwriter or performer signs over the copyright in exchange for a percentage in royalties. This royalty percentage is only paid on the first sale. It is the copyright owner who reaps any long-term benefits from music produced by artists. Because ownership of copyrighted musical works is internationally concentrated with five corporations controlling most of the world's copyrights in music, in reality much of ASCAP fees go to the industry.¹⁰¹

The degree of concentration is immense. For example, Universal Music & Video Distribution owns 750,000 copyrights and is among the top distributors in the USA.¹⁰² Universal Music Group, who recently won its lawsuit against MP3.com, owns at least eleven different labels and is owned by Seagram.¹⁰³ Time Warner and EMI own over 2 million copyrights and one-fifth of world music sales between them, with Warner/Chappel music owning more than 1 million of those copyrights.¹⁰⁴ As media outlets continue to merge, music copyrights continue to be centralized and copyright owners, not authors, benefit from the system.

Music as an international commodity protected by copyright is not only the present reality, but also the likely future unless significant resistance emerges. Merger efforts among the five major music industries abound, with the potential for concentration of music ownership into only three or four international companies. The current centralization of music ownership suggests a future entirely owned and operated through monopoly corporate control. Copyright is not the property of creative individuals; rather it is the property of massive musical corporations who are defending their position through litigation under the guise that the individual author is harmed when a copyright is stolen. As May points out, commodification allows for the perception of neutrality in negotiations regarding music ownership when in reality "the formal appearance of (legalized) neutrality obscures crucial differences in power between parties."¹⁰⁵ Courtney Love suggested that musicians are really sharecroppers in an unjust musical industry.¹⁰⁶ The seriousness of this issue stems from the fact that music has a different type of value than wheat or corn. Music is a vital part of culture and "what these companies own is part of our shared culture."¹⁰⁷

It is difficult to translate the vast corporate ownership of copyrights into an incentive to create. In fact, the claims of international music conglomerates to the contrary, progress can be destroyed by the assertion of an

intellectual property right. As Hank Barry, an affiliate of Napster, noted in the Senate Judiciary Hearings on the subject,

The recording industry's business model – and the industry's reluctance to vary from it – is at the root of the problem....Companies that hold copyrights on behalf of creators, and which control distribution of creative works, have a strong inclination to extend copyright into a complete monopoly control over the creative work – to change the copyright laws from a balanced vehicle for public enrichment to an unbalanced engine of control. As a result, copyright holders traditionally are reluctant to allow new technologies to emerge.¹⁰⁸

Examples of attempts to halt technological progress to preserve copyrights abound.¹⁰⁹ The value of a peer-to-peer network system provides an alternative system that can create a substantively different musical future. The disintermediation effects discussed by May are one part of the advantages that emerge from a peer-to-peer future.¹¹⁰

The future

In 2003, Congress held several hearings on the issue of filesharing and music. While hearings are supposed to be designed for committee members to hear all sides of the debate prior to making an informed decision upon salient issues deemed worthy of government regulation, the hearing before the Permanent Subcommittee on Investigations of the Committee on Governmental Affairs, who invited testimony from different sources on the issue of "Privacy and Piracy: The Paradox of Illegal File Sharing on Peer-to-Peer Networks and the Impact of Technology on the Entertainment Industry," was anything but balanced. California Senator Barbara Boxer opened the hearing, and set the agenda, by repeating what has become the industry line on copyright. First, she asserted very broadly that, "downloading copyrighted works is theft;" second, "stealing copyrighted work is not a victimless crime;" third, "file-sharing networks themselves pose a great threat to privacy;" and fourth, "networks expose children to pornography."¹¹¹ The overly simplistic assertion that filesharing is the equivalent of walking into a record store and taking a CD without paying for it was repeated like a broken record by industry officials and members of Congress. The insertion of the pornography issue into the peer-to-peer debate adds a new line in the anti-filesharing discourse. Each witness, with the exception of a few, went on to endorse Boxer's opening statement and very carefully explain why filesharing is theft and morally wrong.¹¹²

In the hearing only a few voices were raised against the overwhelming onslaught of the "filesharing is theft" discourse. Chuck D, a recording artist and founder of Rapstation.com, testified to the creative potential of

the Internet and helped highlight what is always lost in the overly simplistic rhetoric of the property/theft discourse – that music under industry control exists in a political economy that must be understood and addressed. Adhering without critical thought to the property/theft discourse hides the power relationships that exist between copyright owner and artist, creator and industry.

Chuck D's congressional testimony is similar to the analysis given by Courtney Love regarding the relationship between bands and the industry. In Love's analysis, while the industry makes millions off musicians, band members may make more money working at a 7-Eleven.¹¹³ While the industry claims that filesharing programs facilitate mass copyright infringement, Love reasons that she has little to gain from the current balance of power. What the Internet offers, according to Love, is a chance for artists to regain their artistic selves and escape the exploitation of the industry. According to some, peer-to-peer networking is not the enemy, it is the future. Vaidhyathan notes that filesharing is an *ideology*, the roots of which go well beyond the current debates over technology. Instead, the debate over peer-to-peer technology goes right to the heart of the political philosophical tension between ownership and exchange, anarchism and state control.¹¹⁴

These new technologies offer opportunities to musicians who seek an avenue to directly connect with their fans. Kevin Kelly points out that, "The future of Music is unknown. But whatever it is, it will be swayed, as usual, by technology."¹¹⁵ If artists recognize the potential of filesharing formats and eliminate the roles typically played by the traditional label, then a larger threat to the music industry will have been realized. MP3 acts as an "equalizer" between the artists, the consumers, and the industry.¹¹⁶ If artists were to defect, there would be no need for much of what constitutes the recording industry today.¹¹⁷ The potential of the Internet to transform the way music is created, listened to, and bought drastically undermines the ability of the recording industry to control artists and copyrights.

Kelly suggests that the music industry follow the advice of computer chip designer Carver Mead and 'listen to the technology.' If one were to listen to the technology they might hear some of the following possible ways to profit in the online world:

- Songs are cheap; what's expensive are the indexable, searchable, official lyrics.
- On auction sites, music lovers buy and sell active playlists, which arrange hundreds of songs in creative sequences. The lists are templates that reorder songs on your own disc.
- For bands that tour, giving away their music becomes a form of cheap advertising. The more free copies that are passed around, the more tickets they sell.¹¹⁸

These are simply some of the many ways in which the future of music may be more diverse and adaptable than the present if music enters culture not as a commodity, but as an adaptable musical network.

The issue of adaptability was brought to the attention of Congress in a statement submitted for the record by Steve Wiley, the President of Hoodlums New and Used Music and DVDs. Hoodlums continues to prosper despite rampant downloading by listening to its customers instead of transforming them into thieves and pirates.¹¹⁹ In fact, the testimony of the only member of the general public asked to participate, one of the unlucky people who were targeted and sued by the RIAA, suggests that coercive tactics will backfire. Lorraine Sullivan concluded with these words: "I have been a music fan all my life and until recently had still bought CDs of the artists I love because I want to support them. I won't be buying any more and I know many other consumers feel the same."¹²⁰ The industry has created a world where recording artists and fans seek a new system and the Internet will certainly be part of that system.

In 2004, DJ Modest Mouse published online *The Grey Album*, which was created by mixing parts of the Beatles' *White Album* with Jay-Z's *The Black Album*. Modest Mouse was sued by EMI and cease and desist orders were sent to websites hosting the "illegal" album. Downloading a copy of *The Grey Album* was quickly transformed into an act of civil disobedience and on 24 February 2004 over 150 websites banded together to actively resist the industry and their definition of intellectual property.¹²¹ Modest Mouse's musical contribution is indicative of all the many threads of the musical copyright battles of today and hope for the future. The download illustrates how music evolves by understanding and incorporating the works of others, how copyright can hinder creative expression and becomes a tool for censorship and control, that there are creative people willing to resist the system and create for the sake of their music, and it illustrates that despite their best and most draconian efforts, the industry cannot control the web – at least not yet.¹²²

Napster didn't create filesharing – people were already sharing as an inherent part of being online. However, Napster and its successors provided a space for people to begin publicly creating an alternative to copyright.¹²³ Filesharing, in many ways, is what the Internet is all about. Many would argue that connectivity is an essential form of community building.¹²⁴ As John Perry Barlow, perhaps one of the most eloquent speakers for this paradigm, wrote in *Wired*,

As in biology, what has lived before becomes the compost for what will live next. Moreover, when you buy – or for that matter "steal" – an idea that first took form in my head, it remains where it grew and you in no way lessen its value by sharing it. On the contrary, my idea becomes *more* valuable, since in the informational space between your interpretation of

it and mine, new species can grow. The more such spaces exist, the more fertile is the larger ecology of mind.¹²⁵

It should come as no surprise that people want to share music, much like they share jokes, news clippings, and pictures. The average person does not look upon these items as property, but as a way of connecting with other people and building a community of shared ideas.

The Internet is full of people taking part in a counter-property discourse. This discourse rejects the monopolistic ownership expressed in copyright law and actively advocates a new paradigm. As Hal Niedzviecki puts it, “The flouting of copyright is the beginning of the end for a business model that has always depended on its ability to control what we hear, see – and find on our shelves.”¹²⁶

The new music industry can be based on filesharing instead of fostering an antagonistic relationship to filesharing. This new paradigm predicts the demise of intellectual property law and its replacement with an entirely new way of creating, performing, distributing, and owning music. As Barlow explains,

In the future, instead of bottles of dead “content,” I imagine electronically defined venues, where minds residing in bodies scattered all over the planet are admitted, either by subscription or a ticket at a time, into the real-time presence of the creative act.¹²⁷

Ultimately, this new paradigm suggests that creativity and music will continue to grow absent copyright law because it is the process of exchange that is valuable, not the ownership of ideas.

In a letter to Rapstation.com entitled “Banned from Napster,” a musician lamented his loss of access because he had one Metallica song on his hard drive – a bootleg copy of a cover song Metallica sang in a practice session as a joke. What he laments, however, is not his loss of access to big-name bands like Metallica, but access to his own creative work:

So my art lives because it is experienced by anyone, I am not reliant on agents or record companies. I was free to distribute to a huge and avid community of 9 million. My reward for giving away my music was that it lives with strangers. I even get fan mail from people who enjoy my site enough to tell me why. I keep track of when and who downloads my content. Several a day and just this morning I noticed someone downloaded all my original tracks of my own lyrics and poems. But, when I logged back on I discovered Metallica had banished me for having their copyright songs on my drive which I did not.¹²⁸

For this creative artist, Napster was not the enemy, but the enormous possibility of creating a community with others. This user was interested in

sharing music and discovering what the response would be. This musician is an excellent example of what the future of filesharing has to offer – not the end of creativity, but the creation of networks of new creativity.

It is difficult to see how artistic autonomy will flourish if corporations are able to monopolize creative work. Some people may argue that under our current system people who want to give away their music are free to do so. However, corporate monopolies have a tendency to appropriate and privatize the discourse, making it difficult to create or think outside the music business paradigm. A creative model that centers the artist and allows the artist to decide the appropriate level of control would tend to lead to more sharing than the corporate model that only understands music as a commodity. Music fans also have a responsibility – to honor the hours of work and practice that go into every song that is created and understand that musicians may need to receive some form of compensation for their work. Stephen King's recent online serial experiment suggests many people are willing to "do the right thing."¹²⁹

MP3 as a format can facilitate music swapping and sharing on an unprecedented level. This type of approach has proven successful for many new bands.¹³⁰ MP3 fans accuse the industry of stifling music and believe that the Internet format will open the doors to musical diversity and opportunity for new bands.¹³¹ For smaller bands that can make more in concert sales, the Internet is a wonderful opportunity.

[T]he average musician earns more from live performances than from record sales. Consequently, distributing its music to as wide an audience as possible, in order to generate positive publicity, may be more important to a small band than worrying about any lost royalties as a result of giving away its songs.¹³²

In fact, May suggests performance-based profits are one model for future music profitability.¹³³

More popular artists are beginning to experiment with Internet formats. Peter Gabriel and Brian Eno have recently launched a new musicians' alliance focused on using the Internet to better serve the interests of artists.¹³⁴ As Eno states, "Unless artists quickly grasp the possibilities that are available to them, then the rules will get written, and they'll get written without much input from artists."¹³⁵ As a result, Eno and Gabriel are trying to develop alternatives that utilize peer-to-peer networking instead of fighting against it. The narrative developing attempts to balance public access to music and the musicians' interests. An alternative space, created by musicians who have little stake in the traditional recording industry, has been constructed and illustrates the potential of the Internet to democratize music and other forms of information.

As with everything associated with the information age, the problem in this new economy of ideas is not one of information access, but one of

information filtering and quality control. Even if one ignores the “illegal” music online, there are thousands of songs and bands with music available for downloading and listening. The problem will be one of discovery and quality. To meet this problem, but maintain the direct audience to artist connection, websites are developing that will act as online “talent scouts.” A band that is highlighted by one of these websites will be accessible to listeners who will rely on the quality control mechanism of the website.

If one visits the current MP3.com website, or any online music site, the first thing that is striking is the diversity of bands and music. If commercial radio were the only option, one would never hear even a small bit of this eclectic and musical diversity. Filesharing technology facilitates a sharing of musical diversity unknown in commercial radio. Unlike a record store, where you can rarely preview a CD, filesharing technology allows the listener to hear the music, explore the diversity, and develop his or her taste. In this manner, filesharing facilitates culture building without over-emphasizing the consumer/corporate aspect of the music industry.

Napster and its successors allow individuals globally to share music with each other. Peer-to-peer networks also illustrate an important phenomenon in the distribution of culture. Many people facilitate the exchange of music by finding interesting songs and passing them on to friends. While this type of activity is deemed illegal by the industry, the motivation behind the exchange is non-commercial. These types of exchanges are about sharing art. Peer-to-peer networking is not a panacea, but it does reflect the opening of a possibility.

Perhaps in the future, artists will be able to cut out the middle layers of the contemporary recording industry and connect directly to their listeners. By eliminating many of the layers of the industry, artists can expect to retain a higher percentage of the sales than the 2–10 per cent they currently negotiate through a record label. The artist may be able to better consolidate current copyright privileges, such as distribution rights, that are now part of the label’s control. A future would be based upon people building a sharing network that begins from the assumption that creative ideas emerge from interaction, discussion, and the ideas of other people. This future vision would facilitate the exchange of ideas, in this case musical ideas, in order to build a diverse and interesting culture.

Already, the possibilities of peer-to-peer networking, combined with the language of the open-source movement discussed in Chapter 2, are developing cyberspaces where sharing is possible. These resistances, and the idea of peer-to-peer more generally, are alternatives to the strict ownership of property rights envisioned by the corporate elite. Given the popularity of sharing, perhaps it will be possible to develop a cultural exchange free from the rules of corporate intellectual property rights.

4 Moralized discourses

South Africa's intellectual property fight for access to AIDS medication*

Just as a virus recognizes no national borders, our solidarity must encompass all who are affected by the AIDS epidemic. It is time to demand that pharmaceutical companies drop the prices they charge poor people for drugs to a level that is affordable in the countries where most poor people live. It is time to demand that our governments, churches, foundations, and rich people pay for the purchase of essential medicines and the provision of health care to poor people everywhere. We must never forget that access to health care is a human right. And we must not rest until every man, woman, and child has access to safe shelter, sufficient food, clean water, and good health care.

(Eric Sawyer, founding member of ACT UP/New York, "An ACT UP Founder 'acts up' for Africa's Access to AIDS," in Benjamin Shepard and Ronald Hayduk (eds), *From ACT UP to the WTO: Urban Protest and Community Building in the Era of Globalization*, London and New York:Verso, 2002, p. 92.)

The previous chapters have addressed questions regarding the conceptualization of copyright law and the ways in which different modes of resistance have emerged to challenge the corporate interpretation of copyright. While the public domain, computer programming, and access to music are important issues, the remaining chapters take up even more serious issues – cultural survival, cultural identity, access to agricultural products, the definition of what it means to be human, and access to life-saving medications. The resistance that emerged to fight for access to HIV/AIDS medication is one such example where the world of patent law meets matters of life and death. The fight to gain access to affordable AIDS medication is ongoing and certainly not resolved. This chapter seeks to focus on a specific story – the story of the South African Medicines and Related Substances Control Act of 1997 and the resistance mounted by HIV/AIDS activists that spanned the globe and changed the moral framework for the global debate over essential medicines and patent law.

In 1997, the South African government passed the South African Medicines and Related Substances Control Act Amendments in order to address the problems associated with delivering AIDS medication to the millions of South Africans with HIV/AIDS. The scope of the act was

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modest, allowing the Minister of Health to make affordable medication available to protect public health.¹ However, the act was immediately interpreted as a threat to the patents of international pharmaceutical companies that provide AIDS medication on the international market. These companies responded by filing a lawsuit against the South African government, which sparked global debate. In addition to the lawsuit, the major pharmaceutical companies acted through their most powerful supporter – the US government – to apply pressure on South Africa to change the law.

At the time South Africa decided to pass its legislation, the issue of AIDS could no longer be ignored.² According to UNAIDS, approximately 26 million people in sub-Saharan Africa have HIV.³ It is estimated that 4.7 million people in South Africa alone have AIDS⁴ and almost 20 per cent of adults in South Africa have HIV.⁵ Some communities have infection rates as high as 70 per cent⁶ and, according to James Love, the Director of the Consumer Project on Technology, 20,000 people die each month in South Africa from AIDS.⁷ Children are not immune from infection, with estimates of at least 95,000 children in South Africa infected.⁸ While many children have the disease, even more have been left orphaned because of AIDS, and the number of orphans is threatening to overwhelm communities.

Africa generally, and South Africa specifically, are facing a crisis of unimaginable proportions. African nations are experiencing shortages in teachers and health care staff as the virus takes its toll.⁹ The disease continues to hit all sectors of society, but women and the poor are the most likely to be affected.¹⁰ It is not an exaggeration to claim that entire nations are at risk of extinction if the problem is not systematically addressed.¹¹ The problem was ignored for too long, and the social costs have reached crisis levels.¹² Additionally, because risk of infection has been on the decline in the USA, the perceived urgency of the problem for US lawmakers has been reduced.¹³ Consequently, it has become easier for the developed world to ignore the problem. Thus, when the South African Medicines Act was introduced all parties acknowledged the scope of the AIDS crisis, but differed dramatically on how to solve the problem. The problem quickly resulted in battle lines being drawn between patent rights and public health.

The South African AIDS controversy is important for many reasons. First, this debate finally brought world attention to the enormous impact of AIDS in Africa. Second, the resistance mounted by activists around the world made the use of treatment as a prevention strategy for solving the AIDS crisis a legitimate option. Previously, pharmaceutical companies had been successful in convincing many policy makers that treatment was an unworkable solution in Africa. Third, and the primary focus of this chapter, activists working internationally successfully resisted the intellectual property discourse of patent rights, and have argued that lives ought to be more important than property. As a result, activists were able to pressure the pharmaceutical industry, the US government, and the WTO into conceding the necessity of developing access to medication as a crucial human right. In

the process, these activists have created an alternative moral framework for understanding the relationship between intellectual property and human life. The moral paradigm created by these transnational social movements¹⁴ advocates parallel importation, compulsory licensing agreements, and an understanding that health care is a moral and human right.¹⁵

The rejection of the Medicines Act by the US government and the pharmaceutical industry suggests they are willing to extend patent law to unconscionable levels, at least if public attention is turned elsewhere. In contrast, AIDS activists are not only working to provide necessary medication, but are also changing the discourse so that access to medication is seen as a human right instead of a property right. This chapter seeks to investigate the ways in which activists resisted the US and pharmaceutical position on drug patents. It was only through direct action and global protest that it was possible to focus public attention on this important issue and gain concessions from the USA and the major pharmaceuticals.

It is important to recognize that the resistance mounted by AIDS activists was not aimed at destroying patent law. Instead, activists sought to make remedies that already exist within the status quo available to countries that have been forced to comply with an interpretation of international law not necessarily in their best interest. Compulsory licenses and parallel importation, despite pharmaceutical claims, do not destroy the patent system, but allow for patent rights to be better balanced with easier access to medication. Thus, the debate over access to medication is not about the rejection of the patent system, but balancing that system with health care as a human right. The industry tends to place issues of intellectual property into a false dichotomy – either there is absolute protection or no protection at all. It is possible to develop a middle path that promotes the use of compulsory licenses and parallel importation to overcome the drug pricing problems. However, if parallel importation and compulsory licenses cannot provide the necessary access to medication at an affordable price, then the paradigm of health care as a human right should prevail. Just as copyright needs to be balanced, as discussed in the first several chapters, patent law must be rethought to better balance human rights with property rights.

First, it is necessary to understand the predominant paradigm associated with international intellectual property rights in order to understand the success of AIDS activists in situating health care as a human right as its central premise. In essence, the 1997 South African Medicines Act was necessary because international pharmaceutical companies had successfully scripted the discourse of patent rights to favor an absolutist position that made it impossible to provide medication to the poor throughout the global South. Thus, the narrative of access to AIDS medication had consistently been framed within the language of property rights. In the first section of this chapter, I will investigate the structure of this narrative and the claims upon which it is based. Second, I will trace the significant events that contributed to the success of an alternative discourse emphasizing health

care as a human right over the property rights of patent owners. Finally, I will assess the political implications of developing viable alternatives to a strong intellectual property model. The struggle between the competing interests details the variety of dimensions to intellectual property law that fall between absolute protection and no protection at all, and these different perspectives should be explored.

Constructing victims: the politics of access to medication

There are several strategies for addressing the spread of AIDS including education and treatment. Despite the fact that educational tools designed for AIDS prevention are not reaching the people that need them most, a virtual consensus exists on the importance of education in preventing future infection. Controversy emerges over the use of medication to treat AIDS in the developing world. Wealthier nations have brought AIDS under control through a combination of education and drugs. In the USA, much of the reduction in mortality due to AIDS has been attributed to the development of drug cocktails, a combination of AIDS medications that taken together allow someone with AIDS to live a fairly normal life.

The drug cocktail that has been so successful for Americans is a combination of antiretrovirals known as HAART. This mix of medications is a highly active antiretroviral therapy that reduces the virus to almost undetectable levels, thus helping reduce the risk of spreading the disease.¹⁶ These cocktails are very expensive, around \$12,000/year for an American.¹⁷ Considering that the average African nation spends only \$10/year/person on medical care,¹⁸ a \$12,000 price tag is simply too expensive for any but the most wealthy world citizens to afford. In addition to the combination of antiretrovirals necessary to fight the infection and reduce the transfer of the disease, there are supplemental medications that are also necessary – drugs required to reduce the impact of opportunistic infections and deal with pain.¹⁹ Given the expense involved in providing AIDS medication, most international strategies have focused on prevention and education instead of challenging the high costs of the drugs and providing treatment.

The debate over how to deal with HIV/AIDS in its present context must involve access to available medications. These medications have been proven to work in the Western world and many developing countries feel they should be made available at prices their citizens can afford. India and Brazil have generic drug industries that are able to produce cheaper AIDS medication, and the South African legislation was intended to give them the power to develop access to these cheaper alternatives. The pharmaceutical industry's reaction to attempts to gain access to cheaper medicine has been to assert their patent paradigm as the only viable way in which to produce medication to solve the world's most prominent diseases.

The South African example shows that the laws of intellectual property, and the assumptions used to justify strong intellectual property protection,

take on the power of an ideology used to filter decisions. The pharmaceutical industry argues that they are in the business of producing life-saving drugs that will only be developed if the incentive to create new products remains intact. In this section, I will examine the narrative constructed by the pharmaceutical industry to claim ownership over patented drugs. At one level, this narrative is a struggle over who gets to define moral and immoral behavior. At another level, the basic assumptions about patents used by the pharmaceutical industry to justify their actions clearly illustrate how powerful intellectual property has become as an ideology. If you “steal” property, you are a thief, and if you create a form of property that is a public good, you are a hero.

Over the past two decades, intellectual property owners have aggressively lobbied for domestic and international laws to protect intellectual property rights. The Trade Related Aspects of Intellectual Property agreement (TRIPS) is one of the most recent and far reaching victories by intellectual property owners who wish to see their rights protected globally. TRIPS was the result of a strategy whereby pharmaceutical companies defined themselves as the “victims” of immoral and malicious “pirates” and “thieves.” Developing countries that violated intellectual property rights were not only engaged in unfair trade, they were morally bankrupt. Within the intellectual property discourse, morality is defined as adhering to the law, and according to this definition violating intellectual property laws is inexcusable.

The pharmaceutical industry were active in asserting their idea of intellectual property globally as early as the mid-1980s. As Robert Weissman explains,

By 1985, the pharmaceutical industry was on the offensive, in an effort to force Third World countries to adopt U.S.-style patent laws. While the industry attempted to directly persuade Third World policy makers of the merits of guaranteeing strict patent protection, its main strategy was to persuade U.S. policy makers to coerce Third World countries to adopt restrictive patent rules.²⁰

The industry successfully influenced US policy by opening revolving doors between the patent and trademark office, key governing boards in the USA, and industry jobs.²¹

The close link between industry and government influenced the development of the US position on intellectual property and was instrumental in getting intellectual property rights included in the GATT negotiations.²² Weissman argues that the industry gained significant traction on the issue of intellectual property by developing a “rights” discourse.²³ Once the idea of “rights” to property in the global environment was accepted, the pharmaceutical companies solicited the help of the computer software and entertainment industries to assist them in shaping the international agenda as

a quest to protect the victims of world piracy.²⁴ Multinational corporations defined their own behavior as moral when they successfully claimed they were defenseless from the theft and piracy of immoral countries.

The narration of victimhood and piracy used to support a strong international intellectual property regime is illustrated in the statements by Ambassador, and previous US Trade Representative under Ronald Regan, Clayton K. Yeutter, who testified before Congress in 1996 on the necessity of strong intellectual property protection. His testimony is worth reproducing at length.

Today, the market for new products and technology extends far beyond our shores. It has expanded into every corner of the globe. But if American firms are to take advantage of newfound global demand for their products, they must rely on foreign governments to protect their valuable intellectual property rights. Often, foreign governments fall short, leaving U.S. owners of intellectual property defenseless against piracy. In these situations, the fruits of American innovation are lost, since it is a simple matter to copy most artistic works or technological advances in countries like India, Russia, or China.

In response to pleas from American companies, artists, and inventors for action to address proliferating global piracy, the United States a decade ago forced intellectual property rights onto the Uruguay Round agenda. But for our unremitting pressure, the more than one hundred countries who participated in the Round would not have negotiated stronger rules and disciplines. It was the United States which understood, more than anyone, that uniform protection of intellectual property rights around the world would promote the expansion of international trade, global economic growth, and job creation.

...And until the final stages of the negotiations, many of our trading partners wanted weak or non-existent global intellectual property standards, generous exemptions for developing countries, or the indefinite postponement of multilateral rules so that their local pirates could continue copying American pharmaceuticals, films, sound recordings, software, and books. Fortunately, the outcome was a disappointment for the "purveyors of piracy."²⁵

Yeutter condenses a decade of negotiations into a clear morality play in which the USA is the guiding light to the world; the USA has understood, "more than anyone," the importance of intellectual property rights and has prevailed against governments supporting pirates. In this narrative, there are no legitimate reasons for resisting the US position, and in fact the reasons given by the developing world are not discussed as rational at all. Instead, it is assumed they are "purveyors of piracy." Because of this one-sided narrative, the USA is in the heroic position of listening to the "pleas" of victimized innocents who are "defenseless" at the hands of foreign govern-

ments and pirates. From Yeutter's statements, and others who share his perspective, the global narrative is established with the moral terrain staked out in favor of multinationals.²⁶

Monopolizing the language of victimhood has allowed the pharmaceutical industry to claim it suffers whenever laws sympathetic to public health and human welfare are passed. While millions of Africans are dying, it is the pharmaceutical industry that claims to suffer when attention is focused on making these medicines available. Even as pharmaceutical companies become among the wealthiest corporations in the world,²⁷ they continue to position themselves as the victims of unjustified "piracy" and discrimination.

The US government asserts, along with industry, that without strong protective measures, there would be no incentive to produce new life-saving drugs.²⁸ However, Cuba's production of a meningitis vaccine indicates that a government with sufficient interest in protecting public health can do amazing things.²⁹ In the realm of pharmaceuticals, there is a viable role for governments to play in creating medication instead of working to protect patents. Activists for access to AIDS medication convincingly argued this perspective.

The US Trade Representative's office publicly sided with strong intellectual property laws in May 2001 when it reported to the President that AIDS should only be addressed within the framework of intellectual property rights.

The Administration has informed countries that as they take steps to address a major health crisis like the HIV/AIDS crisis in sub-Saharan Africa, they should be able to avail themselves of the flexibilities afforded by the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), provided that any steps they take comply with the provisions of the TRIPS Agreement. The Administration is equally committed to a policy of promoting intellectual property protection, including for pharmaceutical patents, because of its critical role in the rapid innovation, development, and commercialization of effective and safe drug therapies.³⁰

While the statement recognizes the importance of intellectual property in creating drugs, it ignores evidence that publicly funded support for innovation is crucial to the development of many drugs.³¹ It assumes the government can do nothing to inspire innovation through funding, and that research and development is solely in the hands of organizations that only create when absolute protection is guaranteed.³²

The industry implies that if their monopoly rights are threatened, they will not invest money in new research.³³ This not-so-subtle threat is present in the statements of Gerald J. Mossinghoff, President of PhRMA (Pharmaceutical Researchers and Manufacturers of America) (the primary pharmaceutical lobbying group), at a 1996 Senate hearing on pharmaceu-

tical patents. Mossinghoff blames US laws and a competitive environment for weakening the incentive to pursue life-saving research:

One thing remains unchanged between then and now: the critical need of patients for cures that can only be developed through high-risk, high-cost pharmaceutical research. Cancer, AIDS, Alzheimer's and other diseases continue to take an unacceptable human and economic toll. Sustained innovation is really our only hope for reducing this toll. But because Hatch-Waxman, combined with a far tougher marketplace, have dampened the incentives for R&D investment significantly over the past 11 years, there is a danger that less innovation will occur in the future. The long lead time between R&D investment and the introduction of new drugs means that the effect of weak incentives today will be reflected in fewer new drugs in the future. A recent survey of leading pharmaceutical companies conducted by BCG as part of this study suggests that the share of revenue invested in R&D is expected to decline over the next four years. If this, in fact, occurs, the cutbacks will most likely be made in high-risk categories. Since these are the areas with the greatest potential for breakthroughs, a slowdown in research may deprive society of the next generation of "miracle" drugs.³⁴

Mossinghoff's statement is important for several reasons. It is clear that the pharmaceutical industry associates its work with the most moral of pursuits – reducing the human impact of disease. However, Mossinghoff makes it clear that such a pursuit has an economic framework and diseases will only be researched if the incentive remains high enough to offset the risk. According to Mossinghoff, a weaker incentive structure caused by competition will lead to less R&D on life-saving drugs.³⁵ Without strong patent protection, research for the most devastating of diseases will be ignored and focus will be put on diseases of the wealthy – like obesity.³⁶

The pharmaceutical industry maintains that only one in 4,000 drugs will make it to market, and because it will cost millions of dollars for each one, it is necessary to provide lengthy patent protection to recoup costs.³⁷ However, the fierce protection of patents is as much about control of the market as it is about incentives to research and develop new drugs. If drug companies conceded the issue of compulsory licensing and parallel importation, then vital monopoly control would be lost. As economics professor Michael Engelke puts it, "The South African law also would set a precedent that could lead to weakening of intellectual property laws in more lucrative markets, which could translate into more losses."³⁸ Similarly, pharmaceutical analyst Richard Jarvis argued that "the danger with lots of countries breaking patents is not so much the immediate hit to sales – CSK and Roche both know that most of the money is made in the U.S., Europe, and Japan – but the loss of market control."³⁹ Thus, even though sales to the Third World account for less than 2 per cent of global sales,

the industry takes this issue seriously because of the long-term impacts on their ability to monopolize price controls in the rest of the world.⁴⁰ The industry has decided to take the hard-line approach and attempt to resist any possible infringement. This road may make sense from an intellectual property perspective, but it leaves the industry open to claims of heartlessness.

The global pharmaceutical industry argues that the use of parallel imports and compulsory licensing will result in a significant loss of control. Compulsory licensing and parallel importation are therefore strictly regulated. The TRIPS Agreement provides patent protection for twenty years, during which time other entities are not allowed to manufacture the patented material without the permission of the patent owner.⁴¹ TRIPS provides a mechanism for compulsory licensing in Article 31, but it also provides strict rules for the use of compulsory licenses.⁴² The USA argued that South Africa misinterpreted TRIPS when it passed the South African Medicines Act.⁴³ Instead of moving through the WTO,⁴⁴ the USA took unilateral action to make South Africa go beyond the protection provided in TRIPS and change their rules regarding compulsory licensing to better reflect the pharmaceutical industry's perspective.⁴⁵

Despite the US position on international protection of patents, the USA itself allows compulsory licensing.⁴⁶ Items that may be subject to compulsory licensing in the USA include many types of military technology and public health goods.⁴⁷ The Cipro/anthrax controversy is a recent example. Cipro is a patented drug owned by the German pharmaceutical company Bayer.⁴⁸ Neither American nor Canadian supplies of Cipro were sufficient to meet demand in the event of an anthrax epidemic. In response to the heightened sense of risk, the Canadian government ordered a million doses of Cipro from a generic drug manufacturer, violating Bayer's patent.⁴⁹ After threatening to follow the lead of the Canadians,⁵⁰ the US government negotiated a reduced price in order to stockpile enough Cipro for a large attack.⁵¹ In this case, the USA used the threat of compulsory licensing to lower the price of a medicine needed by US consumers.⁵² The USA has ignored this double standard as it works to protect the interests of US pharmaceutical companies abroad.

There is significant evidence that when generic drugs are available, or other mechanisms are in place to provide competition, drug prices fall.⁵³ Losing control of the market would open the window for an evaluation of the pricing structures of many pharmaceutical products. Part of the rhetorical strategy of the drug companies has been to divert attention from the prices they charge for medication, and shift the debate into a framework where brand-name manufacturers are again victims, this time of generic drug manufacturers. As science reporter Steve Buist puts it, "In the eyes of the multinationals, these companies are deliberately trying to dodge the rules and suck the lifeblood from an industry that spends billions and billions of dollars bringing drugs to market under the protection of worldwide

patents.”⁵⁴ This line of argument suggests that generic manufacturers, which produce drugs that have fallen out of patent protection (or in the case of Brazil and India, produce patented drugs for domestic distribution), are the greedy and unprincipled ones.⁵⁵ For example, in March 1998, PhRMA representative Tom Bombelles suggested that South Africa was a pawn used by India and Argentina to undermine TRIPS.⁵⁶ This position shifts the focus away from the enormous health crisis in Africa and suggests that, in reality, the debate is really about who will be able to sell South Africa medication.⁵⁷

Producers of brand-name pharmaceuticals have also argued that patents are irrelevant to why Africans do not have access to AIDS medication. The industry produced studies that illustrated most AIDS medication was not subject to patent protection in Africa, so it was impossible for patents to have caused the problems of access.⁵⁸ While technically it is true that patent laws *in Africa* have had little to do with access to medication, patent laws elsewhere in the world have made all the difference. Because most AIDS medications are patented and made in the USA or Europe, these companies establish the costs for drugs sold in Africa, regardless of the patent system in Africa. Because nobody, including the world health agencies, seems willing to challenge the costs of brand-name AIDS medications that could be made available legally under TRIPS, these medications remain outside the reach of virtually all individuals in Africa. Instead, health organizations and the pharmaceutical companies have focused on prevention and education instead of medication.

Throughout the debate, pharmaceutical companies have attempted to shift the focus away from the benefits of compulsory licensing and parallel importation, and on to their claim that these actions will destroy the intellectual property system. They have attempted to shift the focus away from a middle path by continually asserting the debate is about the protection or destruction of intellectual property. They create a dichotomy in which the only positions are for or against the protection of patents. However, it is crucial to understand that the South African government did not void international patent law with the Medicines Act. Instead, the South African government argues that it should be allowed to produce the needed drugs domestically for an affordable price through a licensing system; the drug companies still profit under compulsory licensing. The very volume of drugs necessary to treat the AIDS crisis in Africa should produce a profit, even at the cheapest prices.

By resisting the pressure to give legitimacy to the ideas of parallel importation and compulsory licensing, the pharmaceutical industry has ensured that AIDS medications have remained inaccessible to all except the wealthy few. Because the industry has been instrumental in structuring international agreements regarding patent rights, most domestic and international bodies have been very slow to challenge the pharmaceutical companies. The industry seems to have had every reason to believe they would be successful

in their litigation against the South African government. However, the struggle surrounding the South African act illustrates how the industry lost control over the language of property rights.

South Africa's fight for AIDS medication: a brief history

The South African situation helped crystallize the issue of patent law, compulsory licensing, and access to HIV/AIDS medication, but the global debate over access to medication began even earlier. The early activism surrounding access to AIDS medication can be attributed to ACT UP, a direct-action group who has infused contemporary political AIDS activism with momentum and vibrancy.⁵⁹ Co-founder of ACT UP, Eric Sawyer, was invited to speak at the XI International Conference on AIDS in Vancouver, BC, in 1996 where he gave a speech commenting on the absence of AIDS medication for the world's poor and the problematic policies of drug manufacturers.⁶⁰ It was ACT UP and the coalition of organizations operating under the title HealthGAP established in 1998 that set the agenda for the global protest for access to medication.⁶¹

As activists were developing their positions under the banner "Greed Kills, Access for All!"⁶² the South African government was looking for ways to address its public health crisis. In 1997, thinking that its legislation was consistent with TRIPS, and desperately needing to do something to fight the growing AIDS epidemic, the South African government passed the South African Medicines and Related Substances Control Act Amendments. Of particular interest to the pharmaceutical companies was Section 15(c), which indicated that the South African government believed the TRIPS agreement allowed it to legally engage in compulsory licensing and parallel importation of drugs to provide access at prices affordable to their citizens if faced with a health crisis.⁶³

The USA feared South Africa might begin to engage in parallel importation and circumvent the pharmaceutical industry pricing structure.⁶⁴ Ironically, at the same time the USA was resisting the possibility of parallel imports in South Africa, the US Congress was considering legislation to make parallel imports legal in the USA.⁶⁵ Due to the availability of cheaper pharmaceutical products in Canada and Mexico, controversy has mounted over the high cost of pharmaceutical products in the USA. As might be expected, providing Americans access to cheaper drugs is a practice the pharmaceutical industry condemns.⁶⁶ Despite the fact George W. Bush has resisted attempts to permit the importation of cheaper drugs from Canada, there are many within the USA, especially seniors, who are ready to see the US position on this issue change.⁶⁷ If the USA grants itself the right to import medicines without accepting the right of other nations to do the same, a new level of hypocrisy will be reached.

The passage of the 1997 Medicines Act sparked immediate condemnation on the part of the US government and the pharmaceutical industry. In July

1997, then Deputy President Thabo Mbeki received letters expressing concern about intellectual property protection from a variety of US representatives, including Vice-President Al Gore.⁶⁸ Numerous meetings between South African officials, pharmaceutical representatives, and US officials took place, at which parallel imports and compulsory licensing were condemned.⁶⁹ Despite this significant pressure, President Nelson Mandela signed the amendments into law on 12 December 1997.⁷⁰ Over the month of January, in response to the new law, the US National Medical Association, the US National Black Nurses Association, and the National Black Caucus of State Legislators all wrote letters to President Mandela expressing concern.⁷¹

At the same time the USA was expressing concern over the South African law, the World Health Assembly recommended that "The Revised Drug Strategy" be adopted. This resolution requested that member countries "ensure that public health rather than commercial interests have primacy in pharmaceutical and health policies and to review their options under the Agreement on Trade Related Aspects of Intellectual Property Rights to safeguard access to essential drugs."⁷² Thus, while the USA and its European allies were condemning the actions of the South African government, the international health community was beginning to frame the issue in terms of commercial interests versus human rights.

While controversy continued over the South African law, Brazil began manufacturing generic AIDS drugs in 1998. Faced with growing HIV infections and a relatively poor population, Brazil undertook a massive public health campaign to provide AIDS medication for all citizens. To do this, Brazil began manufacturing generic AIDS drugs, a policy that was successful in reducing infection, halting the spread of HIV, and extending life.⁷³ Even as the US government allied itself with the pharmaceutical industry and continued to champion education over medication, Brazil was providing a powerful success story utilizing treatment. It was possible to overcome the barriers of poverty and an inadequate health care system in the fight against AIDS. Brazil's example gave others in the global South a model to follow. In 1999, Thailand also attempted to produce generic AIDS drugs, but ended their plans when the USA threatened to impose tariffs on Thai goods heading towards the USA.⁷⁴ Unfortunately, the Brazil model, despite its success in slowing the rates of death due to AIDS, has been challenged by the USA, which began proceedings in the WTO, claiming that Brazil's patent legislation is a violation of TRIPS.⁷⁵

Throughout 1998, US officials, including Vice-President Al Gore, continued to pressure South Africa regarding the law. On 18 February 1998, the Pharmaceutical Manufacturers' Association of South Africa, along with forty-one other national and multinational pharmaceutical companies, filed a motion in the High Court of South Africa against the South African government arguing that Section 15(c) of the Medicines and Related Substances Control Amendment Act of 1997 was unconstitutional. On the US front, Congressmen Mendez and Royce sent a letter to Secretary of

State Madeline Albright requesting that Special 301 status be used against South Africa in April of 1998.⁷⁶ According to James Love, in May 1998, the United States Trade Representative (USTR) placed South Africa on its Special 301 Watch List because of the Medicines Act, and,⁷⁷ in November 1998, the South African government passed a new medicines bill, but the 15(c) provisions were identical to the original.⁷⁸

In 1998 the international AIDS conference was held in Geneva under the theme "Bridging the GAP." As a result of the conference, activists launched HealthGAP in response to the absence of treatment for the world's poor. HealthGAP became a key player in the global protest over access to medicine issues. Alan Berkman, a New York doctor who works with AIDS patients, began the organization "along with members of ACT UP/New York, ACT UP/Philadelphia, ACT UP/Paris, Search for a Cure, Ralph Nader's Consumer Project on Technology, *AIDS Treatment News*, the AIDS Treatment Data Network, and many others."⁷⁹ HealthGAP networked with other organizations including Médecins Sans Frontières (MSF), Health Action International, South Africa's Treatment Access Campaign (TAC), Partners In Health, and others.⁸⁰ This rather extensive network of activists formed the backbone for access issues and was able to keep the pressure on political leaders in the USA and South Africa while at the same time providing enormous amounts of negative publicity for the major pharmaceuticals. Their claims of "greed kills" were successfully picked up in the media and instead of retaining control of the discourse pharmaceutical companies found themselves on the defensive.

Pressure from the US government and the pharmaceutical industry to reform the law continued throughout 1999. However, in 1999, the AIDS crisis, and South Africa's battle to provide access to cheap drugs, became international news. First, Al Gore was running for president, and the campaign provided activists with an excellent opportunity to focus public attention on Gore's role in the South African negotiations over the previous three years.⁸¹ Second, the World Trade Organization (WTO) held its talks in Seattle in December 1999 amidst tens of thousands of protestors. For the first time, the complex trade rules that governed the WTO, including TRIPS, were translated into their real-world implications. Demonstrators were able to clarify that neo-liberal trade policies were doing little to help the poor or the sick around the world.⁸² Such enormous political pressure not only disrupted the WTO meeting, but also provided a jump start for the more specific campaign to provide cheap access to AIDS drugs. The combination of international media attention on TRIPS and a US presidential election allowed AIDS activists to set the stage for the next series of events.

In April 1999, just months before the WTO meetings in Seattle, the USTR placed South Africa on the Watch List again.⁸³ In a press release, PhRMA supported the USTR policy towards South Africa.⁸⁴ While both sides in the South African lawsuit had filed briefs, the trial was delayed in hopes of negotiating a settlement with the new South African government

elected in June 1999.⁸⁵ The threat of litigation could certainly be interpreted as a not-so-subtle incentive to redraft the law.

While the USA continued to pressure South Africa, the World Health Assembly passed a resolution that “declared public health concerns “paramount” in intellectual property issues related to pharmaceuticals.”⁸⁶ Even as the US State Department was declaring that “all relevant agencies of the U.S. government ... have been engaged in an assiduous, concerted campaign to persuade the government of South Africa to withdraw or modify” their Medicines law, the policy-making body of the World Health Organisation (WHO) was taking a stand in favor of the health concerns of world citizens.⁸⁷

Despite the fact that activists had been working on the issues of access to AIDS medications for years, the pressure on the South African government by the USA during an election year gave them an opportunity to bring the issues to the larger public. Throughout 1999, AIDS activists around the USA followed Al Gore and used the presidential campaign to publicly protest US actions against South Africa. ACT UP members in February 1999 disrupted Gore’s campaign kick-off in Tennessee with signs reading “Gore’s Greed Kills – AIDS Drugs for Africa.”⁸⁸ In March activists infiltrated a church picnic in New Hampshire and disrupted his speech until forcibly being removed by the Secret Service.⁸⁹ These direct actions were successful and the New Hampshire action resulted in a meeting at the White House for ACT UP members to address their concerns.

ACT UP and AIDS Drugs for Africa appeared at Gore events and campaign rallies, and began linking US policies to race and poverty.⁹⁰ Eric Sawyer, co-founder of ACT UP in New York, said,

Britain and the Netherlands get 8–10 percent of their drugs through parallel imports, but the United States is not threatening them with trade sanctions or interfering with their affairs....The U.S. is doing that only in South Africa, Thailand and India. Why? Is it because they’re poor countries of people of colour?”⁹¹

In August 1999, an open letter signed by over 200 people representing expertise around the globe was sent to Al Gore’s office. In August, activists locked Gore out of his office⁹² in response to the US compromise that would allow South Africa to use parallel imports and compulsory licensing for AIDS-related drugs, but for no other type of medication.⁹³ The negotiations only applied to AIDS drugs, and only to South Africa, leaving other life-saving medicines out of reach and the rest of Africa to fend for itself.⁹⁴

ACT UP’s actions were in part responsible for the Black Caucus asking Gore to clarify his position on AIDS medication for South Africa.⁹⁵ In response to his critics, Gore stated that he supported “South Africa’s effort to provide AIDS drugs at reduced prices through compulsory licensing and parallel importing, so long as they are carried out in a way that is consistent with international agreements.”⁹⁶ This statement was taken by the Black

Caucus to mean that Gore was indeed in support of cheaper medication for South Africa; yet Gore was careful to remain committed to the notion that the South African government must act “legally.”⁹⁷ At the WTO meetings in Seattle, President Clinton stated that, “the United States will ‘implement...trade policies in a manner that ensures...the poorest countries won’t have to go without medicine they so desperately need.’”⁹⁸ As the ongoing struggle for access to medication suggests, in private, the USA continued to resist providing access to medication through any channels but those protected by patent law.

Direct action was followed up with news articles and press releases highlighting Gore’s links to the pharmaceutical industry. For example, the *Village Voice* ran an article condemning Gore’s position on patents governing life-saving medicines.⁹⁹ In June 1999, the organization Public Campaign ran a story on Gore’s financial links with the pharmaceutical industry documenting the campaign money Gore received from the drug industry that, they argued, explained why he was taking a hard line with South Africa despite pressure from AIDS activists.¹⁰⁰

In September 1999, AIDS activists had two significant victories for AIDS. First, the US government announced that it would back off from its aggressive approach to South Africa, a move attributed directly to the pressure of activists on the administration in a campaign year.¹⁰¹ The second major victory of September was the suspension of the legal action against the South African government. In a press release by PhRMA, the lobbying organization spun the event as the outcome of negotiations with South Africa who had agreed to redraft the Medicines Act.¹⁰² However, as James Love points out, despite reports that the new position was possible because South Africa “backed down,” the only “concession” South Africa made was a promise that they would adhere to the TRIPS agreement.¹⁰³ In December 1999, the US government “announced a more ‘flexible’ US position on this issue.”¹⁰⁴ These victories, while significant, were only a first step. South Africa still did not have drugs to administer.

Because of the visible public relations battle over compulsory licensing in the South African case, the USA did seem to publicly change its position in 2000. As Sara Ford notes,

In the agreement, the United States agreed to relax its trade pressures on South Africa by acknowledging the special circumstances inherent in the AIDS epidemic. While both nations reaffirmed their policy objectives to mutual satisfaction, it is unclear if the United States’ position actually acknowledged the legality of compulsory licensing or whether it merely backed down due to harsh political pressure.¹⁰⁵

On 10 May 2000, President Clinton signed Executive Order 13155, which stated that the USA would not pursue unilateral negotiations to pressure countries into changing their laws regarding AIDS and access to medication.

However, while the USA would not use Special 301 status, it retained the right to pursue action in the WTO if governments violated the TRIPS agreement.¹⁰⁶ PhRMA immediately responded in a press release arguing that the President's actions "set an undesirable and inappropriate precedent, by adopting a discriminatory approach to intellectual property laws, and focusing exclusively on pharmaceuticals."¹⁰⁷ Despite the public criticism, on 11 May 2000, five pharmaceutical companies began negotiating price reductions with African governments in association with UNAIDS.¹⁰⁸

Two international conferences in 2000 helped focus attention on the South African case and access issues. Both the United Nations Security Council special session on AIDS and the World AIDS Conference in Durban, South Africa, highlighted the plight of millions of people around the globe.¹⁰⁹ These conferences helped publicize the problems facing Africa. Despite the growing global understanding of the depth of the AIDS crisis, and a growing consensus over the need for AIDS medication (or perhaps because of it), the pharmaceutical companies reinstated their case against the South African government in July 2000, the same month as the Durban conference.¹¹⁰

The activist community began to turn its attention to the Bush campaign. ACT UP planned protests outside the Republican National Committee's headquarters in Washington, DC, for 13 October 2000. AIDS activists were afraid that Bush's links with the pharmaceutical industry (like Gore's) would influence his policy choices if he were elected.¹¹¹ Bush's approach to HIV/AIDS in Texas had given the AIDS community little assurance that his leadership on the issue would be progressive. Despite concerns, the Bush Administration announced in February 2001 that it would continue Clinton's policy regarding intellectual property in South Africa.¹¹²

In October, the prominent international group, MSF, criticized the WHO approach to AIDS as "not aggressive enough."¹¹³ While the WHO had publicly supported a worldwide effort to halt the spread of AIDS, they focused on prevention and the availability of medicines to counter opportunistic infections.¹¹⁴ However, claiming that antiretrovirals were too expensive, the WHO stopped short of advocating access to these drugs to poorer nations. MSF continued to argue that pharmaceutical companies tend to invest their research on diseases impacting the wealthy nations of the world, and that it was up to global government agencies like the WHO to fill the void, and provide cheap medication to African nations.¹¹⁵

While MSF was pursuing a public relations war against the thinness of the WHO attempt to provide AIDS medication, the Treatment Action Campaign (TAC) decided to engage in civil disobedience. TAC imported 5,000 capsules of the AIDS drug *Biozole* into South Africa in October as part of their campaign "against 'patent abuse' and 'AIDS profiteering' by multinational pharmaceutical companies."¹¹⁶ Because the South African government had been immobilized by international pressure, TAC has begun establishing its own network of doctors and drug manufacturers to provide cheap drugs to

South Africans.¹¹⁷ The drugs were confiscated by the South African government.¹¹⁸ By December 2000, the HealthGAP Coalition had condemned the joint venture programs established by UNAIDS and the major pharmaceutical companies. While these programs were good public relations for the industry, the program itself was inherently flawed.¹¹⁹ In some cases, prices were actually more expensive in the pilot programs than before and generic drug manufactures were kept out of negotiations.¹²⁰ Meanwhile, Brazil was able to document a 50 per cent reduction in mortality because of "broad access to affordable generic antiretroviral medication" and access to "combination antiretroviral therapy."¹²¹ MSF also published a report card on the UNAIDS program illustrating how the program was failing and demanding an immediate 95 per cent price reduction in AIDS medication.¹²²

On 5 March 2001, the trial began over the constitutionality of Section 15(c) of the 1997 act.¹²³ The following day the pharmaceutical companies were granted a postponement until 18 April 2001.¹²⁴ Each postponement delayed the implementation of the Medicines Act, but the debate over the morality of the issue remained in high gear.

By 2001, activists had been very successful in highlighting the morality of US policy choices. Also, the issue of morality had been inserted into the discourse and the movement had shifted focus to providing access to medicines, especially advocating for the manufacture of affordable generics. Several important petitions followed the work of activists from academic quarters. In March 2001, 6,000 Yale researchers, including Professor William Prusoff, the original inventor of d4T, petitioned the university and Bristol-Meyers Squibb to "permit a generic version of its patented anti-retroviral drug d4T to be imported and distributed in South Africa."¹²⁵ Harvard University faculty followed with a "consensus statement" on 4 April 2001, in which they asserted that world AIDS strategy should focus on medication, as well as education and treatment.¹²⁶ The Harvard statement claimed that it was immoral to allow cost to outweigh the lives of human beings.¹²⁷ These reports were published during the postponement of the South African lawsuit. In February, March, and April, Kofi Annan held meetings with pharmaceutical representatives urging the necessity of access to medication.¹²⁸

Despite the fact that "most observers" expected the South African law to be ruled unconstitutional because it was poorly drafted,¹²⁹ on 19 April 2001 the lawsuit was dropped again due to immense public criticism.¹³⁰ The hard work of the TAC, MSF, Oxfam, ACT UP, the Consumer Project on Technology, and Africa Action had made a public relations victory for the pharmaceuticals impossible.¹³¹ Furthermore, as Roslyn Park pointed out, the industry did not want to face the possibility that their actual expenditures and profit margins would be scrutinized during a trial.¹³²

President Bush gave a Rose Garden speech on 11 May 2001 where he committed \$200 million to the global AIDS fund.¹³³ However, Bush was

quick to emphasize that the global fund must “respect intellectual property rights, as an incentive for vital research and development.”¹³⁴ Thus, the framework of intellectual property protection remained in place. Despite years of pressure, the US government continued to view the debate through the lens of intellectual property law. Public health concerns continued to come second to protecting intellectual property rights. Bush’s statements regarding AIDS and intellectual property were reiterated in June by Under Secretary of State for Global Affairs, Paula J. Dobriansky, at a conference on “Curtailing the HIV Epidemic: The Role of Prevention.”¹³⁵ She indicated that the US position was that the protection of intellectual property rights provides an incentive to create.¹³⁶

In June 2001, over ten African countries finished their negotiations with pharmaceutical companies who were offering reduced pricing in conjunction with a UNAIDS program.¹³⁷ Patented AIDS drugs were becoming available at reduced prices, but availability was still limited to private clinics and small numbers of people.¹³⁸ In response to the continued lack of access, TAC and Oxfam called for a global protest against Pfizer unless it lowered the costs of Diflucan.¹³⁹

The developing world increased pressure in September when Brazil threatened to issue a compulsory license against Roche if it would not provide affordable access to Nelfinavir.¹⁴⁰ Brazil was successful in brokering a deal with Roche.¹⁴¹ In September 2001, Nigeria began importing antiretrovirals from Cipla, the Indian-based generic drug manufacturer.¹⁴² According to one source, “the pharmaceutical coalition now says it won’t oppose the South African government’s purchase of low-cost generics and, in some cases, the multinational companies have said they’d be prepared to provide the drugs either free or at cost.”¹⁴³

One could assume that the debate over South Africa’s access to AIDS medication was over; it seemed like AIDS activists had been victorious. Pharmaceutical companies had agreed to lower prices and provide programs to administer drugs. But it was understood by those involved that if these concessions from the international pharmaceutical industry were not followed by revisions to international laws, the “victory” would be a shallow one. Therefore, the upcoming WTO meetings scheduled for September in Doha were of critical concern to AIDS activists and governments alike.

The events of 11 September 2001 significantly overshadowed the international negotiations leading up to the WTO Doha meetings. In a TRIPS Council Special Discussion on Access to Medicines, the developing countries introduced a draft text they wanted to see endorsed at Doha. The proposal argued that TRIPS should be interpreted to “guarantee the ability of governments to ensure access to affordable medicines.”¹⁴⁴ Despite public assurances by the US government that it would support easier access to medication, the USA during the negotiations continued to seek the protection of intellectual property rights at the expense of public health. The USA and Switzerland led the resistance at the Special Discussion to changes in

TRIPS.¹⁴⁵ They contended that there were no problems with the agreement and it did not need clarification.¹⁴⁶ The USA also rejected language that would definitively allow for governments to take “measures necessary to protect public health.”¹⁴⁷

These discussions continued informally on 21 September, when Australia, Canada, Japan, and New Zealand joined the USA and Switzerland in their opposition to a “separate Ministerial Declaration on TRIPS and public health.”¹⁴⁸ The USA also “sought to restrict the discussion and/or any declaration to only medicines for pandemics such as HIV/AIDS.”¹⁴⁹ Thus, the USA appeared ready to concede that intervention to halt AIDS may be necessary, but explicitly rejected a larger call for the needs of public health to supersede intellectual property. The US position led many developing-country diplomats to question the viability of TRIPS. As one diplomat stated,

If we are not even able to agree to address this life and death issue, the credibility of the TRIPS Agreement is at risk. Perhaps, in the near future, we will have to deal with the problem of the TRIPS Agreement as a whole.¹⁵⁰

The irony of the US position at the Special Discussion was that despite favoring the protection of patent rights as more important than all but the most significant public health epidemics, it was only a matter of weeks before the USA threatened to disregard Bayer’s patent for Cipro if Bayer did not lower the cost for Americans threatened by anthrax.¹⁵¹ While the USA was arguing that only epidemic diseases justified the subversion of intellectual property rights to public health, they were willing to ignore their own statements when a few Americans became infected with anthrax. The USA lost significant international legitimacy when the overwhelming hypocrisy of its own efforts regarding anthrax were juxtaposed against developing-country efforts to secure cheap access to AIDS drugs. For example, when Brazil pressured Roche into lowering the cost of Nelfinavir, “the Bush administration and U.S. corporate media accused it of violating international rules.”¹⁵²

Over sixty African, Latin American, and Asian countries, along with activists from around the globe, came to Doha with the goal of gaining concessions regarding AIDS medication.¹⁵³ The USA, along with Britain, Switzerland, and Germany, came to Doha with a strong intellectual property agenda.¹⁵⁴ Yet the developing world was able to win some concessions. In a 25 December 2001 article, *The Hindu* announced that the adoption of the Doha Declaration was a victory for countries seeking cheaper access to AIDS medication.¹⁵⁵ The Declaration “concedes that public health crises, including those relating to HIV/AIDS, tuberculosis, malaria and other epidemics, can represent a national emergency or other circumstances of extreme urgency...as provided for in Article 31.”¹⁵⁶ The Declaration gives

each country the right to define a national emergency and affirms that compulsory licenses are an acceptable policy under TRIPS.¹⁵⁷

Despite this success, there are flaws with the Declaration. Because it is not an amendment to TRIPS, the Declaration only has moral force.¹⁵⁸ Further, the wording of the Declaration may make it more difficult to actually amend TRIPS in the future.¹⁵⁹ The Doha Declaration may allow countries like India and Brazil, which already have generic drug industries, to continue to manufacture such drugs after the TRIPS compliance deadline of 2005, but the benefits to countries like South Africa remain unclear.¹⁶⁰ While the issue of compulsory licensing is dealt with in the agreement, parallel importation is not.¹⁶¹ Other commentators note that the Doha Declaration does nothing new, but only clarifies provisions of TRIPS that have been misinterpreted by the USA. TRIPS already has provisions for compulsory licensing in times of public health emergencies. Doha simply provides additional public support for an interpretation of how TRIPS ought to be used.

The pharmaceutical industry's response to Doha was not surprising. The drug industry opposed the Doha Declaration and claimed that giving developing countries the ability to "promote access to medicines for all" was irrelevant to the AIDS crisis. Thomas Bombelles, now representing Merck, said, "This is a sterile, hypothetical, theological discussion which has nothing to do with why people are actually dying of AIDS today."¹⁶² Again, while technically true – people are dying of AIDS today because the global community has been remiss in addressing the issue – this statement shifts the focus away from access to medication, a vital piece of the ultimate solution to the AIDS crisis.

Despite the advances made at the Doha meeting, the situation on the ground in South Africa did not change much. Access to AIDS medication remained difficult. In response, TAC and MSF again began importing generic AIDS drugs from Brazil.¹⁶³ While these generic versions are significantly lower in price than the brand-name drugs, it may still be a long time before most Africans have access.

The years leading up to Doha were filled with drama and the clash of two distinct ideas about how to view life-saving drugs. The extended nature of this struggle illustrates that it is nowhere near over. If anything, these events illustrate how deceptive public officials can be as they announce flexible programs in public and negotiate for hard-line protection in private. Without the dedication of AIDS activists, a challenge to the dominant paradigm of strong intellectual property law would never have been possible.

In the process of changing the discourse, the activists helped transform the pharmaceutical industry from self-proclaimed "victim" of international piracy and theft, into victimizer of the poor and sick around the world. In reframing the debate, AIDS activists have made a crucial first step in transforming the world of intellectual property into a more

humane one. In the final section of this chapter, I would like to examine the ways in which activists were able to create such a powerful counter-discourse, and challenge the wealthiest conglomeration of corporate power on the planet.

Resisting intellectual property

As this brief history suggests, the resistance generated by a dedicated group of activists working together across the globe successfully changed the face of the discourse on access to AIDS medication. This resistance was supported by the work of NGOs, the world health community, and state actors throughout Africa. In other words, the dialogue over access to medication successfully changed because actors at all levels were able to co-operate on a common goal. The moral force of the pharmaceutical industry as the creator of life-saving drugs was diminished by a contrary image of a greedy and aggressive industry that placed profits ahead of human life. By putting industry actions within a different moral framework, activists were able to undermine the legal and political superiority of the industry.

In the abstract world of TRIPS, where the implications of monopoly rights in terms of health are not central to the discussion, the moral discourse of theft and piracy established by the pharmaceutical industry was successful, but only as long as it remained in this abstract legalistic world. Because the implications of agreements like TRIPS were difficult for the average citizen to understand, and because much of what was negotiated was done without full public participation, most world citizens were unaware of the implications of TRIPS until after it was passed. The South African case was important as a forum for translating the abstract and legal world of TRIPS into the real world of human lives.

One result of the process of resistance to the pharmaceutical interpretation of intellectual property law was the emergence of a growing global consensus that public health is a human right that should not be controlled by intellectual property decisions.¹⁶⁴ The UN Universal Declaration of Human Rights, the Constitution of the World Health Organization, and the International Covenant on Economic, Social and Cultural Rights have been instrumental in defining the right to health.¹⁶⁵ When the World Health Assembly describes access to medication as a human rights issue, it brings enormous moral weight to the argument.¹⁶⁶ Secretary General of the United Nations Kofi Annan has also weighed in on the side of access to medication by focusing on the role pharmaceutical companies needed to play in providing cheaper drugs to those suffering from AIDS.¹⁶⁷ Gradually, a viable international consensus on the importance of access to medication and affordable prices has developed and this access has been linked to health as a human right. Within this framework, actions taken by the pharmaceutical industry to protect their patents seem increasingly immoral.

The Treatment Action Campaign (TAC), a South African group, used the language of health as a human right to help frame the debate over the Medicine Act.

We argue, therefore, that when a conflict arises between human rights covenants and trade agreements, the rights to life and health-care take precedence. In concrete terms, if the government is a signatory to both the TRIPS agreement and any of the above-mentioned human rights covenants, by international standards it should be able to take action to enforce the protection of human rights, even if this means breaching the TRIPS agreement. Consequently, human health should not be subject to international law.¹⁶⁸

Aside from connecting the South African case to the larger emerging consensus on the importance of seeing health as a human right, this argument also brought international attention to the idea that issues of human health should not be commodified. Essential to the activist framework is the idea that human life should not be viewed through the lens of economic cost–benefit analysis. By positioning the quality and length of human life outside the rational calculation of risk versus profit, activists rendered many of the arguments made by the pharmaceutical companies irrelevant. The TAC followed their words with deeds. The acting chairperson of the TAC, Zachie Achmat, refused to take HIV medication until it is made publicly available by the government.¹⁶⁹

In a discussion paper for TAC, Nathan Geffen described the shift in perspective towards global human rights and away from the antagonistic attack on TRIPS:

In an advertisement to *The Economist* on 28 April, Dr. Harvey Bale, Director-General of the International Federation of Pharmaceutical Manufacturers Association (IFPMA), describes activist groups in conflict with organization as opponents of globalization. While TAC cannot speak for other activist groups, the attempt to caricature us in this way is quite wrong. Indeed, most TAC members are not in favor of eradicating the World Trade Organization (WTO), nor even the Trade Related Aspects of Intellectual Property Agreement (TRIPS). However, unlike spokespersons for the pharmaceutical industry, TAC is consistent in embracing globalization. Fifty-three years ago, the most important global treaty to date was adopted, the Universal Declaration of Human Rights, and has since been ratified by over 140 countries, more than the number of signatories to the WTO.¹⁷⁰

According to this perspective, if companies are unwilling to innovate without adequate monopoly protection, then the role of a government ought to be to protect public health instead of property by providing the necessary R&D when corporations refuse. Activists were quick to point out

that the US government already spends considerable money on R&D that is virtually ignored in the debate over patents. The de-commodification of human life requires more than government programs to provide loans for the purchase of brand-name drugs.¹⁷¹

It is important to remember that activists were not calling for the destruction of the patent system, but for a balancing of rights. Further, many activists saw their cause as simply reasserting the right to use compulsory licensing already in the TRIPS agreement. As Sara Ford points out:

Developing nations generally believe that the economic injury complained of by the pharmaceutical companies in developed nations should have no bearing on the right to receive adequate health care. For these nations, compulsory licenses should be available for any health concern where there exists a pharmaceutical capable of either curing or postponing the disease. Thus, they believe that the moral exception argument should dictate the broad use and implementation of compulsory licenses under the TRIPS Article 31.¹⁷²

The resistance established by activists, academics, and governmental agents was successful because the issue was one of social justice and the resistance was not asking for radical revisions to international or domestic law.

AIDS activists were able to highlight the importance of treatment and make it a morally required aspect of the campaign to fight AIDS.¹⁷³ They were supported by statements from government officials throughout Africa who wished to see the status quo on access to AIDS medication change. For example, the Vice-President of the Republic of Malawi, in his keynote speech to the African Consultation Forum on the Global Fund to Fight AIDS, Tuberculosis and Malaria, summarized the strangeness of the global position on the treatment of AIDS:

It is a paradox that for the majority of diseases in the world, it is accepted wisdom that disease prevention, care and treatment should be addressed in a comprehensive manner as health benefits. None, for example would question the wisdom of treating Malaria, Tuberculosis or indeed any other common communicable disease. Indeed with the exception of childhood immunization, no major disease control programme focuses on prevention alone. However, it was only this year that consensus emerged that there is need to provide comprehensive treatment for HIV/AIDS.¹⁷⁴

Throughout the events described above, AIDS activists skillfully used public pressure to gain concessions from the US government and pharmaceutical companies that would not have otherwise been made. Without the vigilance of AIDS activists, the issues they made public would have been subsumed by the much better funded public relations campaigns of the pharmaceutical

industry. Additionally, without the support of developing governments across the world, as well as the work of NGOs and activists, concessions at Doha would have been impossible.

Only when US government actions were framed within the discourse of human rights was it possible to see an alternative to the strong intellectual property language. However, as TAC and other AIDS action groups point out, if they are not vigilant, nothing will stop the industry from raising prices again.¹⁷⁵ While activists were successful in transforming the debate over patents and AIDS medication, there is still work to do in order to avoid reverting to the status quo.

Conclusion – a cautionary lesson

The lesson from the events surrounding the South African Medicines Act is instructive for those interested in resisting intellectual property for a variety of reasons. First, a committed group of activists were able to disrupt the political and legal agenda of some of the most powerful corporations in the world. Second, a viable human rights discourse centered on health as a human right was developed to help counter the economic rationality of the intellectual property rights paradigm. Third, the moral terrain surrounding AIDS medication was shifted from framing the pharmaceutical industry as the victims of piracy, to people with HIV/AIDS as the victims of a merciless assertion of patent rights. This was possible when the abstract world of TRIPS was rendered concrete in the South African case. Finally, a language of humanitarian care that does not necessarily reject the idea of intellectual property was developed. This language makes it possible to chart a middle path through the polarizing rhetoric of the pharmaceutical industry. The development of a moderate path is a significant step along the road to a world where intellectual property is not over-emphasized at the expense of human life.

Despite these important results, the battle over access to AIDS medication is not over. Success has been limited to South Africa and, to a certain degree, to AIDS medication. For example, President Clinton's Executive Order was specific to South Africa, and while the industry dropped the lawsuit against the South African government, there is little reason to believe these companies have adopted the language of access to medication as a human right. Additionally, while activists made an effort to extend the claims of access to medication to all life-saving drugs, these more general claims have not been globally accepted. Certainly, there is a general moral commitment to providing medication, but the nature of the existing agreements limits access to most medications.

A second reason to be cautious stems from the fact that there has been an effort on the part of the USA to resist and limit the full implications of the Doha Declaration. At the WTO talks in Geneva the USA has held up progress because of concerns over cheaper generic drugs and drugs made

under compulsory license making their way back to the USA.¹⁷⁶ Ultimately, while the seeds for a future effort to transform access to medication into a human right have been planted, there is still significant work to be done. Activists have been successful in developing a resistance to a specific interpretation of intellectual property, and though public opinion is on their side, the battle is long from over. They continue to argue that the role of government is to look after the public interest, not the corporate interest of the most rich and powerful.

The issue of the public interest is at the heart of the question of patents. What role should government play and what exactly is the “public” that the government ought to protect? In the case of AIDS, the developing world has taken a stand in favor of its people, while the USA has taken a stand in favor of its corporations. This division will define the future of governmental relations as the USA attempts to transform the ideological makeup of the world in favor of “liberal” markets that only consider issues of public health and welfare through the lens of markets and intellectual property laws. The debate is about more than who should own information; it goes to the very heart of whom government is for and who ought to be protected. If the USA is successful in defining the public health programs of India, Brazil, and South Africa as immoral because they do not protect the “rights” of corporate citizens, then the democratic principles that serve as the basis for our constitutional rights will have been seriously undermined. However, if activists can successfully offer an alternative we can hope that the result will be a world that is richer, healthier, and more just.

5 Patenting the body

Resisting the commodification of the human

With all the foresight and humanity Europe exercised when carving up Africa, biotech companies are rapaciously carving up your body in a sort of posthuman colonialism, racing each other and the government to gain exclusive rights over your genes. In the coming decades, our God-given traits may become as interchangeable – and marketable – as an Ikea modular home-entertainment system.

(<http://laaronland.info/weblog/2000/04/15/2005/>)

Man, who no longer conceals his character of being the most important raw material, is also drawn into this process.

(Martin Heidegger)¹

In 2000, Donna Rawlinson MacLean took out a patent with the British Patent Office on herself. MacLean stated, “It has taken me 30 years of hard labor for me to discover and invent myself, and now I wish to protect my invention from unauthorized exploitation, genetic or otherwise.”² While MacLean’s patent application was performance art, she was able to highlight a crucial problem with contemporary patent rights. The identity of a human being, while possibly fractured and always in the process of becoming, is intricately wrapped around the human body. Intellectual property law, by contrast, understands the human body as a bundle of “rights.” Understanding the human body as a bundle of property rights allows it to be divided into individual commodified parts and owned as “inventions.” The human personality, for example, as an independent property right attached to a body, is alienable. Additionally, under patent law, it cannot be assumed that an individual is the inherent owner of his or her genetic code. These items are the property of the “inventor” in the case of patent law and the “author” in the case of copyright law and publicity rights. By understanding the human body as a collection of alienable property rights, it becomes easier to divide the person from the right. Much like it may be possible for you to own a parcel of land without owning the mineral rights, it is now possible to slice away, or have sliced away, parts of your identity and body in commercial transactions.

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.

This chapter seeks to evaluate the development of property rights over the human body and articulate the need for alternative theoretical models that can be used to reinterpret the use of the body in modern technological society. The ideological framework that allows the scientific community to view the human body as a wasteland of untouched resources waiting to be mixed with the labor of a scientist to form a product with “value” must be replaced. This chapter focuses on issues related directly to the human body – genetic code and human tissue. There are areas that overlap with the next chapter that focuses on traditional knowledge. Indigenous peoples have been objectified for both their genetic code and their knowledge. In this chapter I will focus specifically on issues related to the human body, and in the next chapter on forms of biopiracy that apply to agriculture, culture, and scientific knowledge. It is important to recognize that the resistance developing through the language of biopiracy discussed in the next chapter is also used when addressing the issues that arise in this chapter as well.

This chapter will focus on the possible theoretical resistances to the dehumanization of the body through modern technology by offering a critique of the Lockean language⁵ used to justify the Human Genome Project (HGP) and the Human Genome Diversity Project (HGDP). I will also evaluate the legal analysis that allows us to make the leap to ownership of life in an effort to understand how the ideology works. Ultimately, as seen in the discussion of the public domain in the first chapter, it is important to revise the underlying theoretical framework that allows for the body to be owned as property. By highlighting and critiquing the current property paradigm, it is possible to see other possible ways of thinking about the human body in relation to patent law. First, I will discuss and analyze the 1980 US Supreme Court case that extended property rights to living organisms. Second, I will look at one of the more controversial cases involving ownership of human tissue – the John Moore case. Finally, I will evaluate the HGDP and its relationship to the ownership of the human body. Each benchmark provides an avenue into understanding the many dimensions of ownership in the body and how the law is evolving.

Owning living things – genes in the state of nature

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 geneti-

cally 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.

John Moore, the Hagahai, and ownership rights

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

The analysis of the court needs to be investigated further. The decision is ripe with tension between the commodified and noncommodified body Hyde suggests is part of the postmodern legal discourse of the body. As Hyde puts it,

What is equally interesting, however, is that this construction of the body as property has not totally effaced noncommodified constructions of the body. Anyone is equally capable both of conceptualizing one’s body as property, and of recoiling in horror at the very conception.²¹

In other words, the legal discourse of property does not offer a totalized discourse of the body. Instead, a tension exists between the body as property and the body as autonomous. According to Hyde,

Many of the dizzying dances law makes around the body are thus in the service of a larger mission, law's construction of an autonomous legal self, a self that must be both property and never-property, free and ordered, autonomous and socialized, and so on.²²

The construction of the body as property is not complete²³ and the Moore case illustrates the difficulty judges will have conferring a property right to tissue.

However, something else must be at work besides simply defining Moore's body as property that can be commodified. Otherwise, why would the judges be willing to confer a property right over Moore's cell line to the medical researchers when they were not willing to give Moore these same rights? If the body cannot be commodified, the court should refuse to assign anyone a property right in Moore's tissue, especially if Moore himself cannot assert ownership over it. If the person who inhabits a body (since we cannot speak of ownership here) does not have a property right in his or her body, what analysis exists for extending property rights to others? James Boyle suggests an important reason why the court was able to create a property right for the researchers, but not for Moore – a reliance (perhaps even subconsciously) on the discourse of romantic authorship.²⁴ The notion of romantic authorship is closely connected to a labor theory of property and the originality of a creative mind. As Boyle points out, “one gets the sense that the court thought that Moore did not exhibit that mixture of arcane labor and dazzling originality that we associate with the romantic author.”²⁵

Moore sued based upon the tort of conversion. Conversion is defined as, “an intentional exercise of dominion or control over a chattel which so seriously interferes with the right of another to control it that the actor may justly be required to pay the other the full value of the chattel.”²⁶ If Moore is given a property right in his spleen and tissue then it is assumed that the tissue is a form of chattel, or property. One must then ask what exactly is Moore's spleen and tissue worth?

The court decided that the spleen has no worth to Moore; in fact it could be argued it has negative worth as a cancer-causing agent that could have caused Moore's death. Thus, even if Moore can establish a property right in his spleen, it has no value to Moore. However, it is clear that the spleen has enormous value as a commodity, so why is Moore not entitled to this value? The answer to this question lies in the manner in which patent law is applied to the human body.

Patent law requires that the subject of a patent be an “invention” that is not a “product of nature.” It certainly seems plausible to call Moore's spleen a product of nature. No human (except Moore and he didn't do it consciously) has created this spleen or the unique properties that the spleen is capable of producing. Patenting living things is no longer an issue after *Chakrabarty*, but human cells were really never understood as living for patent purposes anyway.²⁷ Thus, it is not Moore's spleen that has been patented, but the cell line that was produced by medical research from

Moore's spleen. Moore's spleen is simply a raw material, something that a creative agent may act upon to form an "invention." As such, it has no worth until the labor of a medical researcher is invested in the raw material thus establishing the worth. As the majority states, "It is the *inventive effort* that patent law rewards, not the discovery of naturally occurring raw materials."²⁸ Moore cannot own his spleen because it is a mere raw material and the medical researchers, through their labor, create a property right in Moore's cells.

The court uses the language of raw materials throughout the decision to refer to Moore's tissue. For example, when the court argues that research will be hindered if Moore is given a patent interest in his cells they state, "The extension of conversion law into this area will hinder research by restricting access to the necessary raw materials."²⁹ The court later suggests that if anyone is to limit the scientific communities' access to "raw materials," it should be the legislature.³⁰ As Boyle concludes,

Viewed through the lens of authorship, Moore's claim appears to be a dangerous attempt to privatize the public domain and to inhibit research. The scientists, however, with their transformative, Faustian artistry, fit the model of original, creative, labor. For them, property rights are necessary to *encourage* research.³¹

Only by keeping Moore, and by extension everyone, in the condition of a raw material, thus decreasing human autonomy, can progress be made. If the body cannot be constructed as an objective "thing," then it would be necessary for medical researchers to invest the human tissue they research with the subjectivity of its human source. The reason informed consent becomes a sticking point in genetic research stems from our philosophical understanding of the human as an agent that now clashes with the scientific necessity to understand the human as nothing more than a genetic pool. To give the subjects of research too much control over their genetic material could substantially harm future research. It is much easier to understand the human subject, for the purposes of patent law, as a raw material. Additionally, if Moore is given a property right to his tissue, or treated as a subject, then it would make medical research much more difficult. Researchers would have to treat the donors of human tissues as subjects who might have a stake in the results. The Court in Moore deems this risk too large for medical science to face.

Moore's cells are given no legitimacy as uniquely his, or, more specifically, what Moore's cells are capable of are only made possible by the scientific investment of labor. The court argues,

Moore, adopting the analogy originally advanced by the Court of Appeal, argues that "[I]f the courts have found a sufficient proprietary interest in one's persona, how could one not have a right in one's own genetic material, something far more profoundly the essence of one's

human uniqueness than a name or a face?” However, the defendants’ patent makes clear – and the complaint, too, if read with an understanding of the scientific terms which it has borrowed from the patent – the goal and result of defendants’ efforts has been to manufacture lymphokines. Lymphokines, unlike a name or a face, have the same molecular structure in every human being and the same, important functions in every human being’s immune system. Moreover, the particular genetic material which is responsible for the natural production of lymphokines, and which defendants use to manufacture lymphokines in the laboratory, is also the same in every person; it is no more unique to Moore than the number of vertebrae in the spine or the chemical formula of hemoglobin.³²

Interestingly, the court readily rejects the suggestion that body parts could be as essential to human identity as the personality. However, the key to the court’s analysis here is that Moore’s body is simply a raw material, like any number of other human bodies, and the substances extracted from his body are not unique to him. The doctors suggest that the universality of genetic material makes any individual irrelevant. Thus, all of humanity can be considered a gigantic genetic pool open for exploration and exploitation for those equipped to “discover” and draw out the important genetic material from the junk. Using this analysis, Moore was in no position to invest the necessary labor to create a product of value from his spleen, thus his claim to the products made from his spleen hold no weight.

It is the labor of the inventor that is important here, as the court argued:

Human cell lines are patentable because “[l]ong-term adaptation and growth of human tissues and cells in culture is difficult – often considered an art...,” and the probability of success is low. It is this inventive effort that patent law rewards, not the discovery of naturally occurring raw materials.³³

For the court, it becomes irrelevant if Moore can “own” parts of his body because Moore is not using these body parts to invent things. Patent law only rewards the inventor, not the raw material, and as the Office of Technology Assessment (OTA) report (used by the California Supreme Court in its analysis of Moore) written to assess the potential applications of law to human tissue notes:

Typically, the person providing the material will not make any suggestion regarding the use of the cells, or of the means for using them. While the patient’s cells may have some novel characteristic, it is unlikely that the characteristic was appreciated by the patient.³⁴

Because the patient will not be investing the labor into identifying what is novel about their own genetic material, they lose rights to any patentable commodities that may result from their tissue.

The OTA report suggests that the tort of conversion would not necessarily equate to an injury to a patient. "But 'raw' tissues and cells have little pecuniary value in themselves, especially to the typical patient or research subject who is not trained to identify biological characteristics or develop cell lines or cloned gene probes.³⁵ By equating the human body to a raw material, the analysis of both the Court and the OTA report suggests that Moore has not actually lost anything of value. While the doctors at UCLA were able to use Moore's body to "invent" a new and lucrative product, this does not preclude Moore from using his "raw material" for similar purposes. As the OTA report suggests,

In addition, a researcher's patent on a cell line, recombinant DNA clone, or hybridoma does not reduce the source's right to engage in research on his own (or to employ another scientist) using a similar cell. Since a patent is granted only to that which makes an invention new and unique, using raw material in a patented invention does not prohibit others from using the same raw material in a different way.³⁶

In reality, then, Moore had been deprived of nothing. He is equally free to research his own cells and patent any product that may result assuming it meets the standards established by patent law.

Another doctrine the OTA report analyzes as it relates to human tissue is the defense of *res nullius*, "things that are not owned."³⁷ *Res nullius* is the doctrine that creates a legal distinction between wild and domestic animals. While it is possible to own domesticated animals, under *res nullis* it is not possible to own wild animals because they are common property. If a wild animal passes through private property, the property owner can appropriate it, but when the animal leaves the private territory it goes back to becoming common property.³⁸ If one were to make the analogy that human cells were like wild animals, then it would be possible to assert ownership only at specific times. The OTA report states,

It could be argued that the patient and his tissues stand in a relationship similar to that between a landowner and wild animals on his land. If tissues were removed without consent, the wrongful possessor would be like a poacher of wild animals, and would have rights inferior to those of the patient. If, however, the tissues were removed without the removal itself being wrongful, their status would be that of wild animals in a state of nature and the possessor could attempt to exercise dominion over them. Not having exercised dominion or control over the tissues, the patient's rights therein would be like those of a landowner who had made no attempt to capture wild animals passing over his

land....A defendant/researcher could contend that it was he, not the patient, who isolated and cultured the abnormal bodily constituents thereby reduced them to “possession.”³⁹

In other words, the researcher “tames” the “wild” cells and thus can take “possession” of the cells. The image of the human body as wilderness filled with wild cells again reduces the human to the status of an object. In this case, the autonomous human could exercise dominion over their cells, but like the case of conversion, they only have a legal right if they can prove they have translated their raw materials into something other than the state of nature. Equating human tissues to the state of nature does nothing to create an autonomous subject. Instead, the body is reduced to a natural resource subject to the property contracts made upon it. The “body as state of nature” analysis assumes property is created through labor and thus a valid assertion of property rights over the body becomes possible. Additionally, while the doctrine of *res nullis* does indicate that some form of consent is necessary for the appropriation of material from the “wild,” it continues to place the human being in the same category as fallow land – open to the exploitation of gene hunters. While scientists may retain their subjectivity, the general population becomes a resource.

The OTA report does not claim to know which type of law best suits human tissue in the world of biotechnology. In all versions they assess, tissue is separated from any sense of human subjectivity and reduced to a raw material that gains value only after it is mixed with the labor of an external force. There is no contiguous body under the law; there are only mechanisms for interpreting the body once it is divided into parts. Rights in genes, while necessitating some level of consent, are alienable rights. Property laws are applied to body parts once the human is alienated from his or her body and made into an object under the law.

Treating the human body as a natural resource to be appropriated for the inventive work of researchers has met with some resistance. The development of the language of “bioprospecting,” and “biopiracy” redefines the actions of these scientists as a form of theft. Indeed, to read the case is to be faced with a legalistic language that dehumanizes the subject. Yet, the subjects of these decisions are very human and a language of resistance is beginning to emerge as the subjects of biotechnological experiments recognize their role as a “raw material” in the process of scientific research, a language that will be investigated in further detail in the next chapter. Moore reacted to the appropriation of his cells because he was not informed of their use. The problem becomes more complex when scientists begin collecting the cells of Indigenous peoples in cultures other than that of the USA.

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.

Legally speaking, those filing the patent were not claiming ownership over the Hagahai or their genetic material. Their actions were simply the legal appropriation of a raw material for innovative research. As in the Moore case, there was nothing about the NIH research or patent that precluded the Hagahai from doing research on their genetic material or allowing others to do so. The resulting patent was on a cell line derived from the innovative work of the scientists, not the person the cell line came from. The Hagahai do not “own” this cell line because they did not “invent” it. As Professor Henry Greely, who is involved in the HGDP, noted,

The patent doesn’t patent a person. It doesn’t even patent human genetic material. It’s the cell line, a viral preparation derived from the cell line, and three different bioassays to see whether this virus infects people. And the idea that the U.S. government owns this person or his genetic material is absolute rubbish...the donors involved can continue,

obviously, to use their own DNA to run their bodies. They could also, if they chose, patent anything they wanted to patent that was an ‘invention’ from their DNA.⁴⁸

The theme of original authorship described by Boyle runs clearly through Greely’s statement. The act of inventive labor is the key.

Once one enters the discourse of patent law the issue is quite clear – it is not the human body that is owned, but inventions made using the human body as a raw material.⁴⁹ It should be no surprise that developing countries are upset at having their bodies become exploitable natural resources much like the natural wealth of these same nations. The experience of colonialism has not given those living in the developing world much faith in Western intentions. Western researchers should not be surprised that developing countries see the patenting of Indigenous human tissue as biocolonialism and reject Dr Greely’s analysis. In fact, one cannot understand the reaction of the developing world to biopiracy without understanding the legacy of colonialism.

Indigenous rights theorist Victoria Tauli-Corpuz tells the story of talking to a former committee member of the HGDP regarding his own willingness to donate tissue or blood to contribute to the progress of science. Her response was that,

He has not gone through the experience of being colonized and having his community militarized because the government or a corporation wants to appropriate his people’s land and resources. Most indigenous peoples have gone through this experience. Much of what we have is being taken away or destroyed in the name of development and progress. The HGDP is still the appropriation of what we have and even of what we are, not just for the sake of science but for profits. For those of us whose human rights have been grossly violated, from colonization to the present, it is important that we assert our rights to have control over our own bodies, our territories and resources, and our knowledge and cultures. This is what our opposition to the HGDP is all about.⁵⁰

The stakes are clearly different for Indigenous peoples, a theme that will be returned to in the next chapter. The notion that the HGDP is yet another form of colonization is widespread and is a powerful discourse that has led to a retreat from the project.

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.

The Hagahai tribe is an early example of the international controversy over the patenting of human tissue. How we interpret the property rights of the human body in patentable biotechnology research continues to be controversial as illustrated by the language used by the HGP and the HGDP, discussed in the final section of this chapter.

“Presumed dead...but still useful as a human by-product”⁵⁵

The HGDP is different from the more widely known HGP. The HGP began in 1987 as a public attempt to sequence the entire human DNA.⁵⁶ Mapping the entire human genome and sequencing the material was considered an enormous undertaking. Prior to the mid-1990s, most of the work was being done through the publicly funded Human Genome Project. Privately funded projects entered the race to sequence the entire human gene in the 1990s.⁵⁷ The HGP was finally completed in April 2003.

The HGDP is a different project altogether and has not gained the level of acceptability given the HGP. The HGDP is interested in preserving genetic diversity. Instead of establishing human sameness through genetic research (an outcome of the HGP), the HGDP is interested in mapping human difference and diversity at the genetic level.⁵⁸ Specifically, HGDP scientists are interested in preserving the genetic heritage of over 500 Indigenous groups throughout the world, groups threatened with extinction.⁵⁹ The goal of the HGDP is to preserve these genes for posterity, long after the individuals have died off or have been absorbed into the larger community.

Both the HGP and the HGDP raise ethical considerations, but despite the fact that the HGP is the larger project, there have been fewer controversies surrounding the HGP than the HGDP. Both projects involve intellectual property rights over the human genome, both projects believe that a scientist ought to be able to patent specific inventions that emerge from their research on these genetic samples, and both projects are mapping projects, but the differences in how these projects are approached has led one (the HGDP) to become mired in controversy while the other (the HGP) has successfully negotiated the ethical issues surrounding property rights.⁶⁰ To discover how one project was able to successfully deal with property issues while the others was not, it is important to look at the way these projects, and their subjects, are narratively constructed.

Property rights and human subjects are treated differently in the HGP than in the HGDP and these differences help us pinpoint why one has become controversial and one has succeeded in extensively patenting components of the human gene with little to no controversy. In order to understand how the narrative construction in this case operates it is important to evaluate the language surrounding intellectual property. Evaluating the HGP and the HGDP should help highlight the clash between the autonomy of the human subject and the division of the human into a bundle of property rights available for appropriation that exists in our contemporary legal discourse. By comparing and contrasting the HGP and the HGDP it may become possible to understand where the problems with the human body as property begin.

The OTA provided their report on the HGP to Congress in 1988. The HGP had not received much federal funding in 1988 and the Hearing before the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce was meeting to discuss the implications of the HGP for the USA and its ethical considerations.⁶¹ Congress at this early stage was trying to discern the potential ethical implications of the HGP, decide how much funding to provide, and decide which agency would best serve as a focal point for the work. It is instructive to review what problems were anticipated with the HGP at its inception and compare those ideas to what emerged as problems later in the project. These early constructions developed the narrative of property rights and the human subject that helped keep the HGP from being controversial.

The initial hearing and report by the OTA only mentions patent problems in passing during the question and answer phase. The context of the remarks indicate that patenting of biotechnological products was an issue in 1988, but there was a wide commitment to seeing the HGP operate in the public domain. When Representative Ron Wyden from Oregon asked what would be patentable in the HGP, Mark Pearson of the Dupont corporation responded that it would be a combination of the technologies and the genetic probes, but that the human genome itself would remain in the public domain.⁶² Outside this brief discussion, the patenting of the human genome did not emerge as an ethical issue during the hearing.

The ethical considerations discussed in 1988 included the possible impact the HGP would have on the moral dignity of human beings. The importance of retaining human dignity is considered one reason to avoid patenting the human genome.⁶³ Professor Thomas H. Murray, Director of the Center for Biomedical Ethics at Case Western Reserve Medical School, summarized the possible ethical ramifications of the HGP. As he put it,

Let me turn to the second concern, that the genome initiative might somehow diminish our moral dignity as humans, that uncovering the full complement of the DNA basis will reduce us somehow to nothing more than the chemical constituents of our bodies, and that, in consequence, our spiritual and moral standing would be imperiled.⁶⁴

Professor Murray discounted this ethical problem by arguing that the HGP may actually increase our respect for humanity, much like understanding the composition of a symphony can enhance our respect and awe for the author.⁶⁵ The most problematic ethical implications Murray predicted was the possibility of genetic research being used to discriminate against individuals. The key ethical issues raised were privacy rights, not property rights in genetic code. Patenting and owning the human genome were not discussed as ethical issues during the hearing, in part because of the way the human genome was understood.

Scientists working on the HGP understand their task as mapping the entire human genome. The human genome is genetic information shared by every human being around the world. There is no one person targeted by the HGP. In 1988, Representative Wyden asked, "Whose sets of genes are we talking about? Is there a lucky man or woman to be chosen to have their genes sequenced, or how is this process to develop?"⁶⁶ James D. Watson, Director of the Cold Spring Harbor Laboratory, answered Representative Wyden's question. He responded,

I don't think it makes much difference, because we don't reproduce clonally, and in any individual, the chromosomes are coming from a variety of different sources. So if you sequence chromosome 1 from one person

and chromosome 10 from another, I don't think it would make any difference.⁶⁷

Thus, the HGP does not rely on any individual for its genetic map. The HGP relies upon the genetic pool available from any and all human beings. As Donna Haraway argues, the genetic era has transformed us into "Man™ and Woman™", copyrighted, registered for commerce, and, above all, highly flexible."⁶⁸

Clearly, there is a division between how scientists perceive the human genome and how lay people perceive the genetic material of an individual. On the question of where the genetic information comes from, Representative Doug Walgren asks,

[D]o you do it from a tissue sample, do you do it from a fingernail, do you do it from a hair, do you do it from an internal piece of tissue? Can somebody be involuntarily sequenced without their knowing it?⁶⁹

Again, the questions posed by the representatives concern the autonomy of an individual. Can the individual somehow be harmed through the collection and sequencing of genetic material? Mr Murray's response to this question is instrumental in how those engaged in research on the human gene perceive the HGP. He stated,

The source of the DNA to be sequenced can come from a variety of different tissues. It is almost irrelevant in the sense that the DNA content of each of our tissues is basically the same. So, the simple answer is it doesn't make any difference. The practical answer is it will undoubtedly come from cultured white blood cells.⁷⁰

For the HGP, it doesn't make any difference where the tissue comes from or whose tissue they use – this project is interested in the generic human and its intent was to provide to the public domain the entire genetic sequence to benefit humanity as a whole.

The HGP was successful in limiting the controversial nature of patenting the human gene for several reasons. First, the human gene was divided from any sense of humanity and became a generic resource for experimentation. This division has been successful as the testimony of Todd Dickinson, the Director of the US Patent and Trademark Office, before Congress proves:

[S]ome critics assert that genetic material can't be patented, because it's found naturally in our bodies. However, genes are basically chemicals; complex chemicals to be sure, but chemicals nonetheless. And as I've noted, chemicals and pharmaceuticals that have been isolated and purified from nature, penicillin for example, have long been held patentable.⁷¹

The attitude expressed by the Director of the Patent and Trademark Office slices any humanity away from the human genome and instead describes the human genome as a complex chemical. This attitude makes informed consent, the turning issue in the Moore case, unimportant because the human gene is so generic that the individual is irrelevant.⁷² The HGP successfully disassociated the human genetic code from any given individual's genetic donation and turned the human being into codable information.⁷³ The body, in this new world, is digitized as information and thus easily bought and sold as property. Property rights for individuals other than the inventors are not important issues for those involved in the HGP.

A second reason the HGP was successful in keeping gene patents from becoming too controversial relies upon the analysis that scientists mix their labor with this pool of raw materials and only patent the resulting cDNA. The HGP avoids the sticky ethical issues of property rights in the human body because the patented object – cDNA – isn't the genetic code of any specific human being, or even a product of nature. Again, the element of human labor makes it possible to transform a human gene from a product of nature into an ownable commodity. Professor Sheldon Krinsky describes how this process is possible:

Strictly speaking, genes cannot be patented because, like proteins, they are products of nature. Scientists argued before the PTO (Patent and Trademark Office) that their modification of the genes could qualify for patents because the natural molecular sequence has been altered and a new composition of matter replaced it. To make this argument, scientists used the version of a genetic sequence called copy or complementary DNA ("cDNA"). Typically, a gene that codes for a protein has many redundant or irrelevant nucleotides in the sequence that are not essential for the synthesis of a protein. When the extraneous sequences (called introns) are removed, the version of the gene is called copy DNA. Because this version of the gene is not present in the cell and can be created by using certain enzymes, it was considered patentable under section 101 of the U.S. Patent Act where the subject matter must be novel, useful, and non-obvious. Following the Court's reasoning, the term cDNA is described in books on genetics as "a man-made copy of the coding sequences of a gene."⁷⁴

In fact, the parts of the DNA that have no known function are termed "junk DNA,"⁷⁵ and part of what scientists are doing is eliminating the junk from the human DNA. While the patenting of the human gene was underway at the time of the 1988 OTA report to Congress on the HGP, it had not reached the frenzied proportions brought on by the PTO's decision to allow for gene patents as "compositions of matter."⁷⁶

Ethical debates on the HGP have addressed the issue of dehumanization. If the human genome is commercialized, does it have a negative impact on

our humanity? Has the patenting process harmed any individual? These issues were addressed in a 1997 symposium on the ownership of genetic information. In response to the question about the dehumanizing impact of patenting the human gene, Charles DeLisi, Dean of the College of Engineering at Boston University, stated, "My own feeling is that this concern attributes too much to human genes. The genome alone does little more than encode biological development; whereas what gives us humanity is socialization."⁷⁷

Understanding the human gene as just another raw material led some to develop the language of "bioprospecting" to describe the search for unique genetic information in plants, animals, and human beings, a subject I will return to in Chapter 6.⁷⁸ Bioprospecting was not initially considered a pejorative term by industries engaged in gene hunting. However, as increasing resistance developed to what many people now term "biopiracy," the ethical considerations of understanding human populations as similar to mineral resources have begun to emerge. Professor DeLisi claims that our genetic code is not sufficiently unique to the individual to constitute a threat to any given person's humanity and I would agree with his assessment. However, treating entire populations of people as nothing more than a natural resource open for exploitation does have serious dehumanizing consequences.

It is a common understanding by those involved that, "genetic information is the raw material of the burgeoning biotechnology industry."⁷⁹ Executive Director of the Council for Responsible Genetics, Wendy McGoodwin, responded to the language of "raw materials" by saying that,

It does offend me that we are parceling up bits and pieces of human beings and transforming them, not only into properties, but into property that a single individual or institution can control exclusively. That is the thing that offends me, whether it comes through a patent or not.⁸⁰

The discursive struggle over human genes exists in how the gene itself will be defined – as a raw material available for any prospector, or as part of a human being.

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 public.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.

The HGP, by focusing on the generic human, was successful in dividing the individual from their genes. The HGDP has had no such luck. Unlike the HGP, the HGDP selects specific populations to study and through its selection must also take into consideration the notion of human agency when seeking ownership of the resulting genetic material. The HGDP has helped highlight elements of genetic ownership that the HGP was able to conceal. In part, as a reaction to the extensive bioprospecting throughout the last few decades, and as a response to the HGDP, a new level of activism exists around gene prospecting.

The HGDP began in 1992 with a call to action by geneticists Allan Wilson and Luca Cavalli-Sforza. They described the project as a way to “gain new insights into the origins and evolution of humankind, human migration, reproductive patterns, adaptation to various ecological niches, and the global distribution and spread of disease.”⁸⁴ The ultimate goal, pronounced at the first organizational meeting in 1992, was to find out “who we are as a species and how we came to be.”⁸⁵ The project as initially described in *Genomics* argued,

We must act now to preserve our common heritage. Preserving this historic record will entail a systematic, international effort to select populations of special interest throughout the world, to obtain samples, to analyze DNA with current technologies, and to preserve samples for analysis in the future.⁸⁶

The scientists asked for help from people working with genetically distinct populations throughout the world by collecting samples from these populations.⁸⁷ The organizers of the HGDP held a series of four workshops to develop their proposal. As Dr Cora Marret, Assistant Director for the Social, Behavioral and Economic Research at the National Science Foundation, pointed out in a hearing before the Committee on Governmental Affairs, the first workshop tried to determine what an adequate sample of people would be, the second workshop tried to assess which populations to study, and the third workshop focused on ethical issues. The fourth workshop involved a discussion of international collaboration.⁸⁸

The initial difference between the HGP and the HGDP was the HGDP's identification of select and genetically diverse populations to study. Picking specific study populations was a controversial task and filled with methodological questions. The goal of the HGDP was to select populations that would soon become genetically or literally extinct. Therefore, the HGDP was not dealing with generic human genetic code, but the genetic code of specific population groups. It became much more difficult for the HGDP to dissociate itself from the human identities of its target populations. While the

scientists themselves believed the project was of historical importance akin to the HGP, advocates of Indigenous rights labeled it the “vampire project.”⁸⁹ The language describing the selected populations as “Isolates of Historic Interest” did not help assuage discomfort about the treatment of indigenous populations. As Carolyn Hong notes, the HGDP choice of words, “exhibits a regard for them as objects to be harvested for their useful genes.”⁹⁰

A second problem emerged because most of the targeted populations were located around the globe, but the research and future cell lines were to be located in a database in the USA. Thus, concern over exploitation by the researchers in the USA became central to the discussion. For example, who should “own” the cell lines? Using the logic of the Moore case, issues of intellectual property ownership were initially decided in favor of the researchers. Unlike the Moore case, some consideration was given to the populations whose genes were used when deciding how to allocate ownership rights.

One of the first controversial examples involved the Guaymi people. It was discovered that the blood of the Guaymi carries antibodies that are important for resisting leukemia. With the informed consent of a Guaymi woman, tissue samples were given to researchers and used to develop a cell line that could be studied for its medicinal properties. Based upon the research, the US Secretary of Commerce filed a patent claim on the resulting cell line. Upon learning of this patent, controversy broke out, with representatives of the Guaymi taking the issue to Geneva and protesting the action under the Biological Diversity Convention. As a result of this controversy, the USA withdrew its patent.⁹¹

Patent claims had been relatively uncontroversial when they dealt with an abstract human genetic system. This abstract human body was simply information stored in digital form and thus easily rendered into intellectual property. However, when specific subjects, who must give informed consent, are the focus of the scientific research it becomes much more difficult to make an argument about the generic human being. Both the Hagahai and Guaymi examples illustrate that the issue of patents becomes even more intensely controversial when the colonial past of Western relationships to peoples in the global South are understood within the context of modern patent law. Ultimately, the HGDP treats the Third World body as another bit of information to be collected and added to Western knowledge systems. The subjective body of an individual is replaced with the digital body of genetic information.

Aroha Te Pareake Mead clarifies the indigenous position on the appropriation of human tissue for patentable research. “Human genes are being treated by science in the same way that indigenous ‘artifacts’ were gathered by museums; collected, stored, immortalized, reproduced, engineered – all for the sake of humanity and public education, or so we are asked to believe.”⁹² Mead goes on to point out that “the survival of indigenous cultures will not come about through gene banks, but through an observance of fundamental human rights.”⁹³ Centering the HGDP as an issue of

biocolonialism has successfully resituated human identity into the act of genetic mapping. Instead of allowing the human individual to be divided into parts that become easily commodified, the language of Indigenous rights advocates refuses to allow the individual, or communities of individuals, to be understood as anything less than a totality. Thus, while the law of property and property rights divides and commodifies the human body in a multitude of ways, the rejection of this paradigm attempts to put the human body back together again.

John Moore has insights on the topic of ethics and the human body. When asked to testify on the HGDP before the US National Academy of Science he made the following comments:

I am concerned because the dehumanization of having one's cells conveyed to places and for purposes that one does not know of can be very, very painful. Why should I or any individual or group of individuals have their unique genetic materials borrowed, stolen, or bought for some fraction of their value for some project of others?...How can anyone else set and get a price on what may be priceless or sacred to someone else?...I am concerned because even in this country where the rights of the individual are supposed to be protected from the grasp of institutions and certainly from the greed of private corporations and researchers they are not....Do you think a system that could not protect me will protect the rights of peoples and individuals in other countries?...I don't.⁹⁴

Moore highlights the concerns that should have existed for the HGP, but that have emerged around the issues associated with the HGDP. These concerns of dehumanization, theft, and the idea of the sacred are crucial aspects of any sort of resistance to the increased patenting of the human body. The options open to a given culture may include resisting the commercial use of their genes,⁹⁵ but this resistance does nothing to halt the larger process at work – the technological process of transforming the human body into digital information.

The problem experienced by humans in the HGDP is also at issue in protecting biodiversity globally. As will be discussed in the next chapter, the same assumptions that allow us to regard genes as a raw material also allow us to see plants, animals, and traditional knowledge as raw materials for Western consumption.⁹⁶ However, the work of activists has met with some success. Generally, scientists now recognize that the days of bioprospecting without compensation have passed. Dr Walter Reid addressed this issue during the roundtable discussion held by the HGDP on Payment and Property Issues.

The era of treating biodiversity as a common heritage or open access resource is over. Arguably, the distribution of benefits from the old regime was not equitable, and developing countries see opportunities to

get more benefits in the future, through both financial arrangements and technology transfer.⁹⁷

Dr Reid seems to regret the loss of a narrative that understood the global South as a raw material open to property claims by Western companies. Now that the global South is attempting to protect its traditional knowledge, biodiversity, and human genetic diversity from appropriation as property by the West, the days of bioprospecting have come to an end.

The HGDP remains mired in controversy because it cannot overcome the claims regarding the commodification of Indigenous peoples. Organizations like RAFI have been successful in inserting a holistic image of the human body into the area of gene patents and numerous patents have been withdrawn as a result of the controversy. While the legal issue remains clearly defined – the inventor owns the invention, the politics of the issue have allowed for the law to be less successfully implemented. While intellectual property law has no understanding of the holistic body, only the labor invested into individual body parts, it is still possible to contest the commodification of the body outside intellectual property law. Thus, in order to defend oneself against intellectual property claims, one must retain a sense of human autonomy that transcends its individual parts.

Conclusion

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.

However, it is not the technologies *per se* that are the problem – but the ways in which we conceptualize the use of technology. As Hubert Dreyfus points out, “the threat is not a *problem* for which there can be a *solution* but an ontological *condition* from which we can be *saved*.”¹⁰³ Thus, there is a theoretical level at which a Heideggerian resistance can be built – but it must happen conceptually.

Heidegger’s response to the overwhelming nature of technology is to resist by marginalizing efficiency.¹⁰⁴ Instead of focusing on efficiency, one should design one’s life to “appreciate marginal practices” – the “saving power of insignificant things.”¹⁰⁵ It is possible to develop an alternative future being – one that “no longer treat[s] everything as resources to be optimized.”¹⁰⁶ To create this future we must engage in cultural resistance. Dreyfus argues,

Still we are left with a hint of how a new cultural paradigm would work, and the realization that we must foster human receptivity and preserve the endangered species of pre-technological practices that remain in our culture, in the hope that one day they will be pulled together into a new paradigm, rich enough and resistant enough to give new meaningful directions to our lives.¹⁰⁷

Resistance can happen on many levels – the conceptual and the practical. While there isn’t time to delve deeply into the works of Martin Heidegger here, it is important to recognize that alternatives at the conceptual level are also important. Heidegger’s understanding of the way in which technology

operates helps illuminate the problems with the commodification of the body and the ways in which we have begun to approach the building blocks of humanity. More recent analysis of technology suggests that democratic movements can emerge to change the direction of technological development and that we should avoid being overly deterministic about technological progress.¹⁰⁸ Thus, instead of feeling trapped by the current trajectory of dehumanization associated with technological progress and patent law, it is possible to see the beginnings of a resistance that can change the future.

Should a human being be considered on the same ground as an uncultivated piece of property with an individual's genetic code being the equivalent of fertile soil? Scientists have justified privatizing the human genome by calling genes the uncultivated commons. While we may be able to retain rights to our bodies, we ultimately enter such a commodified state that we become the subjects of potential ownership and/or slavery. Genetics becomes a new form of colonialism, treating the entire human subject as a raw material to be appropriated for private interests. Overall, until we have a viable language of human autonomy that allows for individuals to retain a subjective interest in their personalities and genetic codes, it is not too harsh to call the commodification of the body twenty-first century slavery.

Activists working on issues like the HGDP have developed a viable language of human autonomy as a central focal point for their resistance. Their work suggests that there is an alternative way to understand the human being and an alternative path to follow when entering the biotechnological future. Even the HGP's interest in keeping the human genome in the public domain helps recognize the importance of resisting the commodification of everything. While this chapter presents some of the most serious threats to the human subject from copyright and patent law, the types of resistance are perhaps least clear here. Groups like RAFI have been successful in pressuring agencies into rescinding their patents because of moral outrage and have created a struggle over the meaning of patents in the context of human genetic code. It is necessary to keep a close watch over the way in which these issues are conceptualized because it is the struggle over the meaning of the human body where this debate will be won or lost.

6 Traditional knowledge and intellectual property

Seeking alternatives

The very cultural heritage that gives Indigenous peoples their identity, now far more than in the past, is under real or potential assault from those who would gather it up, strip away its honored meanings, convert it to a product, and sell it. Each time that happens the cultural heritage itself dies a little, and with it its people.

(Thomas Greaves)¹

“They came for our land, for what grew or could be grown on it, for the resources in it, and for our clean air and pure water. They stole these things from us, and in the taking they also stole our free ways and the best of our leaders, killed in battle or assassinated. And now, they want our pride, our history, our spiritual traditions. They want to rewrite and remake these things, to claim them for themselves. The lies and thefts just never end.”

(Margo Thunderbird, 1988, quoted in Ward Churchill, *From a Native Son*)

A memorial sculpture commissioned by the Battle Monuments Commission stands in the National Memorial Cemetery of the Pacific, known in Hawai'i as Punchbowl Cemetery. This memorial for veterans of the Second World War, Korea, and Vietnam sketches a Hegelian narrative of history in a single glance.² The monument illustrates key military events through text and mosaic panels.³ As Kathy Ferguson and Phyllis Turnbull point out,

Hegel's hand is visible not only in the dominant narrative of states and armies sweeping across the stage of History, but also in the supporting subtext of the memorial.... Beneath the main mosaic panels runs a series of depictions of plants, animals, Pacific Islanders (“natives” to Hegel), and women. They are unaccompanied by written text.⁴

In graphic form we can see the history of colonization, progress, and a political narrative of power.

The imagery of nature in the silent subtext of the memorial echoes Hegel's representations of women, kinship, animals, and “primitives” as lesser, but still necessary, counterpoints to western masculine reason and

desire. Happy natives and docile women are useful to the Hegelian narrative of the memorial in that they anchor these nonwestern and nonmasculine lives in the passive arena of the acted-on, while conferring both legitimacy and virtue onto the bold and necessary actions of the white men's armies on the world stage. Women/native/plant/animal – the silent other that supports History without intruding on it, the blank page on which the western male pen is writing.⁵

With a privileged position in history comes the ability to define the other.⁶ In this case, women and Indigenous peoples are closely associated with nature, a condition that keeps them from fully participating in history.⁷

The narrative of colonization describes Indigenous peoples as “child-like” 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 appro-

priation 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.

Narrating Indigenous cultures as primitive allowed Europeans to solidify the myth of modernity as Rosemary Coombe points out:

According to Fitzpatrick, it is one of modernity’s myths that others live in worlds of static, uniform, and closed systems of meaning, whereas “we” (a European, literate, and propertied male “we” in many cases) occupy a world of progress, differentiation, and openness. This “white mythology” assumes that the West has law, order, rule, and reflective reason, whereas others have only violence, chaos, arbitrary tradition (mindless habit), or coercive despotism to govern social life.¹³

In other words, a carefully constructed system of hierarchy determines the relationship of the “civilized” to the “primitive” and this construction makes it very difficult to perceive value in the “primitive” other.¹⁴ At its worst, Indigenous groups in order to become “civilized” were banned from practicing religious and cultural ceremonies, and from speaking their native languages.¹⁵ At its best, native cultures and traditions were ignored as unimportant. For Europeans, Indigenous cultures represented an earlier stage of evolution.¹⁶ Europeans recognized Indigenous “crafts,” but little credibility was given to these expressions of culture.¹⁷ Natives produced functional objects; art was something European and civilized.¹⁸ Scientific knowledge as practiced by Europeans was also absent from native cultures, suggesting again the superiority of Western thought and the inferiority of traditional knowledge.¹⁹

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 Semi-Tribal 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.

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 “gold-rush atmosphere” on the part of researchers and “unrealistic expectations of gain.”²⁴

Until recently, traditional knowledge was seen as a “raw material” within the traditional intellectual property system – part of the “common heritage of mankind.” Traditional knowledge remained outside intellectual property laws because the commonly accepted property rights of patent and/or copyright were not visible. Instead of thinking about the possibility that

Indigenous groups might have alternative property models governing their knowledge, many simply assumed the knowledge shared with them by Indigenous groups was free for the taking. While these attitudes have changed as a result of the growing resistance by Indigenous groups, there is still a large sentiment that unless it can be defined as intellectual property then it is open for exploitation. Thus, the tension that exists here is between those who have begun the difficult task of debating and defining the relationship between traditional knowledge and intellectual property, and those who continue to see traditional knowledge as a raw material free for the taking.

Additionally, it is important to recognize that Indigenous peoples have developed alternative property models and that, by refusing to recognize alternative and pre-existing property models, Western interests are again engaged in a colonizing property grab.²⁵ Colonialism has become biocolonialism.²⁶ The invasion of one property system into areas where it has not been used before does inevitable and devastating harm to the alternative systems from which we would do well to learn. While numerous Indigenous peoples seek to formulate their claims in terms of the intellectual property discourse, I wish to suggest that it is equally important for a resistance to intellectual property that focuses on alternative models for protecting knowledge to emerge.

This chapter is difficult to write because the private property model has already significantly transformed the relationships between traditional knowledge and intellectual property rights. It may be too late to reconstruct the alternative property models that protect traditional knowledge because the path towards copyright and patents is so universally underway. Even discussing preserving traditional knowledge through a system of “group rights” or “collective property” is problematic because it introduces “rights” and the commodification of culture into areas that may as of yet remain uncommodified. The controversy emerging around biocolonialism and biopiracy is as much about the commodification of the sacred as it is about the theft of ideas and property. Without recognizing and giving credit to the concerns of Indigenous peoples regarding this commodification, any discussion of rights-based agreements and protective covenants will miss the point.

Indigenous peoples find themselves in a dilemma, however. On the one hand, intellectual property is a Western concept that may cause more harm than good if applied to traditional knowledge. On the other hand, the language of intellectual property can be an appealing way to try to establish barriers to protect traditional knowledge from further exploitation from outside. I would like to more closely evaluate the possibility that the best form of resistance is to endorse an alternative worldview entirely and learn what Indigenous peoples can teach us about protection of culture and knowledge that can lead us beyond the commodification of Western intellectual property law.

Our cultural arrogance leads us to assume the primary and best way to protect creative and scientific work is to develop private property models. This standpoint ignores the knowledge systems developed by Indigenous

peoples and the knowledge and creative work that have been produced without any thought given to “patents,” or “copyrights.” Our standpoint also takes as unproblematic the commodified nature of our own lives and the fact that, at least in the USA, virtually nothing is left but private property and commercial interests. We live in the absence of the sacred and as a result have a difficult time understanding why much of our behavior might be seen as offensive and inappropriate when used to commodify other cultures and traditional knowledge.

Fortunately, the appropriation of traditional knowledge is not happening uncontested. There is a narrative struggle to reclaim traditional knowledge and culture, and resituate it within the property and cultural narratives of the peoples to whom it belongs. For example, what pharmaceutical companies called bioprospecting has been retermed by many as biopiracy.²⁷ A number of different narratives focused on property issues are emerging in response to the effort on the part of many Western-dominated companies to search the globe for new commercial products (medicinal, agricultural, and cultural). Indigenous peoples are involved in a political struggle to establish their ways of life as morally valid and in the process are attempting to provide an alternative narrative of how to live within the natural world and how to relate to what we have come to understand as intellectual property. Of course, it is difficult to separate claims about traditional knowledge from claims regarding cultural authenticity, identity, and territory. These alternative narratives are not only essential, but also provide some of the most compelling analysis for why another world not governed by commodity-driven intellectual property is possible.

This chapter focuses on the threat to traditional knowledge systems from intellectual property law and the resistance that has emerged to address this threat. Traditional knowledge symbolizes a resistance that can, and is, being articulated in the face of TRIPS and the globalization of intellectual property rights. The literature on Indigenous knowledge has asserted an alternative narrative of culture, property, and ownership that makes it possible to envision creative innovation outside the boundaries of commodified property rights. The possibilities of Indigenous knowledge systems need to be explored, articulated, and defended in order to forestall the globalizing discourse of private property.

The threat posed by the intellectual property language of the West is twofold. First, in terms of what is stolen, Western intellectual property justifies biopiracy, where knowledge is appropriated from Indigenous peoples and privatized for commercial use in the West.²⁸ Second, in terms of a narrative of property, intellectual property inevitably changes the ways in which knowledge is understood. A paradigm of intellectual property distorts arenas that have not been subjected to market analysis before by positioning them only as commercial products. This framework ignores the possibility of noncommodified culture or religious claims regarding the sacred. I would also like to examine the resistance to the overpowering

language of property rights and elaborate on how we can build resistances and create new hybrid systems that may help us balance the overwhelming power of the private property discourse with a new global diversity.

Locating indigenous peoples and traditional knowledge

One of the downfalls of the nation-state system is its ability to conceal the tremendous diversity of Indigenous peoples around the world. The interests of the nation-state dominate domestic and international discussions, and provide a false sense of unity that crumbles under even the slightest evaluation. While Indigenous peoples tend to be associated with underdeveloped countries, it is important to recognize that groups exist throughout the world, hidden from view. The USA and Canada are excellent examples of powerful nation-states that conceal an enormous diversity of first peoples underneath their claims to be a unitary political body. Not only does the USA encompass the native Hawaiians and Alaskan tribes, but it also engulfs federally recognized Native Americans tribes and many other tribes that do not have federal recognition.²⁹ Thus, the first step in defining Indigenous peoples and traditional knowledge is to recognize that despite enormous efforts to assimilate this cultural diversity over the centuries into the larger project of the nation-state, Indigenous peoples continue to survive as distinct groups within national boundaries.

The fact that the nation-state claims to speak for individuals living within the state means that Indigenous issues are often ignored within the international arena. For example, the Trade Related Aspects of Intellectual Property Rights (TRIPS) treaty was negotiated and signed by states wishing to become members of the World Trade Organization (WTO). Signatory states to this treaty do not necessarily represent the interests of the multiple Indigenous groups living within their territory.³⁰ Thus, a situation might arise where a state will give permission to another state to exploit an Indigenous group living within its borders. Another possibility is that the state will exploit its own Indigenous resources in order to develop intellectual property that might be of value in reducing trade deficits or paying off loans. Lakshmi Sarma suggests that underdevelopment of many Southern states will inevitably lead to exploitation.

Public international law gives countries jurisdiction over all persons and things found within their borders, so lesser developed countries could take legal steps to protect Indigenous and local knowledge within their borders. However, these countries face economic pressure from developed countries to sign international treaties such as TRIPS, which try to take such sovereign rights away from the lesser developed countries. Even those treaties that vest sovereign rights to Indigenous knowledge, like the Convention on Biological Diversity (Biodiversity Convention), force lesser developed countries to choose between the potential to

profit on sales of Indigenous innovation and the ability to protect the Indigenous knowledge system from exploitation. This conflict arises because the underdevelopment of many Southern countries, due to remnants of colonialism, causes the governments of these countries to continually seek ways to equalize their economies with those of developed countries.³¹

Within either scenario, the interests of the Indigenous group are not necessarily the same as the state.³²

Additionally, many Indigenous groups seek some level of national sovereignty, either political or territorial, and claims regarding intellectual property rights become wrapped up with the larger issue of sovereignty. As Hugh Hansen puts it in a symposium on the issue of Indigenous intellectual property rights, "I expect that some governments will be alarmed if they view the fight for traditional knowledge protection as kindling views of self-determination, human rights, or other types of empowerment."³³ Thus, claims to autonomy regarding intellectual property may be seen as threatening to the power of the nation-state just as locating Indigenous people within the geopolitical landscape threatens the power of the nation-state. When Indigenous groups speak as autonomous of the nation-state it undermines the ability of the state to define itself as a unitary body. The availability of an identity other than the identity of the nation-state suggests a reason why most Indigenous groups bypass the nation-state and interact with each other in the international arena.

Despite the struggle over boundaries and the ability to speak, there is a general trend towards recognizing Indigenous rights at the international level.³⁴ Due to the tension between many nation-states and Indigenous groups, it should come as no surprise that Indigenous groups have coalesced in the international arena, specifically through the United Nations. The United Nations declared 1993 the International Year for the World's Indigenous Peoples, giving Indigenous peoples throughout the world a general forum in which to raise concerns that may face all Indigenous groups.³⁵ This year was followed by numerous conversations, draft documents, and declarations focused upon Indigenous rights and issues.³⁶ The ILO updated their statement on Indigenous peoples to argue that Indigenous cultures ought to be preserved.³⁷ Additionally, several international treaties paid specific attention to the issue of Indigenous rights, especially intellectual property rights. The Convention on Biological Diversity (CBD) recognized the importance of Indigenous knowledge both within Indigenous communities and as an important part of sustainable development. The convention recognized that Indigenous knowledge has been exploited and suggested compensation is necessary.³⁸ Within these general issues of Indigenous rights, a more specific discussion regarding traditional knowledge and the scope of intellectual property protection emerged.

At the international level, the World Intellectual Property Organization (WIPO) began evaluating copyright and patent law as it related to Indigenous cultures. They worked within the framework of the CBD to ensure that intellectual property agreements supported the intent of the CBD.³⁹ Through this, and other WIPO initiatives to investigate and evaluate the state of Indigenous knowledge, hundreds of Indigenous groups, NGOs, and interested parties took part in talks.⁴⁰ In addition to working on issues surrounding the CBD, WIPO also issued a report suggesting that the Universal Declaration of Human Rights include some intellectual property rights as human rights. WIPO has used this language to assert that Indigenous peoples have rights to intellectual property that fall under the Universal Declaration of Human Rights.⁴¹

These international actions have some interesting implications. First, as noted earlier, there is now international recognition of Indigenous rights to traditional knowledge and a general understanding that protection is necessary. This international perspective has led to a “crisis of legitimacy in the world intellectual property system.”⁴² However, while WIPO and international agreements regarding issues of sustainable development and biological diversity have begun to recognize the importance of traditional knowledge and culture, the WTO using TRIPS remain uncommitted. Additionally, the USA has refused to ratify the CBD while at the time fully supporting the WTO process.⁴³ Thus, two international tracks regarding Indigenous knowledge are emerging. One follows the road of Human Rights and values diversity of knowledge systems. The second follows the road of property rights and a uniform system of intellectual property protection. The tension between these two parallel tracks is the site of significant international struggle.

International tension over the protection of traditional knowledge has led to a second important outcome. An international social movement regarding issues of Indigenous rights has been created. As Rosemary Coombe notes,

Strategic alliances are being forged between Indigenous NGOs, North–South alliances of farmers’ and peasants’ groups, traditional healers’ associations, environmental NGOs, development institutions and activists whose primary commitments are to maintaining food security, as well as to religious organizations who maintain an opposition to the patenting of lifeforms on spiritual grounds. These new coalitions form the core of a new and vibrant political movement organized around growing opposition to existing intellectual property laws, the way patent and plant breeder’s protections are granted, the practices of rights granting bodies in the industrialized world and an insistence upon recognition of alternative values – other than creation of incentives for the further development, proliferation, and circulation of commodities – to those currently given primacy in discussions of intellectual property.⁴⁴

This social movement signifies the convergence between issues such as AIDS medication, patenting the body, the HGDP, as well as more general links to a critique of world trade and the negative implications of a neo-liberal economic model as the underlying foundation of world trade. These trends suggest that resistance to the contemporary assertions regarding intellectual property rights is underway and the development of an alternative discourse of property rights is in the making.

However, there are obstacles regarding the location of the debate about traditional knowledge and Indigenous rights in the international arena. Many rights-talk theorists suggest that speaking in terms of rights can be a double-edged sword. Rights discourses can be overpowering and in many ways can be as colonizing as the idea of property. The international protection of rights has the advantage of providing some protection and support in resisting the property arguments embodied in the TRIPS agreement. However, it may also inadvertently reconstruct the issue of traditional knowledge and culture only in the language of rights.⁴⁵ If this happens, something would be lost from the diversity of perspectives that Indigenous peoples bring to the international arena. It is an alternative to intellectual property rights that is necessary. Constructing an international rights approach to intellectual property may unintentionally make it more difficult to develop and assert deontological claims about sacredness and the noncommodifiability of life. Speaking about alternative rights seems to accept the underlying framework of individual rights and thus close off other possible protective models (if such exist).

There is also a homogenizing tendency when we speak of traditional knowledge and Indigenous groups at the international level. By necessity, one must speak of these concepts as unitary because recognizing the hundreds of different groups and perspectives individually makes conversation at the international level difficult at best. This homogenizing effect must be recognized and understood only as a temporary state because it is the diversity of ideas and concepts that seems critical at this time, not the homogenization of Indigenous claims. Additionally, it is a grave mistake to believe that Indigenous groups speak with a single voice and thus there is a politics to who is recognized as representing a specific Indigenous group for the purposes of negotiation.⁴⁶ These issues are concerns that should be raised, but at the same time I understand and recognize the importance of positioning questions of Indigenous knowledge at the international level and the political importance of formulating a political movement based upon the interests of Indigenous groups around the world.

Commodity markets and the unprotectability of traditional knowledge and culture

In order to understand the threat to traditional knowledge currently underway, it may be useful to tell a story of the expansion of property rights

within the USA. Until 1920, farmers in the USA had access to free seeds distributed to them by the federal government. It was the specific intent of the federal government throughout the nineteenth century to ensure US food security by developing and preserving plant genomes to produce suitable plants for growth in US soil.⁴⁷ The seed distribution program was considered anti-free market by the US seed industry and its government representatives. In 1920 the seed industry successfully revoked the program and only private seeds became available.⁴⁸ What farmers had received free was now a commodity they had to pay to use. The elimination of the free-seed distribution program marks the first step in rendering US agriculture into a private commodity-driven market that emphasized the interests of seed manufacturers over the interests of farmers. The research and development that had gone into making US agricultural products had been publicly funded and when agricultural genomes were given to private industry they were fully developed. Thus, the commercialization of the seed market constitutes a vast transfer of wealth from the public to a private industry at the expense of the US public and US farmers.⁴⁹

Congress did not stop with eliminating the free-seed program. They passed the Plant Patent Act of 1930 and the Plant Variety Protection Act in 1970.⁵⁰ These two acts established property rights to asexually and sexually produced seeds respectively. Then, in 1980 the Supreme Court validated the patenting of a living organism in *Diamond v. Chakrabarty*.⁵¹ Each consecutive decision removed additional rights from farmers and enhanced the rights of seed manufacturers and the emerging biotechnology industry. Additionally, each action by Congress and the courts further removed the plant genome from the public and enshrined it within the logic of private property, despite the fact that research and development continued to be heavily subsidized by public money.⁵² The loss of rights experienced by US farmers over the past eighty years alone is enough reason for traditional farmers to be concerned about the future of their genetic seed stock as biotechnology firms begin expanding their acquisition of genetic materials around the world. However, there is more to this story.

The control given to the seed industry over the past eighty years has led to the development of powerful biotechnology giants that seek to protect what they call their intellectual property worldwide. Conveniently forgetting the initial public grant and continued public funding that makes their profits possible, these firms have aggressively fought any possible challenge to their interpretation of intellectual property laws. As a result of their avid and aggressive protection of property rights, the rather bizarre case of *Monsanto v. Schmeiser* emerged. Monsanto successfully claimed that a Canadian farmer violated their licensing agreement when plants resulting from the natural dispersion (meaning the seeds had been blown by the wind or carried by an animal) of Monsanto's transgene were discovered growing in the farmer's field. Despite the fact the farmer had never signed a licensing agreement with Monsanto, because he didn't use their products, the mere

existence of Monsanto products growing in the area seemingly gave them the right to test plants from all surrounding fields.⁵³ As a result, the court decided that Monsanto's license agreement applies even if a farmer doesn't sign it or use Monsanto products. This decision tilts the balance between farmers and seed producers even more in favor of seed producers.

I tell the story of seeds and farmers not because the commercialization of the farming industry in the USA is in any way near the level of cultural genocide experienced by Indigenous peoples, but because it raises some important issues regarding the balance between public goods and private property. This story illustrates that the paradigm of intellectual property we assume as natural today has not always been as absolute as it now is. It also illustrates that farmers in the USA and Canada experienced the type of privatization and loss of rights in the past that traditional farmers are experiencing today. While traditional farmers around the globe are still resisting the privatization of their seed stock, they are subject to genetically modified seeds and end user licensing agreements just as their Western counterparts. As private property in seeds expands, farmers of all kinds are forced to buy terminator seeds, seeds that have a built-in gene that makes saving and sharing the seed impossible, rendering traditional farming methods impossible.⁵⁴ The difference between a US farmer and a traditional farmer is that the US farmer has already been colonized by the property system. US farmers were colonized by the paradigm of private property model that was not in their best interest over eighty years ago. Since 1920, the USA has been on a slippery slope towards monopolies along every agricultural avenue. Biotechnology firms must turn outwards because there is nothing left to appropriate in the Western world – it has already become a commodity.

The search for new lucrative and commercial products leads us to a second story. This is the story of the yellow bean. Yellow beans have been planted and grown in Mexico for centuries and constitute a substantial part of the Mexican diet. John Proctor traveled to Mexico and brought seeds for this yellow bean back with him to the USA. Once in the USA, Proctor claimed to have established a uniform yellow color in his beans, which he called Enola beans and which he patented with the US Patent Office. Thus, Proctor claims to own the rights to any bean with the particular shade of yellow known to his patented variety.⁵⁵ It is unclear if Proctor's bean is substantially different from the yellow beans grown for centuries in Mexico. However, he receives six cents per pound in royalties for the sale of Enola beans. Customs now stop and investigate beans coming into the USA from Mexico to ensure that they do not violate Proctor's patent. Thus, the Mexican bean market, especially in yellow beans, has plummeted dramatically.⁵⁶ It should be clear that Proctor's ability to patent this bean in the first place is problematic and the fact he was granted a patent illustrates the expansive nature of the current patent frenzy. This story also illustrates that traditional knowledge is viewed by the biopirate as a public domain natural resource ready to be transformed into private property through their inven-

tive labor. This biopiracy is yet another example of conveniently forgetting where this “property” originally came from.⁵⁷

Numerous other patent cases involving traditional knowledge abound. The Rural Advancement Foundation International (RAFI) has developed a list of over 1,000 examples where knowledge regarding medicinal and plant varieties has been transferred from the South to the North.⁵⁸ Most of the controversial cases involve the patenting in the USA of a plant or a plant derivative that has been in use for generations, if not centuries, in the country of origin.⁵⁹ What the Enola bean example suggests, and what the numerous other cases illustrate, is that a concerted effort is underway to find any useful knowledge that may exist “out there” and that isn’t considered property in the USA (yet) and privatize it. This process is considered mercenary and unprincipled by those on the receiving end as researcher and community organizer for the Paiute nation in Nevada, Debra Harry, argues, “The common thread is that we’re dealing with a white society that feels that anything that exists in Indigenous territories is up for grabs.”⁶⁰ Bioprospecting, also called biopiracy, continues for both practical and theoretical reasons.

At the practical level, traditional knowledge is not recognized by those engaged in biopiracy as property. Within the USA’s legal paradigm, there is only one method for protecting patent-worthy material, and that is completing the patent process in the USA. With this process comes specific standards that must be met. In order to patent any invention in the USA you must first prove that it is useful, novel, and non-obvious.⁶¹ According to some analysis, traditional knowledge can never be considered property under the US model because, by its very existence within a community, it is already understood as “obvious.”⁶² Because the existence of traditional knowledge is “obvious” knowledge, it is considered free for the taking.⁶³ Claiming that traditional knowledge is “common,” or “free,” also illustrates a complete lack of respect for traditional law and culture as well.⁶⁴

How, then, is it possible for a Western researcher to turn “obvious” knowledge into non-obvious knowledge? A sleight of hand is necessary and the US patent law fully obliges on this account. First, a US patent law is utilitarian in scope and must be based upon the labor of the individual.⁶⁵ You cannot simply patent a plant or animal found in nature; some inventive step is necessary in order to justify the patent. Traditional knowledge, because it tends to be based on a more holistic approach to the world, does not usually reduce a plant or seed to the medicinal properties or the specific color that makes it useful. Once the Western prospector obtains the knowledge of which plants are useful, however, they can isolate the essential patentable elements.⁶⁶ Thus, according to the rules of US patent law, the researcher can ignore the knowledge he appropriated because only the labor and inventiveness of his specific invention matter.

Of course, prior to patenting the newly “discovered” item that has turned the “obvious” knowledge of Indigenous peoples into the “non-obvious” world

of the original and individual invention, one must do a prior art search. A prior art search is another way in which US patent law ostensibly protects earlier inventors from having their work stolen. If the subject of a patent is already in use or already patented, the new patent cannot be granted. One might again ask why traditional knowledge is not considered prior art?

The US patent law again helps the original Western inventor ignore the contribution of traditional knowledge by limiting the scope of the prior art search that must be done. Specifically, only the following four prior art searchers are necessary:

- (1) prior knowledge of the invention by others in the United States; (2) prior use of the invention in the United States; (3) prior patent of the invention in any country; and (4) the printed publication of the invention in any country.⁶⁷

A prior use within the USA is justification for not granting a patent, but the patent office specifically ignores the prior use of an invention in any country other than the USA. Thus, if a person travels abroad and “discovers” a new medicinal plant in use by a local group of people, or “just picked up” an Indigenous cereal grain as two U.S. scientists put it,⁶⁸ it can be appropriated and patented in the USA as long as no published record of its use exists in any country. Ignoring foreign use represents a significant flaw in the design of the US patent system, one that is in need of fixing.

As it stands, the patent system in the USA allows the Western researcher to engage in a double forgetting, first that his “invention” was in fact already “discovered” by someone else, and second that it is actually in use (and thus not very original) in other parts of the world. In fact, as Thomas Greaves notes, “Western intellectual property protections not only fail to protect Indigenous knowledge; they protect its appropriation by others.”⁶⁹ While the law makes biopiracy legal and even justified, the existence of legal justification does not explain why until Indigenous peoples began to resist the appropriation of their traditional knowledge this behavior was considered ethical. For this, we need to return to the narrative of Indigenous peoples as existing in a symbiotic relationship with nature.

When Europeans were in the midst of their westward expansion in the USA, a justification for the further appropriation of property was necessary. The first part of this justification was a Lockean assessment of how land was used by the Native Americans. For the European mind, which had undergone the Enclosure movement and the triumph of private property over the commons, land devoid of “industry” was considered a waste. As John Locke put it, land held in common was not nearly as productive as land cultivated and held in private.⁷⁰ It was obvious that the most appropriate method for maximizing the potential of the land was to develop it as private property. However, the question of how land might be transferred from Native Americans to Europeans had to be settled.

The Supreme Court weighed in on the issue of property rights and the transfer of property from Native territories to white settlers in *Johnson v. McIntosh*.⁷¹ This case, which involved a property dispute between two white men, was able to “deprive American Indian tribes recognizable full legal title to their ancestral homelands”⁷² The Supreme Court provided two justifications for why Native Americans were not capable of selling what should have been their property.

First, the discovering European nation was held to possess “the sole right of acquiring the soil from the natives...a right with which no [other] Europeans could interfere.” Second, American Indian tribes had no theoretical, independent natural-law-based right to full sovereignty over America’s soil that a European discoverer might be required to recognize under Europe’s Law of Nations.⁷³

The court was able to utilize the doctrine of discovery by explicitly linking American Indians to nature and suggesting that a Lockean approach to territory was a superior method for utilizing land. The doctrine of discovery, based upon European power to conquer and “discover” a territory, asserts a superior European right to property because, as “savages” who live in the “state of nature,” Native Americans do not meet the legal requirements to hold property.⁷⁴ As Justice Joseph Story puts it,

The title of the Indians was not treated as a right of property and dominion, but as a mere right of occupancy. As infidels, heathens, and savages, they were not allowed to possess the prerogatives belonging to absolute, sovereign, and independent nations. The territory over which they wandered, and which they used for this temporary and fugitive purposes, was, in respect to Christians, deemed as if it were inhabited only by brute animals.⁷⁵

A specifically Lockean justification prevailed in this analysis where these savages should not retain rights to the land because “to leave them in possession of their country, was to leave the country a wilderness.”⁷⁶ Such a claim, made legal by the US Supreme Court, was instrumental not only in depriving American Indians of their land, but also “its discourse of conquest ensured that future acts of genocide would proceed on a rationalized, legal basis.”⁷⁷

This decision is only logical by claiming that existing in a “state of nature” means that one is separated from the rights associated with civilized life. Property, additionally, is given its strength through the law. This labor theory of property, and the fact that property is only recognized once it gains legitimacy under Western laws, provides some underlying justification for why today’s traditional knowledge is claimed as a commons waiting to be discovered through the labor of the Western individual.

Today's biopiracy is simply the extension of the logic behind the doctrine of discovery. Russell Means, an American Indian activist and former member of the American Indian Movement (AIM), clarifies exactly how the appropriation of culture and traditional knowledge is a form of colonization:

What's at issue here is the same old question that Europeans have always posed with regard to American Indians, whether what's ours isn't somehow theirs. And, of course, they've always answered the question in the affirmative. When they wanted our land they just announced that they had a right to it and therefore owned it. When we resisted their taking of our land they claimed we were being unreasonable and committed physical genocide upon us in order to convince us to see things their way. Now, being spiritually bankrupt themselves, they want our spirituality as well. So they're making up rationalizations to explain why they're entitled to it.⁷⁸

Cultural appropriation and theft have similar implications to the theft of property and, much like the doctrine of discovery justified the genocide of Native Americans, contemporary appropriation of culture and tradition can be implicated in cultural genocide as well.⁷⁹

Traditional knowledge in the eyes of the Western scientist is "uncultivated" knowledge – it is knowledge that has not been refined by the *individual* labor of someone who recognizes its value as productive property. While traditional knowledge is now considered valuable and important, to claim that it is the "common heritage of mankind," as many do, is simply a new way of justifying the acquisition of property rights over previously uncultivated ground. The labor of an individual and property remain closely entangled. However, it is a specific type of labor and a specific type of property that are privileged over all others. The colonial discourse is at work through the law as clarified by Laurie Anne Whitt:

Indeed, the politics of property has long been the central historical dynamic mediating the relations between Indigenous peoples and imperial states. While sovereignty over Indigenous lands was typically justified by appeal to three international legal theories of territorial acquisition – occupation, conquest, and cession – acquisition of less tangible Indigenous resources, cultural, intellectual, and genetic, is now widely legitimated by appeal to intellectual property laws.⁸⁰

No one can doubt that significant labor has been invested in traditional knowledge. Medicinal plants did not come into use out of a vacuum, but were carefully selected over time. However, the labor invested in the identification of a specific medicinal plant or an artistic design cannot be attributed

to a single individual and this lack of individual authorship makes it easier for Western prospectors to overlook possible property rights.

Additionally, while it is difficult to conceive that Western prospectors did not understand their appropriation of knowledge, it was the type of property and its potential use that enthralled the prospectors. Clearly, traditional peoples were not extracting the best possible use from their knowledge – a productive use in a market environment. These ways of rendering a traditional knowledge system either invisible or inferior meant that, to the Western prospector, the knowledge was “free” to develop into a commodity. After all, the Indigenous group would still have access to the original. Anything derived from the uncultivated knowledge of Indigenous groups and developed into a marketable property could be seen as the private property of the individual inventor. Much like the doctrine of discovery made it possible to appropriate land by making the alternative system of property utilized by the Native American invisible, this same logic remains at work today. Indigenous peoples have again been lumped with their natural environments and any alternative system of developing and protecting knowledge that falls outside the commodity market paradigm of Western capitalism is denigrated as “primitive” and inferior.⁸¹

It is not simply traditional knowledge in the form of patentable products that is being appropriated from Indigenous groups. Cultural artifacts and stories are also at risk. In fact,

Indigenous societies are seeking much more often to protect knowledge that identifies sacred lands and cemeteries, that locates sources of ceremonial and craft supplies, that draws on oral tradition and archaeological evidence to build a case for land claims, that preserves spiritual wisdom and ceremonies, and that accords respect for physical things and insights that should not be treated simply as grist for personal enrichment in the game of capitalism.⁸²

Trying to protect these manifestations of culture is difficult considering that they match the property regimes of copyright even less than scientific and agricultural knowledge match patent law.

Much like the seeds described above, Western traditional folklore and music has undergone a similar colonization. However, because Western folk traditions have already been appropriated and repackaged as Walt Disney products (to highlight one public domain usurper), it is difficult to discern the similarity.⁸³ We in the West have already experienced the colonization and commodification that is underway throughout the world. The culture industry needs new stories and it is now turning to traditional stories and cultures.⁸⁴

It is important to recognize the double-invisibility that allows for cultural appropriation into private property. First, an alternative property model that might protect culture or traditional knowledge as sacred or not for sale is

dismissed as irrelevant when placed into the context of the private property world of the West. This invisibility is the colonizing impulse of the doctrine of discovery. Second, companies like Disney must ignore their appropriation in order to establish property rights over something they played only a partial role in creating. However, the only “rights” that matter are those of the individual (or corporate) author. Cultures don’t have sufficient authorship over themselves and are thus easily appropriated. Without the respect and/or protection of alternatives to the private property model it seems likely that all traditional knowledge and information that has “value” will ultimately be assimilated into the hands of private property owners that may or may not be the creators of that knowledge and culture.

These examples hopefully illustrate exactly what is at stake as the model for property protection generated in the USA is applied to traditional knowledge throughout the globe. The aggressive assertion of property rights is difficult to withstand and there are significant economic interests on the part of the West perpetuating this system of appropriation. Darrell Posey concludes,

After all, the success of First World countries still relies on the acquisition of cheap (or free, in the case of most genetic plant stock) raw materials and cheap labor to do the basic processing. If the industrialized world paid fair market values for essential raw materials, the West’s consumer bubble would burst overnight.⁸⁵

The common heritage claim simply helps conceal an international political economy of inequality. As the West shifts from the raw materials of the natural world like rubber and ivory to the raw materials of the intellectual world, the system of colonization that already informs our relationships is simply reproduced in more subtle ways.

Throughout the West, we have been growing accustomed to private ownership for decades. While resistance exists, for the most part it has not been successful.⁸⁶ There is hardly anything left to commodify (in the USA especially) because outside of a few remaining public goods like libraries and public lands (both under threat), everything is already subject to corporate property rights. Now the USA is turning outward to appropriate the cultures and knowledge around the globe that have not been privatized yet. In reality, perhaps the USA should rethink its division between public and private. For example, there is substantial evidence to suggest that the patents on many biotechnological products are over-broad and should be challenged.⁸⁷ In fact, the USA should be reverting to less property protection instead of attempting to develop even more global systems of absolute property protection. Because the dangers of private ownership of knowledge have become more apparent, the importance of alternative property systems is necessary. Because of the way that traditional knowledge has been treated, opposition to what has come to be understood as biopiracy is growing.⁸⁸

Alternatives to intellectual property rights – the paradigm of indigenous knowledge

The internationalization of Indigenous sovereignty claims has provided the opportunity for Indigenous groups to share their perspectives regarding intellectual property rights with each other. The alternatives described at the international level create a powerful site of resistance that should (and could) become more universally applied. Since 1992, Indigenous groups have been working internationally to articulate a vision of what should be done regarding intellectual property rights and the preservation of traditional knowledge. When Indigenous peoples began contributing to the debate over intellectual property rights they were able to make a significant impact on how property rights should be perceived. Thomas Greaves states,

Indigenous peoples, through their experimentation, are transforming the scope of intellectual property rights and the ways in which intellectual property protection will be achieved. As Indigenous communities, leaders, and advocates see more evidence each year of cultural appropriation by outsiders, they seek ways to gain some defensive control.⁸⁹

While many solutions are couched in terms of rights, the underlying ideological framework developed by Indigenous peoples is concerned with asserting control over traditional knowledge, not privatizing and individually owning it.⁹⁰

The debate becomes muddled because two seemingly contradictory impulses are at work. First, an alternative related to property rights is emerging. It is generally understood that Western models of copyright, patent, and trademark laws will not provide adequate protection for traditional knowledge. Since little to no protection exists for traditional knowledge in the status quo, and there is a sense of exploitation at the hands of Western interests, Indigenous peoples have been forced to develop a property rights discourse at the international level and investigate how intellectual property rights might be used to protect traditional knowledge. The property paradigm may take many different forms. Sometimes this property rights discourse is used to resist further colonization of traditional knowledge by outside forces by attempting to protect a more traditional method of preserving and controlling knowledge and culture. Sometimes compensation for profitable knowledge is the issue, especially if the knowledge appropriated has commercial value in the West and the contribution of the traditional owners of the knowledge is ignored. Sometimes the claim is that traditional forms of property rights should be recognized and protected. The variety of perspectives on how to achieve some sort of protection is wide in part because Indigenous cultures are all substantially different.

The second impulse at work in this struggle to define protection of traditional knowledge seemingly contradicts the first. I believe this second theme to

be the more important political claim. There is a concern for cultural control and preservation of the sacred within culture. It is argued that it is necessary to recognize that many peoples throughout the world continue to value things not for their economic worth, but for their spiritual, cultural, or emotional qualities. In other words, it is possible to live an uncommodified life. It is the concern of many Indigenous peoples that much of what they value and hold sacred will be stripped of its meaning by making it marketable.

Despite the multiplicity of complex and seemingly contradictory claims, at least at the international level it is possible to see the emergence of a general narrative constructed as an alternative to the Western model of property ownership. In this section I would like to evaluate the common themes that seem to emerge from the international discussion of intellectual property rights as they apply to traditional knowledge and highlight the alternative narrative that becomes possible when Indigenous cultures begin to assert their vision of culture, property, and the law.⁹¹ Both impulses suggest that it is possible to seek alternatives to the profit-making ideology of Western intellectual property rights. As such, Indigenous peoples have established the beginnings of a resistance to the over-expansion of intellectual property rights that we can all take up as our personal call.

Indigenous groups begin by defining a different starting place for understanding the relationship between themselves and knowledge. Western knowledge, it is argued, is autonomous and alienated from its surroundings, much like the underlying philosophy of Western individualism.⁹² The first important step by Indigenous groups is to take advantage of the argument that they are closer to nature. No longer are Indigenous peoples inferior because of their close association to nature. Now, that very same link to the natural world has established the basis for the moral superiority of Indigenous peoples. Marie Battiste and James (Sa'ke'j) Youngblood Henderson point out,

Indigenous peoples regard all products of the human mind and heart as interrelated within Indigenous knowledge. They assert that all knowledge flows from the same source: the relationships between a global flux that needs to be renewed, the people's kinship with the other living creatures that share the land, and the people's kinship with the spirit world. Since the ultimate source of knowledge is the changing ecosystem itself, the art and science of a specific people manifest these relationships and can be considered as manifestations of the people's knowledge as a whole.⁹³

As Indigenous groups have been given the opportunity to speak for themselves, the story they wish to tell is of a culture and religion that is intimately connected to the natural environment.⁹⁴ Native groups assert a connection that goes beyond localized knowledge to a spiritual connectedness to that area.

The ability of Indigenous groups to establish themselves as morally superior because of their relationship to the earth has been an important political success. Recognizing and respecting the relationship of Indigenous peoples to their natural environment is now a commonplace narrative told by both Indigenous and non-Indigenous people alike.⁹⁵ The switch from privileging an attitude disconnected from nature to one that is intimately connected to nature is reflected in the respect shown to Indigenous knowledge within the CBD.⁹⁶ Indigenous groups have been successful at establishing not only their connection with the natural environment as superior to that of a Western person, but also they have successfully established that this relationship is preferable to the one lived by Western people. Living in close proximity to nature is no longer seen as “primitive” and “uncivilized,” but rather as morally superior and in greater connection to the larger world.

While it may be argued that this positioning of Indigenous peoples could potentially backfire and for many may simply be seen to reproduce the narrative of colonization, at this moment placing Indigenous knowledge within a closer relationship to nature can serve as a new foundation for Indigenous claims to cultural and intellectual property rights. Part of the paradigm being established by Indigenous peoples is a rights-based paradigm that will transcend the individual rights paradigm of the West. In fact, many Indigenous groups actively argue against a theory based upon individual rights. As Aboriginal activist Michael Dodson notes:

We assert that our identity and our rights are not reducible to the rights of individuals...With its cult of the individual and its emphasis on individual rights, non-Indigenous people in the western world have failed to acknowledge the collective nature of Indigenous societies, and have provided inadequate protection for the group rights of peoples.⁹⁷

The rejection of individual rights and the specific assertion of collective and/or group rights is an important level of analysis that takes us beyond the individualizing influence of intellectual property rights. In the analysis below I would like to evaluate the claims made by Indigenous groups through the international declarations regarding rights and attempt to draw some conclusions regarding the use of rights-based language to protect what we call intellectual property.

A number of different declarations have been developed to deal with issues of importance for Indigenous peoples. To a greater or lesser degree, all these declarations have been concerned with intellectual property issues. For example, despite the fact that intellectual property rights were not as visible as they are today, the 1984 *Declaration of Principles of the World Council of Indigenous Peoples* illustrates that concern was emerging over how Indigenous knowledge was understood.⁹⁸ While this particular declaration focused on territorial sovereignty and rights to natural resources, claims regarding respect for Indigenous culture were also made. The initial claim regarding Indigenous

culture as declared in Article 4 argues that, “The culture of Indigenous Peoples is part of mankind’s cultural patrimony.”⁹⁹ While the language of common heritage becomes problematic for the protection of traditional knowledge in the 1990s, this declaration suggests that the issue in the mid-1980s is not the recognition of property rights, but simply the recognition of culture at all. The declaration focused upon regaining cultural and territorial rights already appropriated by Western agents. Thus, the only other mention of culture and rights claims that Indigenous Peoples will “reassume original rights over their material culture, including archaeological zones, artifacts, designs, and other artistic expression.”¹⁰⁰ No explicit call to protect intellectual property is made, but the concern for control over all forms of property is clear.

Specific language focused on intellectual property soon becomes part of virtually all other recent international declarations on Indigenous issues. The 1993 *UN Declaration on the Rights of Indigenous Peoples* specifically mentions intellectual property rights as one of many areas in which Indigenous self-determination is necessary. In Part IV of the declaration it is claimed:

Indigenous peoples are entitled to the recognition of the full ownership, control and protection of their cultural and intellectual property. They have the right to special measures to control, develop, and protect their sciences, technologies, and cultural manifestations, including human and other genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, and visual and performing arts.¹⁰¹

The claim to property rights in 1993 is still simply one of many issues related to self-determination and sovereignty. However, numerous recommendations, statements, and declarations emerged during the early 1990s that deal specifically with the issues of intellectual property.

The specific claims regarding intellectual property rights by Indigenous groups do not at any time suggest that Indigenous knowledge should be protected by the legal regimes of patents, copyrights, trademarks, or trade secrets. Intellectual property in these declarations is used to describe the creative work now being produced, medical and technological knowledge, but also artifacts and cultural property that have been taken from Indigenous groups. In other words, the concern of Indigenous groups drafting these international declarations is not that they are provided with a legal regime that will protect their traditional knowledge in order to ensure that they can maximize their own profit from it (the concern of Western individuals who seek copyright and patent protection). Instead, Indigenous groups use the language of intellectual property rights to resist the commercialization of their knowledge and culture, and assert control over what can be considered their property.¹⁰² In many cases, it is made clear that groups are willing to share knowledge, but what is shared should be up to the group in question, not the researcher.

These treaties suggest that the idea of intellectual property is developing and used in two different ways. First, as illustrated in the *Mataatua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples*, is the claim Indigenous peoples should have authority and sovereignty over their own intellectual property and the ability to define that property however they want. Specifically, they declare:

That Indigenous Peoples of the world have the right to self determination, and in exercising that right must be recognized as the exclusive owners of their cultural and intellectual property; Acknowledge that Indigenous Peoples have a commonality of experiences relating to the exploitation of their cultural and intellectual property; Affirm that the knowledge of the Indigenous Peoples of the world is of benefit to all humanity; Recognize that Indigenous peoples are capable of managing their traditional knowledge themselves, but are willing to offer it to all humanity provided their fundamental rights to define and control this knowledge are protected by the international community; Insist that the first beneficiaries of Indigenous knowledge (cultural and intellectual property rights) must be the direct Indigenous descendants of such knowledge; and Declare that all forms of discrimination and exploitation of Indigenous Peoples, Indigenous knowledge, and Indigenous cultural and intellectual property rights must cease.¹⁰³

The *Mataatua Declaration*, which has become a model for other declarations, does not suggest that Indigenous knowledge should now be covered by Western intellectual property (and perhaps it could not as the sections above have indicated). However, a new way of looking at the protection of property is developed in the *Mataatua Declaration* as its drafters recognize that some form of protection is now necessary. The recommendations are that:

- (a) Collective (as well as individual) ownership and origin-retroactive coverage of historical as well as contemporary works;
- (b) Protection against debasement of culturally significant items;
- (c) Cooperative rather than competitive framework;
- (d) First beneficiaries to be the direct descendants of the traditional guardians of that knowledge; and
- (e) Multigenerational coverage span.¹⁰⁴

This perspective on intellectual property attempts to avoid reducing it to the individual rights of an “original author” by focusing upon the collective nature of knowledge and the need for this knowledge to benefit the entire group from which it comes. The fact that it becomes possible to develop a language of rights that can respect the cultural contribution of multiple

generations and individuals is an important first step towards defining an alternative to intellectual property rights. Additionally, this model better reflects the realities of creation, authorship, and inventiveness than does the Western model of the original genius creating without any connection to the larger cultural domain.

The second way intellectual property resistance is developing comes from the argument that the legal regimes of copyright and patent should be avoided at all costs. Thus, control over traditional knowledge by Indigenous peoples should exist, but intellectual property regimes developed by the West are not appropriate mechanisms for protection. While a concern for protection of knowledge, culture, and innovation is very evident within the declarations of Indigenous peoples, in part the protection Indigenous peoples seek is from the intellectual property regimes some would suggest they must use themselves. For example, the COICA/UNDP Regional Meeting on Intellectual Property Rights and Biodiversity in 1994 both claims that intellectual property is an issue of self-determination while also arguing that “prevailing intellectual property systems reflect a conception and practice that is colonialist...racist...[and] usurpatory.”¹⁰⁵

The 1995 United Nations Development Programme (UNDP) Consultation on Indigenous Peoples’ Knowledge and Intellectual Property Rights developed a similar language to the other treaties. Intellectual property laws are seen as imperialistic, but there is an understanding that Indigenous groups have valuable knowledge that is in need of protection. The type of protection sought by Indigenous peoples is different from the protection that can be offered through an IPR regime. Indigenous groups were put in the position of trying to develop a language of protection for their traditional knowledge while at the same time trying to develop a language of resistance to the very same legal regime that ostensibly offers legal protection to knowledge. Indigenous groups (and developing countries) were at the forefront of the resistance to the IPR regime advocated by the USA in the form of TRIPS while also attempting to construct a property regime that would reflect their own needs and interests.

While there is clear resistance to the international regime of intellectual property, especially as it is applied to the human genome, the alternative developed by Indigenous groups is not as clear. Options for protecting traditional knowledge are being developed and/or are being put into use.¹⁰⁶ These options range from *sui generis* legislation, authentication marks, moral rights legislation, common law alternatives, education, codes of ethics, and structured frameworks for sharing knowledge.¹⁰⁷ However, some critics would argue that proposals that attempt to develop some type of intellectual property as conceptualized by the West are likely to fail to protect the culture and resources that are valued by Indigenous peoples. At the very least, both protection under intellectual property regimes and a status quo where such protection is lacking are problematic.¹⁰⁸ The very

diversity of ideas and possibilities speaks to the importance of avoiding the homogenizing force of a single intellectual property system. However, it is also possible to begin to summarize the general assumptions and foci of an alternative intellectual property system. Through reading the international declarations and writings of different organizations it is possible to begin to develop the outlines of an alternative property system. There are numerous options being developed and tried throughout the world today. These alternatives seek to preserve and support the values of Indigenous groups throughout the world. Thus, several underlying themes characterize the protective framework Indigenous groups must develop when protecting what they call intellectual property (which is very different from what Americans might call intellectual property).

Graham Dutfield, one of the world's leading experts on issues of traditional knowledge and intellectual property surveyed fifteen prominent statements and declarations of Indigenous peoples, and developed a listing of the main demands. These include:

- Ownership and/or inalienable rights over resources and knowledge,
- Prior informed consent,
- Participation in the research and decision-making,
- Right of veto over research and/or access to lands,
- Knowledge and resources,
- A moratorium on bioprospecting,
- Full disclosure of results,
- Benefit sharing, restitution,
- And codes of ethics to guide research partnerships.¹⁰⁹

I would like to focus on several issues that emerge from Dutfield's work and my own reading of several of these documents.

First, intellectual property for Indigenous groups seems to be another way of talking about culture. In the USA, intellectual property is the private property of an individual. For Indigenous peoples, intellectual property is the culture of the group. This includes music, art, stories, and sacred sites, but it also includes medicinal and agricultural knowledge. As Nelly Arvelo-Jiménex notes, "They are wrong to presume that Indigenous worlds are collections of unattached parts that can be approached with a piecemeal methodology. On the contrary, Indigenous worlds are integrated systems."¹¹⁰ Indigenous leaders argue that knowledge is not divided into discrete packages or individual rights, but instead represents the knowledge of the group as a whole and their connection to the larger world around them. To suggest that Indigenous cultures recognize and value intellectual property as a collective entity does not mean that most Indigenous groups lack an understanding of property or that these works are not protected.¹¹¹ Instead, there are numerous different methods for protecting property. Indigenous knowledge may be the property of a family, an individual, or a

group.¹¹² These people have responsibilities to that knowledge as well as to the community as a whole.

A second point that is thematically present throughout many declarations and comments on traditional knowledge and ownership rights is the idea that this type of property cannot be alienated.¹¹³ The important part about Western intellectual property is that the rights can be alienated from their “original” creator and become the property of someone else. Thus, most authors, musicians, and artists do not own the copyrights to their own works. These rights have been transferred to publishers and corporations for the possibility of royalties. Within an Indigenous perspective, these rights can never be removed from the possession of the originator.

A third important aspect of Indigenous claims regarding intellectual property deals with the role knowledge plays in connecting the past to the future. Knowledge within this paradigm is important to pass on to future generations. In the *Kari-Oca Declaration and the Indigenous Peoples’ Earth Charter* it is claimed “We, the Indigenous Peoples, walk to the future in the footprints of our ancestors.”¹¹⁴ Territorial rights and intellectual property rights are difficult to divide because knowledge and the land is what links the past to the future. The *Declaration of Shamans on Intellectual Property and the Protection of Traditional Knowledge and Genetic Resources* signed by Indigenous groups throughout Brazil is another example of how Indigenous groups narrate their worldview as antithetical to property claims.

As traditional Indigenous peoples who inhabit diverse ecosystems, we possess knowledge on the sustainable management and use of this biological diversity. This knowledge is collective and is not a commodity that may be commercialized as any good in the market. Our knowledge on biodiversity is not separate from our identities, our laws, our institutions, our system of values and our cosmological view as Indigenous peoples.¹¹⁵

The Shaman Declaration goes on to oppose “all forms of patentability arising out of the use of traditional knowledge and we request the creation of mechanisms of punishment to prevent the theft of our biodiversity.”¹¹⁶ Knowledge within this worldview is more holistic and inalienable than the Western model makes it. Thus, resisting “theft” is an important part of social control and preservation of a knowledge system. It is difficult to develop alienable individual property rights within this larger conception of the realm of knowledge and the connection of knowledge to the well-being of humanity.

A fourth theme that emerges is the willingness of Indigenous groups to share their knowledge with the world. They acknowledge that their heritage is part of the larger world heritage, but that this does not open them to specific exploitation to perpetuate individual property rights. Unlike Western owners of intellectual property, Indigenous peoples have suggested

they are willing to share knowledge as long as protections are recognized. Indigenous peoples are willing “to offer it [knowledge] to all humanity provided their fundamental rights to define and control this knowledge are protected by the international community.”¹¹⁷ The language of a common heritage of humankind is defensible *if* it does not become a justification for appropriating and rendering private ideas and inventions held in common. In other words, if the free exchange of information occurs then a positive formulation of the common heritage idea is at work – sort of open sourcing culture. However, if the Lockean understanding of common heritage as raw material for appropriation is the predominant understanding, then some alternative understanding is necessary.

While these legal claims and innovations are necessary in providing an alternative to intellectual property law that can be used to protect Indigenous knowledge, there is perhaps an even more important discourse that has emerged as a result of the resistance created by Indigenous peoples to the expansion of intellectual property rights. This discourse relies on the underlying moral theory of connectedness – life is not for sale.¹¹⁸ Perhaps developing and enriching a discourse of sacredness is more important than further entrenching a property rights perspective. By sacredness I do not mean a return of some sort of religious paradigm, but instead a removal of market forces from realms where they possibly do not belong. Again, it is only possible to understand the full impact of what we have lost by examining those peoples who are about to lose the very same thing.

Laurie Anne Whitt and her colleagues identify clearly how important the philosophy of preserving some area of life as sacred is to many Indigenous peoples.

One reason for the fierce resistance of Indigenous peoples to the varied forms of contemporary biocolonialism is that it commodifies, privatizes, and commercializes both knowledge of the natural world and genetic life forms themselves. To convert life forms into intellectual property is to distort their value, to alter their contribution to the natural order. The commodification of both knowledge and genetic resources entailed by biocolonialism results in the abandonment of crucial moral responsibilities to future generations.¹¹⁹

Retaining and more aggressively asserting a space that can remain uncommodified is perhaps the most essential and politically difficult aspect of the contemporary struggle over intellectual property rights. It is certainly difficult for those, like most US citizens, who have already seen virtually every aspect of their lives become subject to the market to understand the horror and anger that can result from the appropriation of cultural icons and traditional knowledge for profit.

There is nothing in the USA, I would argue, that could evoke the same sort of response. Even our most “sacred” symbols, the flag, religious icons,

or memorials, are among our most commercial products. Other cultural symbols, like Mickey Mouse or Elvis, retain their hold on US culture because they are little more than commercial entities – constantly marketed, but not really allowed cultural lives of their own. Thus, the power of the language of resistance to intellectual property being developed by the keepers of traditional knowledge goes well beyond the preservation of traditional systems. It can and should be the generating discourse behind a transformation of the Western intellectual property system as well.

Conclusion

The Hegelian progress of History enshrined on the Punchbowl memorial is slowly being replaced. Indigenous peoples, women, plants, and animals no longer stand outside history without a voice. While their voices remain silenced and marginalized in many ways, it is possible to see the paradigm shifting as, gradually, respect is granted to Indigenous cultures. It is recognized that a superior moral condition may mean living in closer connection to nature, and that Indigenous cultures and peoples are more than the raw materials necessary to generate a high standard of living for Western societies. These transformations in thought have happened as a result of consistent struggle on the part of Indigenous peoples to be recognized.

Traditional knowledge issues have become increasingly mainstreamed. There has been growing international interest in framing traditional knowledge as intellectual property, but little agreement on how that might be accomplished. The World Bank, for example, has entered the debate, suggesting that intellectual property associated with the world's poor can be better exploited to their benefit.¹²⁰ Using this line of thought, Coenraad J. Visser identifies two “goalposts” for intellectual property protection as 1) protection against exploitation of traditional knowledge, or using intellectual property system to serve as a barrier to external exploitation; 2) protection for exploitation of traditional knowledge, or trying to develop models that will use intellectual property systems to ensure Indigenous peoples benefit and preserve their knowledge.¹²¹

The World Intellectual Property Organization (WIPO) has also sought to frame traditional knowledge as intellectual property. Since the late 1990s, WIPO has served as a clearinghouse of issues of traditional knowledge. WIPO has held a series of meetings on the issues of intellectual property and traditional knowledge, and continues to work towards the development of protective tools for traditional knowledge.¹²² Additionally, WIPO has served as an important meeting point for Indigenous groups to share ideas and understandings. However, both the World Bank interest in intellectual property and the work of WIPO place traditional knowledge within the paradigm of intellectual property, whereas at least some of what Indigenous groups seek to clarify is the importance of traditional knowledge *outside* a framework of intellectual property that renders ideas into commodities.

In addition to the growing acceptance that something called “traditional knowledge” deserves some sort of protection, it is also important to note that there are many ethical scientists working within the Western tradition who have respected the knowledge of Indigenous peoples and sought to protect it by developing ethical and moral codes of their own.¹²³ Additionally, legal theorists like Peter Drahos also have contributed significantly to the ways in which developing countries may address the issue of traditional knowledge.¹²⁴ Furthermore, despite the criticism of companies like Shaman Pharmaceuticals by the NGO RAFI, the attempt they make to balance protection of traditional knowledge and compensation for its use with a Western research and development model may be one important avenue for future ventures.¹²⁵

One cannot forget the global movement resisting the commodification of seeds, traditional knowledge, culture, and, as discussed in the previous chapter, genetic information. This movement has nodes throughout the Western world as well as the global South that have also coalesced around the larger issues of globalization. In India, the Seed Satyagraha – the non-violent resistance to the commodification of seeds – has drawn hundreds of thousands of farmers into the streets to protest the use of genetically modified crops and seed patents.¹²⁶ Similar movements can be found throughout Europe and the USA.¹²⁷ Using street theatre, social protest, direct action, and civil disobedience, concerned citizens have challenged genetically modified organisms, seed patents, and the corporate ownership of life. Such a movement has helped raise awareness about the concerns that exist over intellectual property and help foster an environment in which alternative models might find sympathetic listeners.

The alternative that is developing is one that will first recognize that creativity and scientific inventiveness cannot be separated from the cultural gifts of the public domain and free exchange of information. It is an alternative that refuses to enforce a homogeneous paradigm for protecting intellectual property, but instead recognizes and respects the multiplicity of property models that exist, and can be constructed to protect the cultural and natural diversity remaining on the globe. This alternative attempts to reverse the over-expansion of property rights discourse and retain a noncommodified intellectual and cultural space. This alternative values sharing, but also values the reciprocity of relationships that do not render one group the pawns and raw material of the other. This alternative may seem utopian and impossible to achieve, but then the entire discourse of individual rights was once considered impossible to achieve. The very fact that this alternative can be imagined should give us hope that the future may truly embrace a different path.

7 Conclusion

The Trade Related Aspects of Intellectual Property Rights (TRIPS) agreement was passed over a decade ago with little public discussion. During the intervening years much has happened in the world of intellectual property. In the USA, the controversial Digital Millennium Copyright Act (DMCA) was enacted spawning a new generation of copyright litigation. The Copyright Term Extension Act (CTEA) also passed and was upheld by the US Supreme Court. The European Union endorsed relatively strong database protection, an issue that many have attempted to keep from crossing the ocean.¹ Throughout the global South, there were efforts to harmonize intellectual property laws with the mandates established in TRIPS, which resulted in the development of legal infrastructures to protect intellectual property.²

As the previous chapters illustrate, the expansion of intellectual property laws at the global level has met with some resistance. Certainly, resistance was mounted during the trade negotiations leading up to the TRIPS agreement, especially on the part of nation-states who were not going to benefit from stricter intellectual property laws.³ Given the nature of international trade negotiations, the general public was not necessarily attuned to the abstract language of free trade and intellectual property. However, the ways copyright and patent laws have begun to impact citizens around the globe have raised awareness to new levels regarding the impact of intellectual property. In the process the dominant narratives surrounding patent and copyright – that they are necessary to ensure progress and innovation – have been challenged.

Where copyright and patent law begins to touch everyday life, resistance begins to grow. The issue of access to medication has alerted people around the world to the controversies of putting patents ahead of public health. While access to AIDS medication remains minimal throughout most of Africa and the East, the pharmaceutical companies can no longer hide behind the language of property rights without also paying tribute to the idea that health care is a human right. As the RIAA continues its pursuit of music downloaders, it is not only creating awareness about its version of property laws, but also a new generation of music listeners hostile to the

industry and ready to make the leap to an alternative model. The use of terms such as biopiracy and biocolonialism to describe the approach of corporations seeking new products to appropriate and commercialize has also established lines between what can be commodified and a moral discourse of human integrity and autonomy.

Paradoxically for intellectual property interests, as the idea of intellectual property becomes more widely understood so does resistance to that idea. The unintended consequence of heightening awareness of the intellectual property regime, expanding intellectual property rights, and strengthening enforcement has been a growing global resistance. It has not been possible to keep the strong protection offered by the American version of patent and copyright laws from widespread critique, once the intentions of intellectual property interests were understood. The idea that citizens around the world would march in the street publicly protesting patents on seeds, software patents, the arrest of computer programmers, or acts of biopiracy and genetic modification would have seemed a bit far-fetched even ten years ago; yet contemporary social protest has sprung up around each of these issues.

This book has attempted to describe the emergence of these resistances because, in part, they offer hope that the future will not be completely owned and operated by corporate culture. These resistances suggest that it is possible to challenge the logic of “progress” as it is associated with the commercialization of not only products, but also of humans and nature. These resistances also offer insights into how powerful genuine grass roots social protest can be in the face of corporate discourses on intellectual property rights. What has emerged is not a single coherent transnational social movement, but a loosely organized conglomeration of affiliated interests, networked together and generally operating under the growing resistance to “globalization.” Virginia Vargas describes transnational social movements, “not as unified actors, and not only as movements of plural content. They are revealed rather as a ‘field of actors,’ wide, diverse, and in permanent growth and transformation.”⁴

This chapter is not meant to provide the definitive analysis of how these groups have become so successful. However, it is possible to point to several important aspects of the growing resistance to intellectual property on its many fronts that are worth noting. First, and perhaps most importantly, the ongoing struggle against strong intellectual property laws is an interpretive struggle over meaning. To the degree the resistances discussed in this book have been successful, it has been almost exclusively at the level of transforming the discourse that structures meaning about an event. Activists have been fairly successful at changing public sentiment, relatively rapidly in some cases, by offering an alternative way of talking about intellectual property issues.

Each of the chapters in this book deals with what is primarily a struggle over meaning – What will be the meaning and value of the public domain? How should open source as an idea be interpreted? Is access to essential medicines a human right? And what are the consequences of using the

language of biopiracy instead of bioprospecting? Mike Godwin uses the idea of memes to describe these interpretive struggles. Memes are “ideas that provide structure, points of reference, fulcrums of thought.”⁵ He suggests that free-speech activists (but the same applies to intellectual property activists) “commit ourselves to memetic engineering: crafting good memes that improve society as well as ‘anti-viral’ countermemes that may neutralize and even eliminate the bad memes floating around out there on the Net and in society at large.”⁶ The idea of open source is an example of a meme that has provided a powerful new way of thinking about not only computer software, but also of education, writing, and the Internet. In a way, Microsoft were correct when they called the GPL a “viral” license. Indeed, the idea of open source has spread throughout the Internet and into wider culture as a way of talking about a freer and more open society.

A second important lesson that can be gleaned from these different resistances is that direct action has a role to play in political movements. The 1999 battle in Seattle was an inspiring event for counter-globalization forces in part because of the powerful impact direct action had on the World Trade Organization meetings. However, direct action has taken many forms in the intellectual property battles. In fighting for access to AIDS medication, AIDS activists disrupted Al Gore’s early campaign at every opportunity and were successful in getting the Clinton administration to reverse its stand on the issue of access to medication in South Africa.⁷ The resistance to genetically modified organisms in the UK has been typified by street theater and dancing vegetables.⁸ These resistances are focused and direct, but also long term. In many cases, the resistance that is necessary is ongoing and has taken decades to create any benefits.⁹ Certainly, the fight to gain meaningful access to AIDS medication throughout the globe has only begun. While Chapter 4 discusses an early victory in that fight, the battle is long from over and future direct action will be necessary to move the struggle forward.

A third important aspect of the growing resistance is its transnational nature. As mentioned above, these movements tend to be focused on issues that have both local and global implications. The idea of the public domain transcends the boundaries of the nation-state, and scholars are addressing this issue from multiple perspectives. Resistance to biopiracy has become an international issue, with activists working in both the global North and South. It is important to recognize that I am not discussing a coherent transnational social movement in the chapters of this book, but, rather, a series of movements that have the potential of converging. This type of convergence is discussed by Andrew Feenberg in relation to technology. Iain Thomson explains Feenberg’s position as a movement towards radical democracy.¹⁰

Feenberg’s hope is that the proliferation of situated microstruggles will eventually lead to a “convergence” in which AIDS patients join together with environmentalists, Minitel hackers, progressive medical researchers,

and the like in order to form a “counter-hegemony” capable of permanently democratizing technological design and so gaining some control over the historical impact of technology.¹¹

Feenberg’s words are equally applicable to battles over copyright and patent law, and the counter-hegemony that might possibly emerge from “situated microstruggles” is evident in the types of resistances that already exist. The resulting convergence should not be mistaken for a top-down centralized social movement, but rather as a network of interested actors using a common discourse. As Peter Drahos puts it, “webs of dialogue can help to displace the use of webs of coercion, which in the case of intellectual property exist and have been used”.¹² Under the banner of resisting the over-protection of copyright and patent law within the context of anti-globalization, it is possible that such a movement will come into existence.

Beyond the emergence of social movements, committed to resisting intellectual property, it is also necessary to seek out alternatives to the status quo. Many activists resisting the expansion of intellectual property have also successfully developed these types of alternatives. For example, the open-source movement and the Linux/GPL licensing scheme are not simply ways of resisting proprietary software and the privatization of copyright law, but instead are a viable alternative model. Additionally, the work done by Indigenous peoples to articulate an alternative to intellectual property when it comes to traditional knowledge should also be understood as not simply resisting, but seeking an alternative as well. At the larger level of globalization, the World Social Forum has begun the process of articulating “another world,” one that is critical of traditional intellectual property models and actively seeks alternative paradigms.¹³

It must not be forgotten that social movements and critique of the status quo are part of a political struggle over meaning. However, it is also important to recognize that we must move beyond the logic of capitalism if we truly seek to address the substantive issues raised by the numerous types of resistances that have been discussed here. Chaia Heller eloquently describes why it is necessary to move beyond capitalism.

Citing corporations, instead of the capitalist system itself, as the main source of the problem, activists attempt to turn the ‘capitalist clock’ back to a kinder and gentler form of capitalism. Unfortunately, this critique also fails to recognize the need to move beyond a logic based on hierarchy and centralization, and thus cannot move beyond a capitalist system that was born out of a logic of unlimited growth, accumulation, profit and domination.¹⁴

The concern of activists such as Heller is that we don’t forget the larger systemic critique that is necessary. Instead, she suggests that we remember that resistance must come in the form of political protest that seeks to

replace the economic system by “pushing back with *political* power.”¹⁵ The type of movement that is necessary is “*a new kind of political locality* based on principles of confederation, cooperation, and direct democracy.”¹⁶

This search for a democratic politics is woven throughout the language of the social movements focused on resisting globalization. In the mid-1990s, intellectual property interests perhaps felt that they had triumphed when TRIPS was accepted as the law. However, the past ten years of social protest and the growing global resistance to the interpretation of intellectual property used by corporate powers suggests that the future is far from determined – instead once citizens actively begin to take part in the political debate over how their lives will be framed, it is possible to nudge politics back towards a concern for the public.¹⁷

It is impossible to fully account for the numerous different projects and micro-resistances that have emerged in relation to intellectual property laws. Additionally, it is impossible to fully incorporate the many scholarly works that have helped create a conceptual critique of intellectual property. In the introduction, I discussed the way copyright and patent law slowly changed the way I conceptualized creative work. I still see value in the idea of copyright and patent law, but only to the degree that it is subsumed into a much larger project that puts human and public interests before profit-making interests. What becomes evident from tracing the multiple struggles over intellectual property that have emerged is that no single side has a monopoly on the truth – it may be possible for pharmaceutical companies to believe they need strong intellectual property rights at the same time that activists seek access to medication for those who cannot afford it. Many Western scientists believe they act in the benefit of the Indigenous groups they work with when negotiating agreements for research, but these same agreements may look different when viewed through the anti-colonial framework that RAFI uses. In no way should these words be understood as apologizing for the misdeeds of corporate or scientific actors, but instead they are meant to suggest that what has been lacking, and what activists have opened the space for, is a public debate on the plethora of issues surrounding intellectual property laws. As we move further into a world that operates at the level of brands and conceptual products, it is important to create the public forum in which our idea of the future can be discussed and debated. If nothing else, it is important to create visions of alternative future worlds if only to give us hope that the future has not been predetermined by the corporate entities that are continuing to take ownership over our culture, genes, and environment.

Notes

Introduction

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- 2 Specifically, the use of the Digital Millennium Copyright Act should be of concern. One prominent example is the Dmitry Sklyarov case. Sklyarov is a Russian computer programmer who was arrested while attending a conference in Las Vegas and presenting his work on a software program that allowed users to crack the Adobe e-book protection devices. He was charged with violating the anti-circumvention clauses of the DMCA, an action that sparked protests across the USA. He has since been released and the US District Court in San Jose has acquitted Sklyarov's employer, Elcomsoft, of criminal charges. See: Alex Salkever, "Digital Copyright: A Law Defanged?" *Business Week OnLine*, 23 December 2003.
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- 4 Naomi Klein talks about the relation of branded culture and consumers as a monologue. See: Naomi Klein, *No Logo: Taking Aim at the Brand Name Bullies*, Toronto: Vintage Canada, 2000.
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- 6 Janet Kronblum, "Scary Lawyer Letters and Chilling Effects," *USA Today*, 26 February 2002: 6D (describing numerous cease and desist letters).
- 7 Elizabeth Weise, "'Potter' Webfans Organize Boycott," *USA Today*, 2 February 2002. Available online at: <http://www.usatoday.com/tech/news/2001-02-22-potter.htm> [accessed 30 June 2004]. For Sklyarov see: Salkever, op. cit.
- 8 There is a growing literature on the contradictions between copyright and free speech. See: Michael D. Birnhack, "Copyrighting Speech: A Trans-Atlantic View," in P.L.C. Torremans (ed.), *Copyright and Human Rights*, Netherlands: Kluwer Law International, 2004, pp. 37–62; Michael Birnhack, "The Copyright Law and Free Speech Affair: Making-Up and Breaking-Up," *Idea: The Journal of Law and Technology* 43, 2003: 233–98; Kathleen K. Olson, "First Amendment

Values in Fair Use Analysis,” *Journalism Communication Monographs* 5, winter 2004: 161–202.

- 9 This issue will be addressed in the later chapters of the book.
- 10 See Klein, *op. cit.*
- 11 The distinctions between open source and Stallman’s free software will be discussed in Chapter 2.
- 12 Richard Stallman, “Confusing Words and Phrases That Are Worth Avoiding.” Available online at:
<http://www.gnu.org/philosophy/words-to-avoid.html#IntellectualProperty> [accessed 30 June 2004].

1 Theorizing the public domain: copyright and the development of a cultural commons

- 1 Chris Sprigman, “The Mouse That Ate the Public Domain: Disney, the Copyright Term Extension Act, and *Eldred v. Ashcroft*,” *Findlaw’s Legal Commentary*, available online at:
http://writ.news.findlaw.com/commentary/20020305_sprigman.html [accessed 14 July 2004].
- 2 For his amicus brief in *Eldred v. Ashcroft*, Peter Jazsi graphically depicted the impact of copyright extensions on the public domain. Peter Jazsi, *Growth Rate of the Public Domain*. Available online at:
<http://leon.law.harvard.edu/openlaw/eldredvashcroft/pubdomain.html> [accessed 14 July 2004]. See also the amicus brief filed by concerned intellectual property law professors and others in *Eldred v. Reno*.
<http://leon.law.harvard.edu/openlaw/eldredvashcroft/legal.html#amici> [accessed 14 July 2004].
- 3 Laura Gasaway, “Importance of the Public Domain,” *Information Outlook*, July 2001: 32–3. The retrieval from the public domain of foreign works began when the USA signed TRIPS in 1996. Numerous works by foreign authors that had entered the public domain due to technical errors were given copyright protection back. See: Thomas Gordon Kennedy, “GATT – Out of the Public Domain: Constitutional Dimensions of Foreign Copyright Restoration,” *St John’s Journal of Legal Commentary* 11, spring 1996: 545–7.
- 4 Lawrence Lessig, *The Future of Ideas: The Fate of the Commons in a Connected World*, New York: Random House, 2002, pp. 196–9.
- 5 The Supreme Court ruled that the CTEA was constitutional and allowed the twenty-year extension to stand, thus ending *Eldred’s* quest for more access to the public domain. *Eldred v. Ashcroft*, 537 U.S. 186 (2003).
- 6 The DMCA (Digital Millennium Copyright Act) has also been critiqued as leading to a smaller public domain and restricting the fair-use doctrine. The DMCA sets the stage for the emergence of a “pay-per-use” society. See: John R. Therien, “Exorcising the Specter of a “Pay-Per-Use” Society: Toward Preserving Fair Use and the Public Domain in the Digital Age,” *Berkeley Technology Law Journal* 16, summer 2001: 979–1043.
- 7 Lessig, *op. cit.*, p. 202. Lessig points out that this battle is not one between liberal and conservative, but between old and new. Status quo forces, threatened by the increasing ambivalence of life in the world of cyberspace, are attempting to regulate the flow of what they see as their property.
- 8 James Boyle, “The Second Enclosure Movement and the Construction of the Public Domain,” *Law and Contemporary Problems* 66, spring/summer 2003: 33–74.
- 9 Jessica Litman, *Digital Copyright*, New York: Prometheus Books, 2001.
- 10 Philip Elliott, “Intellectuals, the ‘Information Society’ and the Disappearance of the Public Sphere,” pp. 260–2, in Chris Newbold and Oliver Boyd-Barrett (eds),

- Approaches to Media: A Reader*, London and New York: St Martin's Press, 1995, p. 260.
- 11 David Lange, "Recognizing the Public Domain," *Law and Contemporary Problems* 44, 1981: 147–78.
 - 12 Christopher May, private email, 10 September 2003.
 - 13 In November of 2001 Duke University held a conference on the public domain and brought together leading intellectual property scholars to discuss the issue. Available online at: <http://www.law.duke.edu/pl/about.html> for proceedings and webcast of the conference. The proceedings have since been published in a special issue of *Law and Contemporary Problems*.
 - 14 David Bollier, *Silent Theft: The Private Plunder of our Common Wealth*, New York and London: Routledge, 2002, p. 6.
 - 15 Lange, op. cit., pp. 147–78; Jessica Litman, "The Public Domain," *Emory Law Journal* 39, 1990: 965; James Boyle, "A Politics of Intellectual Property: Environmentalism for the Net," *Duke Law Journal* 47, 1997, pp. 87–116; James Boyle, "The Second Enclosure Movement," op. cit.
 - 16 John Frow, "Information as Gift and Commodity," *The New Left Review*, 1996, p. 103.
 - 17 Jürgen Habermas, "The Public Sphere," in Steven Seidman (ed.), *Jürgen Habermas on Society and Politics: A Reader*, Boston: Beacon Press, 1989; Jürgen Habermas, *The Structural Transformation of the Public Sphere: An Inquiry into the Category of Bourgeois Society*, trans. T. Burger, Cambridge: MIT Press, 1989.
 - 18 Boyle, "Second Enclosure Movement," op. cit., p. 57.
 - 19 Richard Sennett, *The Fall of Public Man*, New York: W.W. Norton & Company, 1974; Robert A. Baron, "Making the Public Domain Public," 28 April 2000. Available online at: <http://www.studiolo.org/IP/VRA-TM-SF-PublicDomain.htm> [accessed 14 July 2004]; Carla Hesse, *The Other Enlightenment: How French Women Became Modern*, Princeton and Oxford: Princeton University Press, 2001.
 - 20 Litman, op. cit., p. 975; Boyle, "Second Enclosure Movement," op. cit.
 - 21 Mark Rose, *Authors and Owners: The Invention of Copyright*, Cambridge and London: Harvard University Press, 1993.
 - 22 *Ibid.*, pp. 38–9. Christopher May uses Karl Polanyi's idea of "fictitious capital" as a parallel example of the transformation of "labor, land, and money" into commodities. Each must be narrated into being. See: Christopher May, "Justifying Enclosure," in Sandra Braman (ed.), *Biotechnology and Communication: The Meta-Technologies of Information*, Mahwah, New Jersey, and London: Lawrence Erlbaum Associates, 2004, pp. 119–43.
 - 23 Litman, "The Public Domain," op. cit.
 - 24 Trevor Ross, "Copyright and the Invention of Tradition," *Eighteenth-Century Studies* 26, 1992: 1.
 - 25 Robert L. Dawson, *The French Booktrade and the "Permission Simple" of 1777: Copyright and Public Domain*, Oxford: The Voltaire Foundation, 1992.
 - 26 Paul Starr, "The Electronic Commons: The Promise of the New Public Domain," *The American Prospect*, 2000: 32. Starr argues that it is possible to define an "illegal public domain" where copyrighted works are exchanged in violation of the law.
 - 27 Carol M. Rose, *Property and Persuasion: Essays on the History, Theory, and Rhetoric of Ownership*, Boulder, San Francisco, and Oxford: Westview Press, 1994.
 - 28 *Ibid.*, p. 109.
 - 29 *Ibid.*, p. 110.
 - 30 *Ibid.*, pp. 110–11.
 - 31 *Ibid.*, p. 112.
 - 32 *Ibid.*, p. 113.
 - 33 *Ibid.*, pp. 121–2.

- 34 Robert Tudor Hill, *The Public Domain and Democracy: A Study of Social, Economic and Political Problems in the United States in Relation to Western Development*, New York: Longmans, Green & Co., Agents, 1910; Roy M. Robbins, *Our Landed Heritage: The Public Domain 1776–1970*, Lincoln and London: University of Nebraska Press, 1976.
- 35 It should be noted that this definition already excludes many people. Native Americans and African Americans were not part of the “people” early US government said it represented.
- 36 Carol Rose, *op. cit.*, p. 124.
- 37 The standards for fair use are explained in Section 107 of the Copyright Act. 17 U.S.C. 107.
- 38 Starr, *op. cit.*, p. 30.
- 39 Pamela Samuelson, “Mapping the Digital Public Domain: Threats and Opportunities,” *Law and Contemporary Problems* 66, spring/summer 2003: 148–54.
- 40 Marlin H. Smith, “The Limits of Copyright: Property, Parody, and the Public Domain,” *Duke Law Journal* 42, 1993: 1267–8.
- 41 Samuelson, *op. cit.*, p. 151, Figure 1.
- 42 *Ibid.*
- 43 *Ibid.*
- 44 *Ibid.*, p. 150.
- 45 Edmund S. Morgan, *Inventing the People: The Rise of Popular Sovereignty in England and America*, New York and London: W.W. Norton & Company, 1988.
- 46 *Ibid.*, pp. 49–50.
- 47 *Ibid.*, p. 60.
- 48 *Ibid.*, p. 60.
- 49 In fact, there is evidence that much of what is termed “mob” activity or “riots” needs actually to be interpreted through a different moral economy. Specifically, E.P. Thompson’s work on the political economy of corn and the moral economy of the crowd suggests that what have been called riots or mobs were actually politically motivated people reacting to new economic relationships that were replacing traditional economic norms. Calling these groups mobs or crowds engaged in riots helps obscure the political nature of the conflict. E.P. Thompson, *Customs in Common*, New York: New York Press, 1991.
- 50 Benedict Anderson, *Imagined Communities*, London and New York: Verso, 1983; Habermas, *Structural Transformation of the Public Sphere*, *op. cit.*
- 51 Habermas, *ibid.*, p. 34.
- 52 Ross, *op. cit.*, pp. 7–9.
- 53 For more information on the importance of the novel to the creation of national identity and the nation-state see: Eva Hemmungs Wirtén, *No Trespassing: Authorship, Intellectual Property Rights, and the Boundaries of Globalization*, Toronto, Buffalo, and London: University of Toronto Press, 2004.
- 54 Habermas, *Structural Transformation*, *op. cit.*, p. 42.
- 55 Catherine M. Vernon, “Common Cultural Property: The Search for Rights of Protective Intervention,” *Case Western Reserve Journal of International Law* 26, 1994: 437–8.
- 56 Martha Woodmansee, “The Cultural Work of Copyright: Legislating Authorship in Britain, 1837–1842,” in Austin Sarat and Thomas R. Kearns (eds), *Law and the Domains of Culture*, Ann Arbor: University of Michigan Press, 1998, pp. 67–8.
- 57 Nicholas Garnham, “Concepts of Culture – Public Policy and the Cultural Industries,” in Anne Gray and Jim McGuigan (eds), *Studying Culture: An Introductory Reader*, London and New York: Arnold, 1997, p. 57.
- 58 Michael Warner, “The Mass Public and the Mass Subject,” in Bruce Robbins (ed.), *The Phantom Public Sphere*, Minneapolis and London: University of Minnesota Press, 1993, p. 234.

- 59 Bruce Robbins (ed.), *The Phantom Public Sphere*, Minneapolis and London: University of Minnesota Press, 1993.
- 60 Jodi Dean, *Publicity's Secret: How Technoculture Capitalizes on Democracy*, Ithaca: Cornell University Press, 2002, p. 9.
- 61 Shalini Venturrelli, "Political Justice and Civil Society in the Information Age," in Kevin F. Kersten and William E. Biernatzki (eds), *Value and Communication: Critical Humanistic Perspectives*, Cresskill: Hampton Press, Inc, 2000, p. 86.
- 62 Michael Warner, "The Mass Public and the Mass Subject," in Robbins (ed.), *The Phantom Public Sphere*, Minneapolis: University of Minnesota Press, 1993, p. 239.
- 63 Dean, op. cit., p. 30.
- 64 Stanley Aronowitz, "Is a Democracy Possible? The Decline of the Public in the American Debate," in Robbins (ed.), *The Phantom Public Sphere*, Minneapolis: University of Minnesota Press, 1993; Nancy Fraser, "Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy," *ibid.*; Robbins, op. cit., p. 14.
- 65 Fraser, op. cit., p. 14.
- 66 Rosemary Coombe, "Author/Izing the Celebrity: Publicity Rights, Postmodern Politics, and Unauthorized Genders," *Cardozo Arts and Entertainment Law Journal* 10, 1992, pp. 365–95; Rosemary Coombe, "Objects of Property and Subjects of Politics: Intellectual Property Laws and Democratic Dialogue," *Texas Law Review* 69, 1991, pp. 1853–80.
- 67 Coombe, "Author/izing," op. cit., p. 376. Coombe argues that celebrity images become important markers for identity formation among subcultures. She states that, "marginal groups are continually engaged in nascent constructions of alternative identities. The celebrity image plays a central role in many of these cultural practices." Thus, the circulation of texts has important ramifications for subcultures that constitute identities independent of the primary public sphere.
- 68 David Harvey, *The Condition of Postmodernity*, Cambridge: Basil Blackwell, Inc., 1989, p. 239.
- 69 Dean, op. cit., p. 36.
- 70 *Ibid.*, p. 35.
- 71 *Ibid.*, p. 150.
- 72 While I do not directly deal with censorship in this chapter, it is important to mention that copyright can be (and has been) used as a tool for censorship.
- 73 Venturrelli, op. cit.; Peter Dahlgren, *Television and the Public Sphere: Citizenship, Democracy and the Media*, London: SAGE Publications, 1995; Nicholas Garnham, "Concepts of Culture – Public Policy and the Cultural Industries," in Anne Gray and Jim McGuigan (eds), *Studying Culture: An Introductory Reader*, London and New York: Arnold, 1997, pp. 54–61; Nicholas Garnham, *Capitalism and Communication: Global Culture and the Economics of Information*, London: SAGE Publications, 1990.
- 74 Naomi Klein, *No Logo: Taking Aim at the Brand Bullies*, Toronto: Vintage Canada, 2000, pp. 175–82. Klein speaks of how corporations wish us to have "relationships" with their products, but that the conversation can only be a monologue.
- 75 Garnham, *Capitalism and Communication*, op. cit., pp. 104–14.
- 76 Fraser, op. cit., p. 3.
- 77 Litman, "The Public Domain," op. cit., p. 968.
- 78 *Ibid.*, p. 975.
- 79 Starr, op. cit., pp. 30–4.
- 80 The Open Law Center at Harvard is collecting facts about works that have been impacted by the recent extension of copyright. See: <http://leon.law.harvard.edu/lopenlaw/eldredvrenolexamples.html> [last accessed 14 July 2004]. The Subverted

- Public Domain List gives examples of work that should have become public domain materials, but remained private because of the copyright term extension act. See:
<http://www.law.asu.edu/HomePages/KarjalalOpposingCopyrightExtension/publicdomain/PDlist.html>. *The Secret Garden* entered the public domain in 1987 and has resulted in numerous derivative works that could be said to have enhanced the creative atmosphere. See:
<http://www.law.asu.edu/HomePages/KarjalalOpposingCopyrightExtension/publicdomain/SecretGardenDWs.html> [last accessed 8 May 2002].
- 81 Woodmansee, op. cit., p. 67.
 - 82 Debora Halbert, *Intellectual Property in the Information Age: The Politics of Expanding Property Rights*, New York: Quorum Press, 1999.
 - 83 Eric S. Raymond, *The Cathedral and the Bazaar: Musings on Linux and Open Source by an Accidental Revolutionary*, Beijing and Cambridge: O'Reilly, 1999.
 - 84 Dahlgren, op. cit., p. 20.
 - 85 Leslie Gernstein, "The Wireless, Non-Free, Paperless Future," *USC Annenberg Online Journalism Review*, 2002.
 - 86 James Boyle, *Shamans, Software and Spleens: Law and the Construction of the Information Society*, Cambridge and London: Harvard University Press, 1996; Debora Halbert, op. cit.; Christopher May, *A Global Political Economy of Intellectual Property Rights: The New Enclosures?* London and New York: Routledge, 2000; Lawrence Lessig, op. cit.; Kembrew McLeod, *Owning Culture: Authorship, Ownership, and Intellectual Property Law*, New York: Peter Lang, 2001; Therien, op. cit., pp. 979–1043; Siva Vaidhyanathan, *Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity*, New York and London: New York University Press, 2001.
 - 87 Vaidhyanathan, op. cit., p. 80.
 - 88 *Ibid.*, pp. 159–60.
 - 89 Susan K. Sell, *Power and Ideas: North–South Politics of Intellectual Property and Antitrust*, Albany: University of New York Press, 1998.
 - 90 Litman, "The Public Domain," op. cit., p. 979; Lessig, op. cit., p. 107.
 - 91 "Gone with the Wind Done Gone: 'Re-Writing' and Fair Use," *Harvard Law Review* 115, 2002: 1193.
 - 92 Lange, op. cit.
 - 93 Louise Branson, "Harry Potter Fans Threaten Boycott," *The Straits Times*, February 27, 2001: 6.
 - 94 *Ibid.*, p. 6.
 - 95 John Kheit, "Public Performance Copyright: A Guide to Public Place Analysis," *Rutgers Computer and Technology Law Journal* 26, 1999: 1–63.
 - 96 Joshua P. Binder, "Current Developments of Public Performance Rights for Sound Recordings Transmitted Online: You Push Play, but Who Gets Paid?" *Loyola of Los Angeles Entertainment Law Review* 22, 2002: 1–2.
 - 97 William Matthews, "More Sites Targeted for Shutdown," *Federal Computer Week*, 2002. Available online at:
<http://www.fcw.com/fcw/articles/2002/1111/web-science-11-13-02.asp>.
 - 98 *Ibid.*
 - 99 Vaidhyanathan, op. cit., pp. 163–7.
 - 100 Feist Publications, Inc. v. Rural Telephone Service, Inc. 111 S. Ct. (1991) at 1282.
 - 101 Jordan M. Blanke, "Vincent Van Gogh, 'Sweat of the Brow,' and Database Protection," *American Business Law Journal* 39, 2002: 657.
 - 102 *Ibid.*, p. 676.
 - 103 Jerome H. Reichman and Paul F. Uhlir, "Database Protection at the Crossroads: Recent Developments and Their Impact on Science and

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- 104 Paul J. Heald, “Reviving the Rhetoric of the Public Interest: Choir Directors, Copy Machines, and New Arrangements of Public Domain Music,” *Duke Law Journal* 46, 1996: 245–6.
- 105 *Ibid.*, p. 246.
- 106 Kathleen Connolly Butler, “Keeping the World Safe from Naked-Chicks-in-Art Refrigerator Magnets: The Plot to Control Art Images in the Public Domain through Copyrights in Photographic and Digital Reproductions,” *Hastings Communication and Entertainment Law Journal* 21, 1998: 57–8.
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- 108 *Ibid.*, pp. 68–9.
- 109 *Ibid.*, pp. 68–9.
- 110 *Ibid.*, pp. 68–9.
- 111 *Ibid.*, pp. 70–1.
- 112 Numerous scholars take up trademark law specifically. See: Klein, *op. cit.*
- 113 The United States’ Patent and Trademark Office provides information about the length and scope of patent protection. “General Information Concerning Patents,” available online at: <http://www.uspto.gov/web/offices/pa/cldoc/genindex.html#patterm> [accessed 14 July 2004].
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- 117 Jennifer Wells, “At War over Prozac: Generic Drugmakers Fight to Sell Look-Alike Copies of the Antidepressant,” *MacLeans*, 1996, p. 40.
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- 119 Carlos M. Correa, *Intellectual Property Rights, the WTO and Developing Countries: The Trips Agreement and Policy Options*, Penang: Third World Network, 2000.
- 120 Michael A. Heller, “The Tragedy of the Anticommons: Property in the Transition from Marx to Markets,” *Harvard Law Review* 111, 1998: 621–8.
- 121 Lessig, *op. cit.*
- 122 Robbins, *op. cit.*, p. 301.
- 123 Garrett Hardin, “Tragedy of the Commons,” in David Schlosberg and John S. Dryzek (eds), *Debating the Earth: The Environmental Politics Reader*, Oxford: Oxford University Press, 1999, pp. 23–34.
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- 125 Robbins, *op. cit.*, p. 301.
- 126 Hill, *op. cit.*, p. 75.
- 127 Roderick Nash, *Wilderness and the American Mind*, 3rd edn, New Haven and London: Yale University Press, 1967.

- 128 Carol Rose, *op. cit.*, p. 125.
- 129 *Ibid.*, p. 141.
- 130 *Ibid.*, p. 141.
- 131 Hardin, *op. cit.*, p. 27
- 132 Algis Mickunas, "The Public Domain," in John W. Murphy and Dennis L. Peck (eds), *Open Institutions: The Hope for Democracy*, Connecticut and London: Praeger, 1993, p. 181.
- 133 Keith Aoki, "Neocolonialism, Anticommons Property, and Biopiracy in the (Not-So-Brave) New World Order of International Intellectual Property Protection," *Indiana Journal of Global Legal Studies* 6, 1998: 41.
- 134 Mark Hosler, speech given at the Conference on the Public Domain, Duke University School of Law, 2001.
- 135 May, *op. cit.*, p. 48.
- 136 Litman, "The Public Domain," *op. cit.*, p. 988.
- 137 Another possibility to more clearly defining the boundaries of the public domain might be to retain a "muddiness" to the laws of copyright, especially as they apply to cyberspace. See: Dan Burk, "Muddy Rules for Cyberspace," *Cardozo Law Review* 21, 1999: 121–79.
- 138 Heald, *op. cit.*, p. 275.
- 139 While the Center for the Public Domain has ended its work as a charitable foundation, its website continues to host important links to work done in the interest of the public domain: <http://www.centerforthepublicdomain.org/>.
- 140 For information on the case see: Open Law: Eldred v. Ashcroft, <http://eon.law.harvard.edu/openlaw/eldredvashcroft/>.
- 141 While an appeals court has recognized the "fair-use" defense for The Wind Done Gone, and a private settlement has ensured the end to litigation, the free-speech issues, and issues regarding public domain, fair use, parody, and transformative uses remain unanswered. See: Wirtén, *op. cit.*, pp. 130–1.
- 142 Dan L. Burk, "Patenting Speech," *Texas Law Review* 79, 2000: 100–62.
- 143 While it is difficult to tell how active an organization is from its web presence, there are certainly numerous groups focused on the public domain. For example, the Union for the Public Domain is an organization focusing on public domain issues. See: <http://www.public-domain.org/>.
- 144 May, *op. cit.*, p. 56.
- 145 Smith, *op. cit.*, p. 1268.
- 146 Richard Stallman, "Confusing Words and Phrases That Are Worth Avoiding," available online at: <http://www.gnu.org/philosophy/words-to-avoid.html#IntellectualProperty> [accessed 14 July 2004].
- 147 Litman, "The Public Domain," *op. cit.*, p. 1010.
- 148 Rosemary Coombe, "Fear, Hope, and Longing for the Future of Authorship and a Revitalized Public Domain in Global Regimes of Intellectual Property," *DePaul Law Review* 52, summer 2003: 1181
- 149 Litman, *op. cit.*, p. 1011.
- 150 Ronald W. Bettig, *Copyrighting Culture: The Political Economy of Intellectual Property*, Boulder: Westview Press, 1996, p. 97.
- 151 Bollier, *op. cit.*, pp. 79–84; Vandana Shiva, *Biopiracy: The Plunder of Nature and Knowledge*, Boston: South End Press, 1997.
- 152 Luisa Maffi, "Language, Knowledge, and Indigenous Heritage Rights," in Luisa Maffi (ed.), *On Biocultural Diversity: Linking Language, Knowledge, and the Environment*, Washington and London: Smithsonian Institution Press, 2001, pp. 417–19; Coombe, "Intellectual Property," *op. cit.*
- 153 Shiva, *op. cit.*, p. 5.

- 154 Stephen B. Brush, "Protectors, Prospectors, and Pirates of Biological Resources," in Luisa Maffi (ed.), *On Biocultural Diversity: Linking Language, Knowledge, and the Environment*, Washington and London: Smithsonian Institution Press, 2001, pp. 517–30; Graham Dutfield, "The Public and Private Domains: Intellectual Property Rights in Traditional Knowledge," *Science Communication* 21, 2000: 274–95; Aoki, op. cit., p. 49.
- 155 Sandra S. Awang, "Indigenous Nations and the Human Genome Diversity Project," in George J. Sefa Dei, Budd L. Hall, and Dorothy Golan Rosenberg (eds), *Indigenous Knowledge in Global Contexts: Multiple Readings of Our World*, Toronto: University of Toronto Press, 2000, pp. 120–36; Marie Battiste and James (Sa'ke'j) Youngblood Henderson, *Protecting Indigenous Knowledge and Heritage*, Saskatoon: Purich Publishing Ltd, 2000; Vilsoni Hereniko, "Indigenous Knowledge and Academic Imperialism," in Robert Borofsky (ed.), *Remembrance of Pacific Pasts: An Invitation to Remake History*, Honolulu: University of Hawai'i Press, 2000, pp. 78–91.
- 156 Battiste and Henderson, op. cit., p. 71.
- 157 Dutfield, op. cit., p. 281.
- 158 Ibid., p. 286.
- 159 Ibid., p. 287.
- 160 Ibid., p. 288.

2 Licensing and the politics of ownership: end user licensing agreements versus open source

- 1 There is considerable debate over the use of the term "open source." Richard Stallman, creator of the GNU license and the Free Software Foundation, used the words "free software" to describe his ideology and programs. However, many following in the Linux tradition found that the term "free software" was confusing and the term "open source" was coined by Christine Peterson, president of the Foresight Institute, as a possible alternative. The term has since caught on. See: Sam Williams, *Free as in Freedom: Richard Stallman's Crusade for Free Software*, Beijing: O'Reilly, 2002, pp. 161–2. I will use the term open source because it has now entered the mainstream debate and become a global way to refer to software created under the GPL licensing agreement (as well as others).
- 2 ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, p.1449, (7th Cir. 1996).
- 3 RE: My Day in Court (ProCD v. Zeidenberg), 25 September 1995. Available online at: <http://www.cni.org/Hforums/cni-copyright/1995-03/0823.html> [accessed 6 August 2003] (email from Zeidenberg).
- 4 ProCD, Inc. v. Zeidenberg, p. 1450.
- 5 Ibid., p. 1455.
- 6 Mortenson Co. v. Timberline Software Corp., 140 Wash. 2d 568, 998 P.2d 305 (2000).
- 7 Ibid., p. 572.
- 8 Ibid., p. 575.
- 9 Ibid., p. 576.
- 10 Ibid., p. 576.
- 11 Ibid., p. 576.
- 12 Ibid., p. 576.
- 13 Ibid., p. 584.
- 14 Ibid., pp. 585–6.
- 15 Ibid., p. 586.
- 16 Feist v. Rural Telecommunications, 506 U.S. 984.

- 17 Kevin W. Grierson, "Enforceability of 'Clickwrap' or 'Shrinkwrap' Agreements Common in Computer Software, Hardware, and Internet Transactions," *ALD* 106(5) 2003: 309. Grierson suggests that while there remains division over the validity of shrinkwrap and clickwrap licenses most courts are upholding these licenses.
- 18 The point of comparison I wish to make is that both Firestone and Timberline knew the product they sold was flawed. In Timberline's case, they had actually produced a patch for the flaw and sent it to some customers, but not to Mortensen. Certainly, in both cases an unknown flaw would be a different situation and most likely if Firestone had taken immediate action to change the flawed design there would have been less public outcry. A similar case can be made regarding the software industry. The software industry has been successful in arguing that they sell an intrinsically flawed product and cannot be held responsible for losses associated with the operation of the software. While this notion should be, and is, contested, becoming aware of a flaw and concealing it from the purchaser is substantively different from distributing software with bugs that are unknown to the developer.
- 19 *Vault Corp. v. Quaid Software Ltd.*, 847 F.2d 255 (5th Cir. 1988). This case found that the prohibition against reverse engineering in the shrinkwrap license was pre-empted by federal law: *Step-Saver Data Sys., Inc. v. Wyse Tech.*, 939 F.2d 91 (3d Cir. 1991). Finding the warranty limitations in the shrinkwrap agreement invalid because the agreement on price had been established prior to the plaintiff receiving the shrinkwrap agreement and plaintiff had never agreed to the additional terms in the shrinkwrap license; *Arizona Retail Sys., Inc. v. Software Link, Inc.*, 831 F. Supp. 759 (D. Ariz. 1993). Finding that a shrinkwrap license does not apply to additional software bought over the phone after the initial software purchase. For additional case analysis see: Grierson, *op. cit.*, p. 309.
- 20 Cynthia M. Bott, "Protection of Information Products: Balancing Commercial Reality and the Public Domain," *University of Cincinnati Law Review* 67, fall 1998: 239. Bott argues that, for databases, licenses can provide protection where copyright law may not.
- 21 It should be noted that federal pre-emption should provide copyright law with precedence over conflicting state laws. However, the boundaries between contract and copyright remain blurred. See: Jonathan Band, "Closing the Interoperability Gap: NCCUSL's Adoption of a Reverse Engineering Exception to UCITA," *The Computer and Internet Lawyer* 19, May 2002: 1.
- 22 Patrick Thibodeau, "NCCUSL Pulls Support for Controversial UCITA Law," *Computerworld*, 1 August 2003. Available online at: <http://www.computerworld.com/governmenttopics/government/legalissues/story/0,10801,83676,00.html> [accessed 13 July 2004].
- 23 David McGowan, "Symposium: Intellectual Property Challenges in the Next Century: Legal Implications of Open-Source Software," *University of Illinois Law Review*, 2001, p. 242.
- 24 I am using the words digital product because while computer software is attached to all products that will be installed on a computer, many products also include content, such as an encyclopedia or a math program, that can only be viewed using a software product. Thus, the copyright owners are concerned not only that the computer software that allows the user to run the product on their computer is protected, but also that the content that is viewed is protected as well.
- 25 Software agreement on file with author.
- 26 Adobe End-User License Agreement. On file with author.
- 27 *Ibid.*
- 28 Apple Computer, Inc. Software License Agreement. 1999. On file with author.
- 29 Computer Software Rental Act of 1980. 17 U.S.C. 109(b)(1)(A) (libraries are exempted from this section of the act).

- 30 End User License Agreement for Microsoft Software. On file with author.
- 31 The Learning Company License Agreement. On file with author.
- 32 Netscape Client Software End User License Agreement.
http://home.netscape.com/download/client.html [last visited 6 August 2003]. On file with author.
- 33 On file with author.
- 34 REALNETWORKS, INC. End User License Agreement. On file with author.
- 35 Books are also now coming “shrinkwrapped” with rules governing the use of the book.
- 36 One unintended consequence that has caused some consumer backlash is that these copy-protected CDs may not always play on the consumer’s home machine. Christopher Walsh, “How the Music Industry Burns Itself,” *Billboard* 114, 30 March 2002: 1.
- 37 The one-copy rule is one part of the much larger debate over what constitutes copyright in the digital age. The hearings and discussions leading up the Digital Millennium Copyright Act asserted that every time a software program or image was brought into the RAM of a computer, a copy was made and permission would be necessary to view the item. While this assertion makes everything we do on the Internet a violation of copyright law, it was the operating assumption of the working group charged with changing the copyright law for the digital age. For an excellent account of the debate and the process see: Jessica Litman, *Digital Copyright*, Amherst: Prometheus Books, 2001.
- 38 17 U.S.C. § 107. Section 107 outlines the following criteria in determining the appropriateness of the use: 1) use must not be commercial in nature; 2) context of the copyrighted work; 3) amount of work used in relation to the whole; 4) effect on the market value of the copyrighted work.
- 39 Napster, Inc. End-User Software License Agreement. On file with author.
- 40 The reverse-engineering prohibition in shrinkwrap licenses was found unenforceable in *Vault Corp. v. Quaid Software Ltd.* The Louisiana Software License Enforcement Act that ensured the enforceability of shrinkwrap licenses was federally pre-empted because decompilation and reverse engineering are allowable under federal law. *Vault Corp. v. Quaid Software Ltd.*, 847 F.2d 255, 7 U.S.P.Z 2d (BNA) 1281 (5th Cir. 1988).
- 41 Hoffman Enclosures Software License Agreement. On file with author.
- 42 End User License Agreement for Microsoft software.
- 43 Adobe Systems Incorporated. Electronic End User License Agreement for Adobe Acrobat Reader. On file with author.
- 44 It even appears in the GPL and other open-source types of licenses, but with a different analysis – in the case of the GPL, the fact that the products are produced by free labor is used to justify the “as is” warranty and is also used as an opening to get programmers to help contribute to the project.
- 45 Executive Software(r) International, Inc. Software License Agreement for Diskeeper. On file with author.
- 46 Another example comes from the world of music composition software. Licenses over this type of software claim that the software company will need to split any royalties from a composition produced with the product 50/50. Christopher May provided this example to me from: C. Field, “Copyright Co-Ownership in Cyberspace,” *Entertainment and Sports Lawyer* 19, summer/fall 2001: 3–8.
- 47 Brian D. McDonald, “The Uniform Computer Information Transactions Act,” *Berkeley Technology Law Journal* 16, 2001: 461–84.
- 48 *Ibid.* p. 462.
- 49 *Ibid.* pp. 462–8; Casey Lide, “UCITA: A Challenge to Traditional Licensing Policy?” *Educause Review* 35, July/August 2000: 60.

- 50 Maryfran Johnson, "Stomp Out UCITA," *Computerworld* 35, 19 November 2001: 24.
- 51 Patrick Thibodeau, "UCITA Backers Hatch New Plans for Adoption Push," *Computerworld* 36, 10 June 2002: 7.
- 52 Judge John Vittone, Chair, American Bar Association Working Group Report on the Uniform Computer Information Transactions Act (UCITA) (<http://www.aba.org>), 31 January 2002. Available online at: http://www.abanet.org/ucitalreport_on_ucita.pdf [accessed 13 July 2004].
- 53 Patrick Thibodeau, "NCCUSL Pulls Support for Controversial UCITA Law," *Computerworld*, 1 August 2003. Available online at: <http://www.computerworld.com/softwaretopics/softwarestory/0,10801,83676,00.html> [accessed 13 July 2004]. In 2002, UCITA, while not dead, was languishing. See: Ed Foster, "UCITA, the Undead," *Infoworld* 24, 6 May 2002: 72.
- 54 Alan Garfield, "The First Amendment as a Check on Copyright Rights," *Hastings Communication and Entertainment Law Journal* 23, spring 2001: 587–605; William W. Van Alstyne, "The Public Domain: Reconciling What the First Amendment Forbids with What the Copyright Clause Permits: A Summary Explanation and Review," *Law and Contemporary Problems* 66, winter/spring 2003: 225–38.
- 55 Netscape Client Software End User License Agreement. On file with author.
- 56 Patrick Thibodeau, "UCITA Backers Hatch New Plans for Adoption Push," *Computerworld* 36, 10 June 2002: 7.
- 57 *Ibid.*
- 58 Under the US constitution, federal laws pre-empt state laws. This can have the effect of either replacing more liberal state laws with a uniform and conservative federal law or, in the case of copyright and the UCITA legislation, preserve some aspects of the public law from further infringement from private sources.
- 59 *ProCD v. Zeidenberg*, *op. cit.*, p. 1454.
- 60 There are other versions of licenses based upon the idea of the GPL. The Free Software Foundation has also designed a GNU Free Documentation License (GFDL), which states, "The purpose of this License is to make a manual, text-book, or other written document 'free' in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or noncommercially." See: Williams, *op. cit.*, pp. 209–16.
- 61 The story goes that Stallman founded the Free Software Foundation in 1984 when the manufacturer of his printer refused to give him access to the source code so he could fix the printer problems himself. See: Robert Young and Wendy Goldman Rohm, *Under the Radar: How Red Hat Changed the Software Business – and Took Microsoft by Surprise*, Scottsdale, Arizona: The Coriolis Group, 1999, pp. 20–1. The story has many different permutations and key facts seem to be blurred at this point. See: Williams, *op. cit.*
- 62 <http://www.fsf.org>.
- 63 Eric Raymond, *The Cathedral and the Bazaar: Musings on Linux and Open Source by an Accidental Revolutionary*, Beijing: O'Reilly, 1999, p. 69–71.
- 64 For more on open source see: Steven Weber, *The Success of Open Source*, Cambridge and London: Harvard University Press, 2004. Weber argues the open source allows us to radically rethink our ideas about property. See also Rod Dixon, *Open Source Software Law*, Boston and London: Artech House, 2004, for a discussion on open-source licensing and its relationship to copyright law.
- 65 In fact, open source and Stallman's GNU philosophy have merged for all intents and purposes. Stallman urges people to refer to the result as GNU/Linux in order to highlight the essential contributions of the free software movement to the Linux kernel. See Williams, *op. cit.*, pp. 142–53.

- 66 Josh Lerner and Jean Tirole, "The Simple Economics of Open Source," *NBER Working Paper Series*, Cambridge, MA: National Bureau of Economic Research, March 2000, pp. 4–9.
- 67 Eric Raymond describes much of the hacker culture via the language used by hackers in *The New Hacker's Dictionary*. See: Eric Raymond (ed.), *The New Hacker's Dictionary*, Cambridge and London: MIT Press, 1991. Steven Levy also describes early hacker culture as including the central tenet: "All information should be free." Steven Levy, *Hackers: Heroes of the Computer Revolution*, Garden City, New York: Anchor Press, 1984, pp. 27–31. As many hackers are quick to point out, there is a difference between using the Internet to steal a person's credit card number or setting up a site to pirate copyrighted software (crackers and warez) and developing useful computer programs. Hackers see themselves as doing the latter and make a clear distinction between the former criminal activities and their own innovative activities. Despite the demonization of the term hacker and the relatively marginalized lifestyle of hackers, their impact upon technology has been profound. The term "hacker" later took on negative connotations as the mainstream media and law enforcement appropriated the word to cover all types of computer crime. See: Debora Halbert, "Discourses of Danger and the Computer Hacker," *The Information Society* 13, 1997: 361–74.
- 68 Weber, op. cit., p. 228.
- 69 Bob Wallace, "Shareware Goes Formal," in Rusel DeMaria and George R. Fontaine (eds), *Public Domain Software: Untapped Resources for the Business User*, Redwood City: M&T Publishing, 1988, p. 109–11.
- 70 DeMaria and Fontaine, *ibid.*, p. 63.
- 71 For example, I use a shareware program called Gradekeeper for my grades. This program was written by a college professor. He then put the program online where it can be downloaded. If you like the program he requests you send him \$20 (which I have done).
- 72 Stephen Fishman, *The Public Domain: How to Find Copyright-Free Writings, Music, Art and More*, Berkeley: Nolo, 2000. While Fishman is concerned with describing how to make the best use of the public domain, he also discusses piracy from the public domain. Additionally, one of the earliest lessons in copyright came when AT&T, which had been developing UNIX in a collaborative manner with academics around the country, decided that they would assert proprietary control over the operating system. They began to require licensing fees from universities that had been using it freely and contributing to its evolution. Needless to say, feelings of betrayal ran high. For an account of this story see: Eric Raymond, *The Cathedral and the Bazaar*, op. cit., pp. 12–15; Young and Goldman Rohm, op. cit., pp. 21–2.
- 73 Richard Stallman's website is: <http://www.gnu.org/copyleft/gpl.html>. See also R. van Wendel de Joode, J.A. de Bruijn, and M.J.G. van Eeten, *Protecting the Virtual Commons: Self-Organizing Open Source and Free Software Communities and Innovative Intellectual Property Regimes*, The Hague: T.M.C. Asser Press, 2003, for the threat posed by copyright regimes and the different types of licenses that have emerged in the free software and open-source communities.
- 74 For a first-hand version of the development of Linux see: Linus Torvalds and David Diamond, *Just for Fun: The Story of an Accidental Revolutionary*, New York: Harper Publishers, 2001. See also: Eric Raymond, *The Cathedral and the Bazaar*, op. cit., and Young and Goldman Rohm, *Under the Radar*, op. cit. It should also be noted that despite the open-source nature of Linux, it remains controlled by a core group of programmers and in essence creates a fairly centralized system.

- 75 Torvalds and Diamond, *op. cit.*, p. 94.
- 76 Torvalds has his own theory of why programmers will spend so many hours working on a project. He argues that first we complete tasks for survival purposes. Once these survival objectives are met, we can develop social purposes for our tasks. Finally, we evolve into creatures that pursue a project goal for the fun of it. Thus, entertainment for Torvalds is a high evolutionary form and one that motivates hackers to spend the type of hours they do in front of a computer. For a better description of his philosophy see his introduction to Pekka Himanen, *The Hacker Ethic: And the Spirit of the Information Age*, New York: Random House, 2001, or his description in *Just for Fun*, *op. cit.*, pp. xvii–xxii.
- 77 Torvalds, *op. cit.*, p. 96.
- 78 “More Balls through Windows: Linux on Desktop PCs,” *The Economist*, 17 April 2004.
- 79 See: Belinda Rabano, “The Penguin Takes Flight,” *Asiaweek*, 8 September 2000: 64.
- 80 “More Balls through Windows,” *op. cit.*
- 81 Almost all banks in China, for example, use the Linux operating system for security and cost reasons. China is also trying to enhance its domestic software production instead of buying Microsoft products. “Chinese Experts Back Dumping of Microsoft,” *Straits Times* (Singapore), 12 January 2002. In June 2004, Thailand, Cambodia, Laos, Myanmar, Vietnam, Japan, and South Korea all stated that they would begin making the transition from Microsoft products to open-source products. See: Mike Clendenin, “Open-Source Software Intensifies Efforts in Asia,” *Electronic Engineering Times*, 21 June 2004: 26.
- 82 Mark Minasi, *The Software Conspiracy: Why Software Companies Put Out Faulty Products, How They Can Hurt You, and What You Can Do About It*, New York: McGraw Hill, 2000.
- 83 Raymond, *The Cathedral and the Bazaar*, *op. cit.*, p. 152.
- 84 *Ibid.*, p. 152.
- 85 “Jobs for Hackers: Yes, You Can Eat Open Source,” *Open Source*. Available online at <http://www.opensource.org/advocacy/jobs.html> [accessed 13 July 2004].
- 86 Mark Minasi covers several different licensing scenarios including the shutdown of a computer system for failure to comply with the license. Software companies have built back doors that allow them to see how the purchaser of the product is using the product. See: Minasi, *op. cit.*, pp. 77–80.
- 87 Lee Min Keong, “Showfloor: LinuxWorld Malaysia Shows OS Potential,” *Asia Computer Weekly*, 27 November 2000.
- 88 *Ibid.*
- 89 Software Information Industry Association, SIIA’s Report on Global Software Piracy 2000, Washington, DC, 2000, 13–14
- 90 Peter Drahos and John Braithwaite, *Information Feudalism: Who Owns the Knowledge Economy?* New York: The New Press, 2002. They document the creation of TRIPS emerging from the work of about fifty US individuals with international business interests.
- 91 John Schwartz, “Report Raises Questions about Fighting Online Piracy,” *The New York Times*, 1 March 2004: C2.
- 92 “Microsoft Exec Calls Open Source a Threat to Innovation,” *The Bloomberg News*, 15 February 2001. Available online at: <http://news.cnet.com/news/0-1003-202-4833927.html> [accessed 13 July 2004].
- 93 *Ibid.*
- 94 Ben Charny, “Microsoft Raps Open-Source Approach,” *CNET News.com*, 3 May 2001. Available online at: <http://news.cnet.com/news/0-1003-202-5813446.html> [accessed 13 July 2004].

- 95 Stephen Shankland, "MS Lawyers Join Open-Source Fray," *ZDNET*, 22 June 2001. Available online at: <http://www.linuxdevices.com/news/NS2292440348.html> [accessed 13 July 2004].
- 96 Ibid. For a copy of the license for this software see: http://msdn.microsoft.com/downloads/leula_mit.htm.
- 97 Internal documents known as the "Halloween" papers outline the perceived open-source threat. These documents are available online at: <http://www.opensource.org/halloween/halloween1.html> and <http://www.opensource.org/halloween/halloween2.html> [accessed 13 July 2004].
- 98 Apache is used on around 63 per cent of web servers and Linux on 36 per cent of web servers. See: Steve Lohr, "Can 'Open Source' Bridge the Software Gap?" *New York Times*, 8 August 2000. Available online at: <http://www.nytimes.com/library/tech/00/08/biztech/articles/28code.html>. In 2004, Apache has increased to 71 per cent of the market with Microsoft holding 22 per cent. *Guardian* (London), 1 July 2004.
- 99 Young and Goldman Rohm, op. cit.
- 100 Lohr, op. cit.
- 101 In June of 2001 Bill Gates suggested that he isn't against open source per se, but rather he thinks people need to be aware of exactly what the GPL does for proprietary systems. There should be "a rich ecosystem" of "free software and commercial software." See: Mike Ricciuti, "Gates Wades Into Open-Source Debate," *CNET News.com*, 19 June 2001. Available online at: <http://news.cnet.com/news/0-1003-200-6322264.html> [accessed 13 July 2004]. In response to criticisms of open source, innovators including Linus Torvalds and Richard Stallman published a joint statement in which they defended the terms and conditions of the General Public License (GPL). See: Bruce Perens et al. "Free Software Leaders Stand Together," 15 May 2001. Available online at: <http://perens.com/Articles/StandTogether.html> [accessed 13 July 2004].
- 102 Open-source programmers are often quite radical in their attempt to keep software open. Witness the DeCSS debates and the issue of encrypted DVDs. See: Weber, op. cit., p. 211.
- 103 See: Scott Rosenberg, Free Software Project, <http://www.salon.com/tech/fsp/index.html> [accessed 13 July 2004]. See also the "Free Software Story," <http://www.salon.com/tech/special/opensource/> [accessed 13 July 2004].

3 I want my MP3s: the changing face of music in an electronic age

- 1 Quoted in Siva Vaidhyanathan, *The Anarchist in the Library: How the Clash between Freedom and Control is Hacking the Real World and Crashing the System*, New York: Basic Books, 2004, p. 22.
- 2 Alan S. Story, "Don't Ignore Copyright, the 'Sleeping Giant' on the TRIPS and International Educational Agenda," in Peter Drahos and Ruth Mayne (eds), *Global Intellectual Property Rights: Knowledge, Access and Development*, New York: Palgrave, 2002, p. 138; Victor Wong, "Taiwan Aboriginal Singers Settle Copyright Lawsuit," *Billboard*, 31 July 1999.
- 3 Richard F. Roper, "The Enigma Law Suite Article," *The Enigma Zone*. Available online at: http://www.geocities.com/enigma_monk/article2.html [accessed 3 June 2004].
- 4 Wong, op. cit.
- 5 As Rosemary Coombe notes regarding the case, the publicity around Enigma allowed for issues of Indigenous rights in Taiwan to become more nationally recognized. She highlights how music should (and can) be a way of understanding

the complex political struggles faced by indigenous peoples in relationship to state politics – topics discussed in Chapter 6.

Given that as recently as the 1970s and 1980s many of these aboriginal peoples were widely considered to be extinct and their traditions endangered, if not lost to humankind, this revival of Ami musical traditions is a remarkable story of cultural revitalization. A political commitment to a creative commons, a robust public domain, and a vigorous First Amendment would not have been sufficient or even desirable to enable this cross cultural exchange, but more likely would have hastened this music's decline. The rights of Western authors to access cultural forms for the purposes of creative transformation need to be balanced with other human rights, if only because there may be no more of such music to sample from in the very near future, given the circumstances in which most of the world's indigenous peoples find themselves. In short, Western arts of appropriation might be practiced so as to further the maintenance of, or at least stem, the ongoing destruction of cultural diversity.

(Rosemary Coombe, "Fear, Hope, and Longing for the Future of Authorship and a Revitalized Public Domain in Global Regimes of Intellectual Property," *DePaul Law Review* 52, summer 2003: 1189.)

- 6 Wong, *op. cit.*
- 7 Matthew Benz, Ed Christman, and Brian Garrity, "Consolidation Seen On Fast Track For Big Five," *Billboard*, 22 March, 115, 2003: 1.
- 8 Roper, *op. cit.*
- 9 Nicholas Petreley, "Napster Doesn't Have to Undermine the Way the Music Industry Makes its Money," *Infoworld*, 13 March 2000: 62; Paul Veravanich, "Rio Grande: The MP3 Showdown At High Noon in Cyberspace," *Fordham Intellectual Property, Media and Entertainment Law Journal* 10, winter 2000: 70; Michael Paoletta, "Vision + Invention in the Music Industry: Michael Robertson," *Billboard*, 8 January 2000: 70; Lidia Pedraza, "MP3: Second Verse," *UCLA Entertainment Law Review* 7, spring 2000: 345.
- 10 Lisa M. Bowman, "Labels Aim Big Guns at Small Fileswappers," *C-Net News.Com*, 25 June 2003. Available online at: http://news.com.com/2100-1027_3-1020876.html?tag=fd_lede2_hed [accessed 31 July 2003]. Gibbons and Pennisi argue that these individual lawsuits are in part motivated by the industry's loss in Metro-Goldwyn-Mayer Studios Inc., et al. v. Grokster Ltd. The Central District Court of California found that Grokster was not a contributory infringer because they "do not provide the facilities for file-sharing." See: Robert Graham Gibbons and Christopher Scott Pennisi, "The 'One-by-One' Approach Toward Eliminating the Epidemic of On-Line Music Copyright Infringement," *Intellectual Property Today*, December 2003: 35.
- 11 Jerome Kuptz, "Independent Array," *Wired*, October 2000: 234.
- 12 Christopher May, "Concentrated Industry, Fragmented Consumption: The Global Music Industry in the New Millennium," in M.I. Franklin (ed.), *Shake, Rattle and Rap: On Music, Culture and Politics*, New York: Palgrave Macmillan, 2005 (forthcoming).
- 13 *Ibid.*
- 14 American Society of Composers, Authors and Publishers, *How the Public Gets Its New Music: A Statement of Some of the Reasons for the Copyright Law, Its Operation and How it Benefits the Public*, New York: American Society of Composers, Authors and Publishers, 1933, p. 7.
- 15 Stanley Rothenberg, *Copyright and Public Performance of Music*, Littleton, Colorado: Fred B. Rothman & Co., 1987 (originally published The Hague: Martinus Nijhoff, 1954).
- 16 *Ibid.*, p. 22.
- 17 *Ibid.*, p. 14.

- 18 Ibid., p. 22.
- 19 Ibid., p. 147.
- 20 American Society of Composers, Authors and Publishers, op. cit., pp. 5–6.
- 21 Ibid., pp. 6–7.
- 22 Today ASCAP represents over 80,000 members and has millions of songs in its licensing database. See: American Society of Composers, Authors and Publishers, “About ASCAP Licensing.” Available online at: <http://ascap.com/licensing/about.html>, 2003 [accessed 31 July 2003].
- 23 Wayland Holyfield, *Musical Licensing in Restaurants and Retail and Other Establishments, Hearing before the Subcommittee on Courts and Intellectual Property of the Committee on the Judiciary*, 17 July 1997, p. 37.
- 24 Peter Orlik, “American Society of Composers, Authors and Publishers (ASCAP),” *Encyclopedia of Radio*, Chicago and London: Fitzroy Dearborn Publishers, 2001. Quoted in Michael Perlman, *Steal This Idea: Intellectual Property Rights and the Corporate Confiscation of Creativity*, New York: Palgrave, 2002, p. 18.
- 25 Ibid., p. 18.
- 26 Harvey Reid, “ASCAP and BMI – Protectors of Artists or Shadowy Thieves?” Available online at: <http://www.woodpecker.com/writing/essays/royalty-politics.html>, 1993 [accessed 1 July 2004].
- 27 Perlman, op. cit., p. 18.
- 28 Ibid., p. 18. It may be the case that the recent popularity of world music is an attempt to work around restrictive licensing and copyrights by exploiting a pool of “free” music (the same type of behavior the industry complains about when done by music fans).
- 29 The boycott of ASCAP lasted for several months until ASCAP and BMI reached an agreement. Today, BMI is about 60 per cent the size of ASCAP. See: Reid, op. cit.
- 30 Laurence R. Helfer, “World Music on a U.S. Stage: A Berne/TRIPS and Economic Analysis of the Fairness in Music Licensing Act,” *Boston University Law Review* 80, February 2000: 106.
- 31 In response to the decision in *Eldred v. Ashcroft*, Marilyn Bergman, Chairman and President of the Board for ASCAP, wrote the following: “The Supreme Court’s decision supporting copyright term extension is a tremendous victory for America’s composers and lyricists – those men and women who are the purest entrepreneurs because they face an empty page and, out of the ‘factory of their minds,’ create the music that speaks to the essence of what we are all about. Our copyright system must assure that our creative efforts receive proper reward, protection that we can pass on at least to our children and grandchildren. It must assure that we, and those who invest in our works, will receive at least a chance of economic success, here and abroad. Congress recognized these needs by enacting the Sonny Bono Copyright Term Extension Act, and the Supreme Court did likewise by upholding it. It is a great day for ASCAP’s writer and publisher members, for all American creators, and, indeed, for the nation as a whole.” Marilyn Bergman, “U.S. Supreme Court Upholds Copyright Term Extension.” Available online at: <http://www.ascap.com/legislation/> [accessed 2 July 2004].
- 32 Private letter sent to Village Espresso in Honolulu, Hawai’i, by ASCAP specialist for licensing John S. Kroninger, 4 April 1995. Copy on file with author.
- 33 In the letter provided by ASCAP many of the lawsuits it has successfully litigated over these examples are used to illustrate how futile resistance is.
- 34 Helfer, op. cit., p. 119.
- 35 Ibid., p. 116.
- 36 Ibid., p. 93.

- 37 "Settlement between European Union and United States of WTO Fairness in Music Licensing Case Appears to have Fallen Apart," *Entertainment Law Reporter*, February 2002. In September 2003, based upon the settlement agreement reached by the WTO arbitration panel, the USA paid \$3.3 million to the European Commission to settle the ongoing dispute over the FIMLA. The amount paid was considered "symbolic" by the EC, and the USA must still revise its copyright code to remove the infringing FIMLA. The EC gave the USA until December 2004 to revise the code or it will consider further action through the WTO. See: Phil Hardy, "GESAC to Administer the \$3.3m paid to the EC for U.S. Infringements of the Rights of EU Copyright Holders," *Music and Copyright*, 17 September 2003.
- 38 Peter Drahos and John Braithwaite, *Information Feudalism: Who Owns the Knowledge Economy?* New York: The New Press, 2002.
- 39 Yet another example of copyright benefiting the copyright owner instead of newer creative work comes from the world of digital sampling. Digital sampling is when a musician takes small portions of other songs to reach a desired affect. Such samples violate copyright if the band is not careful. All samples are the property of the copyright owner and a band using such samples must seek permission. Record labels absolve themselves contractually from copyright infringement in digital sampling; thus, it is the band that will pay the penalty for infringement. See: Rebecca Morris, "When is a CD Factory not like a Dance Hall? The Difficulty of Establishing Third-Party Liability for Infringing Digital Music Samples," *Cardozo Arts and Entertainment Law Journal* 18, 2000, pp. 259–60.
- 40 Seongkun Oh, "Legal Update: The Digital Performance Rights in Sound Recordings Act of 1995: Exclusive Performance Rights for Digital Transmission of Copyrighted Works," *Boston University Journal of Science and Technology Law* 2, 1996: 17.
- 41 David Balaban, "Music in the Digital Millennium: The Effects of the Digital Millennium Copyright Act of 1998," *UCLA Entertainment Law Review* 7, spring 2000: 314.
- 42 Pedraza, op. cit., p. 347.
- 43 They have licensed over 1,000 websites, including *MP3.com*, ranging in price from \$200 per year to \$200,000. See: Matt Jackson, "The Digital Millennium Copyright Act of 1998: A Proposed Amendment to Accommodate Free Speech," *Communication Law and Policy* 5, winter 2000: 68.
- 44 Michelle L. Spaulding, "MP3: Copyright Protection for Music on the Move," September 1999. Available online at: <http://leon.law.harvard.edu/MP3> [accessed 31 July 2003].
- 45 Balaban, op. cit., p. 322.
- 46 Ibid., p. 316.
- 47 Ibid., p. 315.
- 48 Joyce Slaton, "A Mickey Mouse Copyright Law?" *Wired News*, 13 January 1999. Available online at: <http://www.wired.com/news/politics/0,1283,17327,00.html> [accessed 31 July 2003].
- 49 Jackson, op. cit., p. 91; Karen J. Bernstein, "The No Electronic Theft Act: The Music Industry's New Instrument in the Fight against Internet Piracy," *UCLA Entertainment Law Review* 7, spring 2000: 325–41.
- 50 Wendy M. Pollack, "Tuning In: The Future of Copyright Protection for Online Music in the Digital Millennium," *Fordham Law Review* 68, May 2000: 2456.
- 51 Spaulding, op. cit.
- 52 Jackson, op. cit., p. 83. "By encouraging copyright owners and OSPs to 'co-operate' and avoid involving the judicial system, the DMCA is one more step in the privatization of the Internet. Scholars have long raised concerns about the

- privatization of public forums and the resulting impact on free speech. There is a growing concern that private shopping malls have replaced public forums where First Amendment rights can be protected. The Internet provides a unique forum that eliminates physical, temporal and economic barriers to communication. Yet the government has steadily privatized this new forum, encouraging the growth of the Internet as the electronic equivalent of the private shopping mall where censorship is permissible. The DMCA gives official government sanction and encouragement to this private censorship.” For more on the DMCA see: Siva Vaidhyanathan, *Copyrights and Copywrongs: The Rise of Intellectual Property and How it Threatens Creativity*, New York and London: New York University Press, 2001; Jessica Litman, *Digital Copyright*, Amherst: Prometheus Books, 2001.
- 53 Pollack, *op. cit.*, pp. 2453–4.
 - 54 If the industry continues to be concerned about online filesharing, they can follow the advice of New York-based intellectual property lawyer, Robert Kunststadt. Mr Kunststadt suggests that viruses be employed as anti-piracy tools. Just send a virus to a pirate MP3 site and let it destroy the pirate’s computers. Robert M. Kunststadt, “Fat Lady Hasn’t Sung on MP3,” *The National Law Journal*, 17 July 2000: A19.
 - 55 May, *op. cit.*
 - 56 Ines G. Gonzalez, “Recording Industry Association of America, Inc. v. Diamond Multimedia Systems, Inc.,” *Berkeley Technology Law Journal* 15, 2000: 73.
 - 57 Recording Industry Association of America v. Diamond Multimedia System, 180 F 3d 1072, 1074 (9th Cir. 1999).
 - 58 Gonzalez, *op. cit.*, pp. 75–7. See: Universal City Studios, Inc., v. Sony Corp., 464 U.S. 417 (1984). In the Sony case, the court found that because consumers use their VHS machines to “time shift” programs in order to watch them at a later time, there were legal uses for the machines and that private home viewing was a fair use protected under copyright.
 - 59 *Ibid.*, p. 78.
 - 60 Eileen Fitzpatrick, “RIAA Suit vs. MP3.com Raises ‘Fair Use’ Issues,” *Billboard*, 5 February 2000: 10.
 - 61 *Ibid.*, p. 10.
 - 62 UMG Recordings, Inc. v. MP3.Com, Inc., 92 F. Supp. 2d 349 (S.D.N.Y. 2000). They settled with Warner Music Group, BMG, EMI, and Sony. See: “Seagram Boss Testifies at MP3.com Trial,” *New York Law Journal*, 31 August 2000: 2; Larry Neumeister, “Judge Orders MP3.com to Pay Up to \$250 Million,” *The Legal Intelligencer*, p. 4.
 - 63 “Recent Cases,” *Entertainment Law Reporter* 25, February 2004.
 - 64 Scott Carlson, “Metallica Sues Universities and Napster, Charging that Students Engage in Music Piracy,” *The Chronicle of Higher Education*, 28 April 2000: A50.
 - 65 Spencer Ante, “Shawn Fanning’s Struggle,” *Business Week*, May 1, 2000, p. 197–198.
 - 66 Richard Roeper, “Surf Music: Napster Opens the Floodgates for ‘Net Fans,”” *Chicago Sun-Times*, 18 June 2000: 2.
 - 67 Bill Holland, “RIAA Sues MP3 Search Site,” *Billboard*, 18 December 1999: 9.
 - 68 In their motion for summary adjudication, Napster made the argument that as a service provider they qualified for the “safe harbor” exemption in the DMCA and thus could not be sued. See: 54 U.S.P.Q.2D (BNA) 1746 at 9, 5 May 2000. The court agreed with the plaintiffs that Napster was a service provider under the definition of subparagraph 512(k)(1)(A), but did not qualify under the more specific language of subsection 512(a).

- 69 Napster has also re-emerged as a pay-to-download company since its earlier legal troubles. There is still some question as to how successful it will be. See: Damien Cave, "Napster Troubles Grow," *Rolling Stone* 945, 1 April 2004: 30.
- 70 Confusion over the legality of peer-to-peer networking remains. In *Re Aimster and MGM, Inc. v. Grokster, Ltd.* have been decided by the Seventh Circuit Court and a California Federal District Court, respectively, with two different outcomes. Additional clarification from Congress or the Supreme Court may be necessary to decide the dispute. See: Elizabeth Miles, "In *Re Aimster & MGM, Inc. v. Grokster, Ltd.*: Peer-to-Peer and the Sony Doctrine," *Berkeley Technology Law Journal* 19, 2004: 21–58. For additional information on the Napster case see: Joseph Menn, *All the Rage: The Rise and Fall of Shawn Fanning's Napster*, New York: Crown Business, 2003; Adam Thierer and Wayne Crews (eds), *Copy Fights: The Future of Intellectual Property in the Information Age*, Washington, DC: Cato Institute, 2002.
- 71 Napster continues to exist, having been bought by Bertlesman, but in a proprietary format.
- 72 Jackson, op. cit., p. 81; Pollack, op. cit., p. 2469.
- 73 Jackson, op. cit., p. 81.
- 74 Vaidhyanathan, op. cit., p. 57.
- 75 Andrea Foster, "Universities Reject Requests That They Block Students' Access to Napster," *The Chronicle of Higher Education*, 6 October 2000: A46. These colleges include: "Columbia, Cornell, Duke, Harvard, Princeton, and Stanford Universities; the Georgia Institute of Technology; the Massachusetts Institute of Technology; the University of California at Berkeley and at Los Angeles; the University of Florida; the University of Michigan; the University of Pennsylvania; and the University of North Carolina at Chapel Hill."
- 76 Foster, *ibid.*, p. A46; Vaidhyanathan, op. cit., p. 58.
- 77 Bill Holland, "Verison Win Won't Stop Suites," *Billboard* 16, 10 January 2004: 6.
- 78 *Ibid.*, p. 6.
- 79 Lauren Gitlin, Amelia McDonnell-Parry, Kerry Smith, and Gillian Telling, "In the News," *Rolling Stone*, 949: 16.
- 80 "Sound of Silence," *Communications of the ACM* 47, January 2004: 9.
- 81 Jack Ewing and Heather Green, "Global Downloading, Local Lawsuits," *Business Week*, 6 October 2003: 64.
- 82 Quoted in Vaidhyanathan, op. cit., p. 65.
- 83 James Harding, "The EMI/Time Warner Deal: Collaborators in Concerto Seek Perfect Harmony: Combination of Musical Businesses Aims for Global Supremacy in the Digital Age," *Financial Times* (London), 24 January 2000: 24.
- 84 Vaidhyanathan, op. cit., p. 52–3.
- 85 Harding, op. cit., p. 24.
- 86 Daniel P. Finney, "Downloaders Must Face the Music," *St. Louis Dispatch*, 10 August 2003: A1.
- 87 Charles Arthur, "Universal Blames CD Piracy as It Sheds 1300 Staff," *Independent* (London), 17 October 2003: 7.
- 88 Bernstein, op. cit., p. 327.
- 89 Andrew Orłowski, "Missing RIAA Figures Shoot Down 'Piracy' Canard," *The Register*, 9 June 2003. Available online at: <http://www.theregister.co.uk/content/archive/28588.html> [accessed 20 July 2003].
- 90 Vaidhyanathan, op. cit., p. 44.
- 91 George Ziemann, "RIAA's Statistics Don't Add up to Piracy," *MacWizards Music*, 11 December 2002. Available online at: <http://www.azoz.com/music/features/0008.html> [accessed 20 July 2003].

- 92 Warren Cohen, "Napster's Rap Sheet: Does the Music Mart Rob Artists or Sell Them?" *US News and World Report*, 8 May 2000: 45.
- 93 Scott Carlson, "Metallica Sues Universities and Napster, Charging that Students Engage in Music Piracy," *The Chronicle of Higher Education*, 28 April 2000: A50.
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- 96 May, *op. cit.*
- 97 Courtney Love, "Courtney Love Does the Math," *Salon.com*, June 14, 2000. Online. Available HTTP: <http://www.salon.com/tech/feature/2000/06/14/lovelindex.html>. (accessed 31 July 2003).
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- 99 Wendy Day, "Artists Don't Make Money from the Record Deals," 2000. Available online at: http://www.rapstation.com/digital_affairs/wendy_day/ [accessed 16 July 2003].
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- 102 "Vivendi, Seagram and Canal+ to Merge, Creating Fully Integrated Global Media and Communications Company for the Wired and Wireless World," *Business Wire*, 20 June 2000.
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- 106 Love, *op. cit.*
- 107 Thilman, *op. cit.*
- 108 "In Congress: Internet Music Sharing; Senate Music Sharing Hearings Portray Napster as Both Thief and Innovator," Leader Publications, Inc., 5 July 2000.
- 109 Gonzalez, *op. cit.*, p. 71.
- 110 May, *op. cit.*
- 111 Testimony of Barbara Boxer before the Permanent Subcommittee on Investigations of the Committee on Governmental Affairs, "Privacy and Piracy: The Paradox of Illegal File Sharing on Peer-to-Peer Networks and the Impact of Technology on the Entertainment Industry," 30 September 2003: 1-3.
- 112 This general position was endorsed by Mitch Bainwol, Chairman and CEO of the RIAA, Jack Valenti, President and CEO of the MPAA, L.L. Cool J, Mike Negra, President of Mike's Video who claims to have lost money because of filesharing, Jonathan Moreno, Director of the Center for Biomedical Ethics who strayed from his field to call filesharing theft and immoral, and James DeLong, Senior Fellow and Director of the Center for the Study of Digital Property. Additionally, all opening statements by senators

- themselves were adamantly against the peer-to-peer networking that exists on the Internet.
- 113 Love, op. cit.
- 114 Vaidhyanathan, op. cit., p. 18; See also: Michael J. Shapiro, "Sovereignty and Exchange in the Orders of Modernity," *Alternatives* 16, 1991: 447-77.
- 115 Kevin Kelly, "Where Music Will Be Coming from," *The New York Times Magazine*, 17 March 2002: 31.
- 116 Gonzalez, op. cit., p. 71
- 117 Harding, op. cit., p. 24.
- 118 Kelly, op. cit., p. 31.
- 119 Testimony of Steve Wiley, op. cit., pp. 145-7.
- 120 Testimony of Lorraine Sullivan, op. cit., pp. 130-3.
- 121 "Grey Tuesday: Free the Grey Album." Available online at: <http://www.greytuesday.org/> [accessed 5 July 2004].
- 122 A new website has emerged to help publicize and distribute music the RIAA seeks to prohibit. <http://www.bannedmusic.org/>. The website states that, "Bannedmusic.org is a peer-to-peer collaboration that makes it impossible for the major record labels to ban or censor musical works. When record labels send legal threats to musicians, record stores, or websites, we will post the music here for download and publicize the censorship attempt. There is a clear fair use right to distribute this music, and for the public to decide whether current copyright law is serving musicians and the public, they need to be able to hear what's being suppressed."
- 123 One of the unintended consequences of the litigation against Napster has been that more difficult to stop filesharing services have emerged.
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- 125 John Perry Barlow, "The Next Economy of Ideas: Will Copyright Survive the Napster Bomb? Nope, but Creativity Will," *Wired*, October 2000: 253.
- 126 Hal Niedzviecki, "Unchain Your Melodies: Why Indie Artists Should Stop Worrying About 'Stolen' Music," *This Magazine* 37, October 2003: 26-7.
- 127 Barlow, op. cit., p. 252.
- 128 "Banned from Napster." Available online at: http://www.rapstation.com/today_in_hiphop/banned_from_napster.html [accessed 31 July 2003].
- 129 "Thousands Download Stephen King's On-line Novel," *C-Net News.Com*, 24 July 2000. Available online at: <http://news.com.com/2100-1023-243523.html?legacy=cnet> [accessed 31 July 2003]. However, it must also be acknowledged that pirated copies were made available. See: Rosemary Goring, "The Serial E-novel?" *Herald* (Glasgow), 3 April 2004: 6.
- 130 Bilge Ebiri and Ed Lovett, "Launching Pads," *Yahoo! Internet Life*, August 2000: 108-9.
- 131 Pedraza, op. cit., p. 353.
- 132 Veravanich, op. cit., p. 433.
- 133 May, op. cit.
- 134 Angela Doland, "Independent Musicians: Let Technology Free you from Labels' Yoke," *The Associated Press*, 27 January 2004.
- 135 Available online at: http://www.usatoday.com/tech/news/2004-01-26-mudda_x.htm [accessed 26 January 2004].

4 Moralized discourses: South Africa's intellectual property fight for access to AIDS medication

- 1 Medicines and Related Substances Control Amendment Act, No. 90 (1997) (S. Afr.).
- 2 It is important to recognize that many countries in Africa have been slow to acknowledge the disease given the stigma attached to it. Furthermore, President Mbeki publicly sided with AIDS detractors who claimed that HIV was not related to AIDS and refused to offer much in the way of governmental support for AIDS victims – positions that he has since (reluctantly) changed.
- 3 *UNAIDS Report on the Global HIV/AIDS Epidemic, 2002*, p. 8.
- 4 Emad Mekay, "Pressure Builds for Affordable Life-Saving Drugs," Inter Press Service, 7 November 2001.
- 5 Theodore C. Bailey, "Note, Innovation and Access: The Role of Compulsory Licensing in the Development and Distribution of HIV/AIDS Drugs," *University of Illinois Journal of Law, Technology and Policy*, spring 2001: 195–6.
- 6 Steve Buist, "Generic AIDS-Drug Makers Weather Global Controversy," *The Hamilton Spectator*, 25 July 2001: A01.
- 7 Ibid.
- 8 Bailey, op. cit., pp. 195–6.
- 9 J.M. Spectar, "The Hybrid Horseman of the Apocalypse: The Global AIDS Pandemic and the North–South Fracas," *Georgia Journal of International and Comparative Law* 29, winter 2001: 260.
- 10 Salih Booker and William Minter, "AIDS in Africa: Is the World Concerned Enough?" *Great Decisions* 71–80, 2002: 72. Available online at: <http://www.africaaction.org/laction/aids2002.pdf> [accessed 5 July 2004].
- 11 Stephen Lewis, "The Nature of Things with David Suzuki: Race against Time, the HIV/AIDS Pandemic in Africa," CBC television broadcast, 27 November 2001.
- 12 Even today with treatment now an acceptable part of the approach, few are receiving treatment. The numbers have increased from 10,000–50,000 receiving treatment in 2001 to around 50,000–75,000 receiving treatment in 2004, but given the numbers of people infected with the disease much more needs to be done. Joint UNICEF, UNAIDS Secretariat, WHO/HTP, MSF Project, *Sources and Prices of Selected Drugs and Diagnostics for People Living with HIV/AIDS*, 1 May 2001, p. 5. Available online at: <http://www.accessmedmsf.org/upload/ReportsandPublications/3920012333116/Sources%20and%20prices.pdf> [accessed 5 July 2004]; Raymond W. Copson, *AIDS in Africa, CRS Issue Brief for Congress*, Congressional Research Service, Updated 28 May 2004. Available online at: <http://www.fas.org/man/crs/IBI0050.pdf> [accessed 5 July 2004]. AIDS was also ignored in the USA for years after it was identified as a public health issue. Ronald Regan refused to acknowledge the disease, and because of its association with homosexuality and drug use, research, development, and effective treatment were slow in coming. See: Stella Z. Theodoulou (ed.), *AIDS: The Politics and Policy of Disease*, Upper Saddle River: Prentice Hall, 1996.
- 13 See Anna-Marie Tabor, "Recent Development: AIDS Crisis," *Harvard Journal on Legislation* 39, summer 2001: 515.
- 14 The literature on transnational social movements is growing. See: Jackie Smith, Charles Chatfield, and Ron Pagnucco, *Transnational Social Movements and Global Politics: Solidarity beyond the State*, Syracuse: Syracuse University Press, 1997; Margaret E. Keck and Kathryn Sikkink, *Activists beyond Borders: Advocacy Networks in International Politics*, Ithaca and London: Cornell University Press, 1998.

- 15 There is much controversy over the use of compulsory licensing and parallel imports. Compulsory licensing allows a state to license a patented product at an affordable price, usually under the price established by the patent owner. Parallel imports would allow a country to shop for the best prices on the world market instead of buying directly from the drug supplier. Given the different costs for drugs in different countries, substantial savings can be reached.
- 16 Raymond W. Copson, Cong. Res. Serv., *AIDS In Africa*, CRS Issue Brief for Congress, No. 1B10050, p. 9 (updated 1 August 2002). Available online at: <http://www.fas.org/man/crs/1B10050.pdf>.
- 17 Bailey, op. cit., p. 196. See also Joint UN Programme on HIV/AIDS (UNAIDS) and WHO, *Guidance Modules on Antiretroviral Treatments, Module 1: Introduction to Antiretroviral Treatments*, U.N. Doc. UNAIDS/98.7, 1998. Available online at: <http://www.paho.org/english/hcpl/hcalmod1.doc> [accessed 5 July 2004] citing 1997 level costs for the most popular AIDS medications.
- 18 Matthew Kramer, "Comment, the Bolar Amendment Abroad: Preserving the Integrity of American Patents Overseas after the South African Medicines Act," *Dickenson Journal of International Law* 18, spring 2001: 553.
- 19 Rosalyn S. Park, "Note, the International Drug Industry: What the Future Holds for South Africa's HIV/AIDS Patients," *Minnesota Journal of Global Trade* 11, winter 2002: 127.
- 20 Robert Weissman, "A Long, Strange TRIPS: The Pharmaceutical Industry Drive to Harmonize Global Intellectual Property Rules, and the Remaining WTO Legal Alternatives Available to Third World Countries," *University of Pennsylvania Journal of International Economic Law* 17, winter 1996: 1075-6.
- 21 *Ibid.*, p. 1076.
- 22 *Ibid.* See also Susan Sell, *Private Power, Public Law: The Globalization of Intellectual Property Rights*, New York and Cambridge: Cambridge University Press, 2003.
- 23 *Ibid.*, p. 1087.
- 24 F.M. Scherer, "The Law and Economics of Intellectual Property Rights: The Pharmaceutical Industry and World Intellectual Property Standards," *Vanderbilt Law Review* 53, November 2000: 2248.
- 25 Pharmaceutical Patent Issues: Interpreting GATT, Hearing Before the S. Comm. on the Judiciary, 104th Cong. 227, 1996 (Statement of Clayton K. Yeutter, Ambassador). Ambassador Yeutter is a partner at Hogan & Hartson, L.L.P., which serves as counsel to Glaxo-Wellcom, Inc.
- 26 See generally: Debora Halbert, *Intellectual Property in the Information Age: The Politics of Expanding Property Rights*, New York: Quorum Press, 1999.
- 27 The pharmaceutical industry has grown in the past twelve years from under \$30 billion to over \$100 billion. Hearing Before the S. Comm. on the Judiciary, *supra* note 25, at 125 (Statement of John Klein, Chairman of the Generic Pharmaceutical Industry Association).
- 28 Bailey describes the balance between the industry and AIDS patients; the debate is often framed in terms of a balance between patients' rights to medication and the need to preserve the industry incentive to create more public goods. See: Bailey, op. cit., p. 195.
- 29 Sandra W. Key and Daniel J. DeNoon, "Cuba Upbeat on Vaccine Deal," *World Disease Weekly Plus*, 20 September 1999: 17.
- 30 This is the first of eight annual reports submitted to Congress by the President. See: Office of the US Trade Representative, *2001 Comprehensive Report of the President of the United States on U.S. Trade and Investment Policy Toward Sub-Saharan Africa and Implementation of the African Growth and Opportunity Act* 43, May 2001. Available online at: http://www.ustr.gov/regions/africarepo_2001.pdf [accessed 5 July 2004].

- 31 The AIDS drugs AZT, ddI, ddc, d4T, 3TC, and ritonavir were developed by the National Institute of Health (NIH) with public funding or institutions who were given NIH funding until the final phase of clinical trials. At that point they were licensed at low prices to pharmaceuticals who took them through the final trial phase. See: Eric Sawyer, "An ACT UP Founder 'acts up' for Africa's Access to AIDS," in Benjamin Shepard and Ronald Hayduk (eds), *From ACT UP to the WTO: Urban Protest and Community Building in the Era of Globalization*, London and New York: Verso, 2002, p. 92.
- 32 Dean Baker, *Dying for Patents*, Center for Economic Policy and Research, 29 October 2001. Available online at: <http://www.commondreams.org/views01/1030-09.htm> [accessed 5 July 2004], stating that the National Institute of Health, other government-funded groups, private foundations, and charities make up a significant amount of the research into life-saving drugs.
- 33 Copson, op. cit., p. 10.
- 34 *A Decade Later: The Drug Price Competition and Patent Term Restoration Act*, Hearing Before the S. Comm. on the Judiciary, 104th Cong. 124–125. (1996) (statement of Gerald J. Mossinghoff, President of PhRMA).
- 35 *Ibid.* (statement of Charles J. Cooper, Attorney, PhRMA). In addition, PhRMA attorney Charles J. Cooper insisted upon keeping the debate within the bounds of economic theory. Within this framework, drug companies retain the moral high ground by being able to claim harms done to them via generic drug manufacturing and piracy. They only mention the issue of availability of medication for people within the framework of R&D. Their contribution is not medicine, but research.
- 36 Carl Mortished, "Medical Patent is Bitter Pill for WTO Delegates," *Times* (London), 5 November, 2001, p. 23.
- 37 Bailey, op. cit., p. 197.
- 38 Karine Cunqueiro, "Hostile AIDS Activists Target Gore over Patents," Inter Press Service, 18 July 1999.
- 39 Leo Lewis, "Can Drug Giants Swallow This Bitter Pill? As Brazil Threatens to Copy the AIDS Drug Viracept, Leo Lewis Asks How Pharmaceutical Research Will Survive," *Independent on Sunday* (London), 26 August 2001: 3.
- 40 Richard Gwyn, "Big Drug Companies, Shameful Profits," *Toronto Star*, 7 March 2001. Available online at: <http://www.commondreams.org/views01/0307-03.htm> [accessed 5 July 2004].
- 41 Kramer, op. cit., pp. 560–1 (defining the controversy of compulsory licenses).
- 42 See John A. Harrelson, "Note: Trips, Pharmaceutical Patents, and the HIV/AIDS Crisis: Finding the Proper Balance between Intellectual Property Rights and Compassion," *Widener Law Symposium* 7, spring 2001: 181–2. Harrelson argues that in the case of pharmaceuticals it is not possible to use compulsory licenses under the TRIPS agreement.
- 43 Professor Frederick Abbott argues that the USA and the pharmaceutical industry have "misused [the] Agreement on TRIPS to bully countries into going further than they are legally required to do to protect intellectual property rights." See: "Legal Wrangle over TRIPS Absurd," *South Bulletin* 9. Available online at: <http://www.southcentre.org/infol/southbulletin/bulletin09/bulletin09-06.htm> [accessed 20 July 2004].
- 44 See: Bess-Carolina Dolmo, "Note, Examining Global Access to Essential Pharmaceuticals in the Face of Patent Protection Rights: The South African Example," *Buffalo Human Rights Law Review* 7, 2001: 146. Dolmo suggests that the USA did not utilize the WTO dispute resolution framework because they knew the South African legislation did not technically violate TRIPS. But see:

- Scherer, *op. cit.*, p. 2252. Scherer argues that WTO action was avoided because of activist pressure on Gore during the campaign.
- 45 Harrelson, *op. cit.*, p. 184.
 - 46 *Ibid.*, p. 191.
 - 47 *Ibid.*
 - 48 "Patent Problems Pending," *The Economist*, 27 October 2001.
 - 49 *Ibid.*
 - 50 *Ibid.*
 - 51 "France Suggests US Double Standards over Generic Drugs," *Agence France Presse*, 2 November 2001.
 - 52 See: *ibid.* Because of their negotiating power, the USA was successful in getting Bayer to lower the cost of Cipro from \$1.77 per tablet to 95 cents.
 - 53 See Weissman, *op. cit.*, pp. 1116–17, arguing that the evidence overwhelmingly supports the position that competition equals cheaper drugs.
 - 54 Buist, *op. cit.*
 - 55 See: *ibid.*
 - 56 Jamie Love, "Appendix B: Time-line of Disputes over Compulsory Licensing and Parallel Importation in South Africa," 5 August 1999. Available online at: <http://www.cptech.org/lip/health/salsa-timeline.txt> [accessed 5 July 2004]. I rely heavily on this timeline and Love's excellent archival information surrounding this controversy.
 - 57 Mortished, *op. cit.* It is suggested that India and Brazil are arguing for reduced patent protection because of their own self-interest in protecting their generic drug industries. There is no evidence that India manipulated South Africa, only that these countries share a similar perspective regarding the inequitable impact of intellectual property on access to medication. By blaming the Indian government as Bombelles does, the claim could be made that the South African controversy was really an issue of manipulative generic companies using the AIDS crisis to maximize their own profits at the expense of the brand-name industry.
 - 58 John Donnelly, "Patents Reportedly Do Not Cut AIDS. Drug Access Study on Africa Cites Dearth of Global Aid," *Boston Globe*, 17 October 2001: A3.
 - 59 L.A. Kauffman, "A Short History of Radical Renewal," in Benjamin Shepard and Ronald Hayduk (eds), *From ACT UP to the WTO: Urban Protest and Community Building in the Era of Globalization*, New York and London: Verso, 2002, p. 36.
 - 60 Sawyer, *op. cit.*, p. 96.
 - 61 *Ibid.*, p. 96.
 - 62 *Ibid.*, p. 96.
 - 63 Love, *op. cit.*
 - 64 The USA banned the practice of parallel importation in 1987. See: William Davis, "Comment, the Medicine Equity and Drug Safety Act of 2000: Releasing Gray Market Pharmaceuticals," *Tulane Journal of International and Comparative Law* 9, spring 2001: 485.
 - 65 Dolmo, *op. cit.*, pp. 146–7. Dolmo points out that numerous U.S. Congress people are looking into the possibilities of parallel importation for pharmaceuticals to decrease drug costs in the United States.
 - 66 Davis, *op. cit.*, p. 485.
 - 67 Ceci Connolly, "Medicare Nomination Halted; Answers on Drug Importation Ban Sought from FDA Chief," *Washington Post*, 10 March 2004: A27.
 - 68 Love, *op. cit.*
 - 69 *Ibid.*
 - 70 *Ibid.*
 - 71 *Ibid.*
 - 72 *Ibid.*

- 73 Tina Rosenberg, "Look at Brazil," *New York Times (Magazine)*, 28 January 2001, § 6: 26.
- 74 Harrelson, op. cit., pp. 185–6. The US government later backed down from their position against Thailand and the country was able to produce medication.
- 75 Park, op. cit., p. 141. While the USA continues to have problems with Brazilian protection of patented medication, the election of a new President in Brazil put action temporarily on hold in order to see if the new administration would take care of the patent issues raised by the USA. See: James Bruce, trans., "USA Protests to Brazil about Patents," *Gazeta Mercantil Online* (Brazil), 29 November 2002.
- 76 Love, op. cit.
- 77 Ibid.
- 78 Ibid.
- 79 Sawyer, op. cit., p. 96.
- 80 Ibid., p. 97.
- 81 Love, op. cit.
- 82 Even before Seattle, these ideas were bubbling to the surface. See: David Korten, *When Corporations Rule the World*, San Francisco: Berrett-Koehler Publishers, 1995.
- 83 Press Release, Office of the US Trade Representative, "USTR Announces Results of Special 301 Annual Review," 30 April 1999. Available online at: <http://www.ustr.gov/releases/1999/04/99-41.html> [accessed 5 July 2004]. The USTR stated, "South Africa's Medicines Act appears to grant the Health Minister ill defined authority to issue compulsory licenses, authorize parallel imports, and potentially otherwise abrogate patent rights. We call on the Government of South Africa to bring its IPR regime into full compliance with TRIPS before the January 1, 2000 deadline, ensure that all Government offices use only legitimate software, and clarify that the powers granted in the Medicines Act are consistent with its international obligations and will not be used to weaken or abrogate pharmaceutical patent protection. We will continue to address these issues with the South African Government and will conduct an out-of-cycle review of South Africa's progress towards addressing these concerns in September 1999."
- 84 Press Release, Pharmaceutical Research and Manufacturing Association, "PhRMA Supports USTR on South Africa," April 30, 1999.
- 85 PhRMA, "Submissions of the Pharmaceutical Researchers and Manufacturers of America for the National Trade Estimate Report on Foreign Trade Barriers: South Africa," 1999. Available online at: <http://www.cptech.org/iplhealth/phrma/nte-99/safrica.html> [accessed 5 July 2004].
- 86 Robert Weissman, "AIDS and Developing Countries: Democratizing Access to Essential Medicines," *Foreign Policy in Focus* 4, August 1999: 23. Available online at: <http://www.foreignpolicy-infocus.org/briefs/vol4/v4n23aids.html> [accessed 5 July 2004].
- 87 US Dept of State, Report, *U.S. Government Efforts to Negotiate the Repeal, Termination or Withdrawal of Article 15(C) of the South African Medicines and Related Substances Act of 1965*, 5 February 1999. Available online at: <http://www.cptech.org/iplhealth/salstdept-feb51999.html> [accessed 5 July 2004].
- 88 Sawyer, op. cit., p. 99.
- 89 Ibid., p. 100.
- 90 Cunqueiro, op. cit.
- 91 Ibid.

- 92 Press Release, "Treatment-Access, Activists Lock Gore out of His Office," 25 August 1999. Available online at: <http://www.hivnet.ch:8000/topics/treatment-access/viewR?574> [accessed 5 July 2004].
- 93 Ibid.
- 94 Ibid.
- 95 Sonya Ross, "Gore Faces S. Africa AIDS Dilemma," The Associated Press, 30 June 1999. Available online at: <http://www.aegis.com/news/ap/1999/AP990616.html> [accessed 5 July 2004].
- 96 Ibid.
- 97 Ibid.
- 98 Harrelson, op. cit., p. 186.
- 99 James Ridgeway, "Gore AIDS Scandal – Helps Drug Companies Nix Cheap Medicines," *The Village Voice*, 2–8 June 1999. Available online at: <http://lists.essential.org/random-bits/msg00107.html> [accessed 5 July 2004].
- 100 "Al Gore, AIDS Drugs and Pharmaceutical Money," *Ouch!* 25, 16 June 1999. Available online at: <http://lists.essential.org/pharm-policy/msg00126.html> [accessed 5 July 2004].
- 101 See: Ed Vulliamy and David Beresford, "South Africa Beats US over Costs of AIDS Drugs," *Daily Mail* and *Guardian*, 21 September 1999. Available online at: <http://www.q.co.za/news/1999/9909/990921-uspolicy.htm> [accessed 5 July 2004]. In addition, in a press release from the USTR, the US government announced that this decision came in response to an agreement reached where the South African government made a new commitment to protecting intellectual property law. Press Release, Office of the United States Trade Representative, "U.S.–South Africa Understanding on Intellectual Property," 17 September 1999. Available online at: <http://www.ustr.gov/releases/1999/09/99–76.html> [accessed 5 July 2004].
- 102 Press Release, PhRMA, "Drug Companies Suspend Action against South African Law," 9 September 1999. Available online at: <http://www.phrma.org/mediaroom/pressreleases/09.09.1999.47.cfm> [accessed 5 July 2004].
- 103 James Love, "Five Common Mistakes by Reporters Covering US/South Africa Disputes over Compulsory Licensing and Parallel Imports," *Consumer Project on Technology*, 23 September 1999. Available online at: <http://www.cptech.org/lip/health/salmistakes.html> [accessed 5 July 2004].
- 104 Africa Policy Information Center. ACT UP Media Advisory. Available online at: <http://www.africaaction.org/docs00/drug0010.htm> [accessed 5 July 2004].
- 105 Sara M. Ford, "Comment, Compulsory Licensing Provisions under the TRIPS Agreement: Balancing Pills and Patents," *American University International Law Review* 15, 2000: 956.
- 106 Exec. Order No. 13155, Fed. Reg. 30,521–23, 12 May 2000.
- 107 Statement from Alan F. Holmer, President, PhRMA, issued in response to President Clinton's 10 May 2000 Executive Order on Access to HIV/AIDS Pharmaceuticals, May 2000 (on file with *Seattle Journal for Social Justice*).
- 108 Copson, op. cit., p. 9; see also: Position Paper by Health GAP Coalition Presented at UNAIDS meeting in Rio de Janeiro, "Questioning the UNAIDS/Pharmaceutical Industry Initiative. Seven Months and Counting," 13 December 2000. Available online at: <http://www.africaaction.org/docs01/drug0101.htm> [accessed 5 July 2004].
- 109 Tabor, op. cit., p. 516.
- 110 "Pharmaceutical Companies Reinstate South African Legal Challenge," *Africa–Europe Trade and Development Update*, September 2000: 2. Available online at: <http://www.africaaction.org/docs00/drug0010.htm> [accessed 5 July 2004].

- 111 Press Release, ACT UP, "AIDS Activists to Target Bush on Mass Protest Friday the 13th," 10 October 2000. Available online at:
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<http://www.cptech.org/ip/health/africa/> [accessed 5 July 2004].
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- 126 Gregor Adams et al., "Consensus Statement on Antiretroviral Treatment for AIDS in Poor Countries by Individual Members of the Faculty of Harvard University," 19 November 2001. Available online at:
http://www.hsph.harvard.edu/bioethics/pdf/consensus_aids_therapy.pdf [accessed 5 July 2004] (arguing that there are many compelling reasons to focus on treatment despite the fact that it may cost).
- 127 Copson, op. cit., p. 10.
- 128 Barbara Cochrane Alexander, "Lack of Access to HIV/AIDS Drugs in Developing Countries: Is There a Violation of the International Human Right to Health?" *Human Rights Brief* 8, spring 2001: 12.
- 129 Richard Gwyn, "Big Drug Companies, Shameful Profits," *Toronto Star*, 7 March 2001.
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- 132 Park, op. cit., pp. 147–8. According to Christopher May, MSF submitted a powerful amicus brief that documented the reliance on public funding by the major pharmaceutical companies. Email communication, 26 November 2003.
- 133 George W. Bush, "Remarks by the President during Announcement of Proposal for Global Fund to Fight HIV/AIDS," US Department of State, 11 May 2001. Available online at:
<http://www.state.gov/goes/rls/rlm/index.cfm?docid=2869> [accessed 5 July 2004].

- 134 Ibid.
- 135 Paula J. Dobriansky, "The Fight against HIV/AIDS: The Bush Administration's Integrated Approach," Remarks to a Conference on Curtailing the HIV Epidemic: The Role of Prevention, 22 June 2001. Available online at: <http://www.state.gov/rls/rml/2001/index.cfm?docid=4147> [accessed 5 July 2004].
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- 144 Joint Press Release, MSF, Oxfam and Third World Network, "TRIPS Council Special Discussion on Access to Medicines," 19 September 2001. Available online at: <http://www.africapolicy.org>.
- 145 It should be noted that the Swiss government has only offered patents on pharmaceutical products for the past thirty years – after they developed a mature drug industry. Thus, their position at Doha is a bit hypocritical.
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- 152 Mekay, op. cit.
- 153 Mekay, op. cit.
- 154 Mortished, op. cit.
- 155 Muchkund Dubey, "Implications of Doha for India," *The Hindu*, 25 December 2001
- 156 Ibid.
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- 160 Celia W. Dugger, "A Catch-22 on Drugs for the World's Poor," *New York Times*, 16 November 2001: W1.
- 161 Geoff Dyer, "Activists Point to Flaws in Declaration of Drug Patents," *Financial Times* (London), 16 November 2001: 13.
- 162 Ibid.
- 163 Sarah Boseley, "Aids Drugs Bring Hope to South Africa," *Guardian* (London), 30 January 2002: 14.
- 164 Nathan Geffen, Treatment Action Campaign (TAC), *Pharmaceutical Patents, Human Rights, and the HIV/AIDS Epidemic*, May 2001, p. 4. (Discussion document presented to the World Business Council for Sustainable Development Project on Innovation and Technology, Workstream on Intellectual Property

- Rights in Biotechnology and Information Technology.) Available online at: <http://www.tac.org.zal>.
- 165 Alexander, op. cit., p. 13. (Arguing for an interpretation of health as a universal human right).
- 166 It is important to note that the USA was the only veto on the UN Human Rights Commission declaration on access to medication to treat HIV/AIDS. Park, op. cit., p. 151.
- 167 Alexander, op. cit., p. 12.
- 168 Geffen, op. cit., p. 7.
- 169 *It's My Life*, First Run Icarus Films, 2001. Available online at: <http://frif.com/new2002/mlife.html> [accessed 5 July 2004].
- 170 Geffen, op. cit., p. 3.
- 171 Harrelson, op. cit., p. 186. Such a program has several obvious flaws from an activist point of view. First, it does nothing to challenge the high cost of these drugs in Africa and perpetuates the injustice inherent in the pricing structure. Second, such an action acts as a subsidy for the pharmaceutical companies that are already making millions on medication. Third, Africa doesn't need additional loans. In fact, the burden of debt has made it impossible for Africa to effectively fight AIDS in the first place.
- 172 Ford, op. cit., p. 964.
- 173 The Harvard Consensus statement on the moral reasons for providing AIDS medication helped clarify the point that despite the economic costs, treatment was a necessary part of a viable AIDS strategy. Adams et al., op. cit.
- 174 The Right Honorable Justin Malewezi, Vice-President of Malawi, Statement at The Consultation Forum on Global Fund to Fight AIDS, Tuberculosis and Malaria, 12–13 November 2001. Available online at: <http://www.hdnet.org/home2.htm>.
- 175 Geffen, op. cit., p. 18.
- 176 "HIV Victims Die as Drugs Firms Nurse Own Interests," *Guardian* (London), 28 August 2003: 22.

5 Patenting the body: resisting the commodification of the human

- 1 Martin Heidegger, "Overcoming Metaphysics," *The End of Philosophy*, New York: Harper & Row, 1973, p. 107. Quoted in Hubert Dreyfus, "Heidegger on Gaining a Free Relation to Technology," in David M. Kaplan (ed.), *Readings in the Philosophy of Technology*, Lanham: Rowman & Littlefield Publishers, 2004, pp. 53–61.
- 2 Jeff Howe, "Copyrighting the Book of Life," *Feed Magazine*, 12 April 2000. Available online at: <http://www.feedmag.com/dnalbookoflife.html> [accessed 5 September 2000].
- 3 Howe, 2000.
- 4 I will not be covering the vast literature on personality and publicity rights, but these issues also offer interesting challenges for human autonomy within the world of contracts and intellectual property rights. For more information see: James Boyle, *Shamans, Software, and Spleens: Law and the Construction of the Information Society*, Cambridge and London: Harvard University Press, 1996, p. 103. Boyle discusses several key right of publicity cases where, "it is worth noting that in each case the plaintiffs did not expend great labor, emotion, or even much originality in creating the protectable 'mark.'" Furthermore, Boyle argues that the idea of publicity rights is indebted to our attachment to the notion of the romantic author. Rosemary Coombe notes, the human personality is "capable of almost infinite commodification, because exclusive,

- nonexclusive, and temporally, spatially, and functionally limited licenses may be granted for use of any valuable aspect of the celebrity's public presence." Rosemary Coombe, *The Cultural Life of Intellectual Properties*, Durham and London: Duke University Press, 1998, p. 91. For an expanded discussion of the publicity rights issues and reality television see: Debora Halbert, "Who Owns Your Personality: Reality Television and Publicity Rights," in Matthew J. Smith and Andy Wood (eds), *Survivor Lessons: Essays on Communication and Reality Television*, Jefferson, North Carolina and London: McFarland & Company, 2003, pp. 37–56. For analysis on celebrity contracts see: Jane M. Gaines, *Contested Culture: The Image, the Voice, and the Law*, Chapel Hill and London: University of North Carolina Press, 1991. For a discussion on theoretical alternatives see: Alice Haemmerli, "Whose Who? The Case for a Kantian Right of Publicity," *Duke Law Journal* 49, November 1999, pp. 383–492.
- 5 For Locke's analysis of property ownership see: John Locke, *Second Treatise of Government*, ed. C.B. Macpherson, Indianapolis: Hackett Publishing Company, 1980, pp. 18–30.
 - 6 Sheldon Krimsky, "The Profit of Scientific Discovery and its Normative Implications," *Chicago-Kent Law Review* 75, 1999: 17.
 - 7 Eliot Marshall, "Companies Rush to Patent DNA," *Science*, 7 February 1997: 780–1. See also: *Diamond v. Chakrabarty*, 100 S.Ct. 2204, p. 2206.
 - 8 *Diamond v. Chakrabarty*, 100 S. Ct. 2204.
 - 9 596 F. 2d 952 quoted in summary of *Diamond v. Chakrabarty*, 100 S. Ct. 2204.
 - 10 *Ibid.*, p. 2207.
 - 11 *Ibid.*, p. 2207.
 - 12 *Ibid.*, p. 2207.
 - 13 Marshal, op. cit., p. 781.
 - 14 Courtney J. Miller, "Patent Law and Human Genomics," *Capital University Law Review* 26, 1997: 895. The patent on the Oncomouse was granted in 1988.
 - 15 *John Moore v. The Regents of the University of California*. 51 Cal. 3d 120 at 127 (1990).
 - 16 John Vidal, "The Story of Life," *Guardian*, 26 June 2000: 11.
 - 17 *Moore v. California*, p. 11. Moore also sued Genetics Institute, the organization with which a contract to commercialize his cell line had been made by his doctors.
 - 18 *Moore v. California*, p. 133.
 - 19 *Ibid.*, pp. 143–8.
 - 20 Alan Hyde, *Bodies of Law*, Princeton: Princeton University Press, 1997, p. 69.
 - 21 *Ibid.*, p. 49.
 - 22 *Ibid.*, p. 53.
 - 23 *Ibid.*, p. 57. "Yet the construction of the body as property is not complete, and we shall see judges recoiling in horror from this construction."
 - 24 Boyle, op. cit., pp. 106–7.
 - 25 *Ibid.*, p. 106.
 - 26 US Congress, Office of Technology Assessment, *New Developments in Biotechnology: Ownership of Human Tissues and Cells – a Special Report*, Washington, DC: US Government Printing Office, March 1987, p. 79.
 - 27 Krimsky, op. cit., pp. 25–6. Krimsky clarifies that the US Patent Office understands human gene fragments as "compositions of matter," not "living things." As Sheldon Krimsky, Professor of Urban and Environmental Policy at Tufts University, notes, "Human genes are not manufactured or modified, and therefore could not receive a patent on the criteria of intellectual property. There were two strategies open to patent applications. They could claim that the isolation of the genes within the genome of the organism was novel and therefore deserving

- of a patent, or that the form of the gene for which a patent was sought was not derived from nature.”
- 28 Moore v. California, p. 142.
- 29 Ibid., p. 144.
- 30 Ibid., p. 147. “If the scientific users of human cells are to be held liable for failing to investigate the consensual pedigree of their raw materials, we believe the Legislature should make that decision.”
- 31 Boyle, op. cit., p. 107.
- 32 Moore v. California, op. cit., pp. 138–9.
- 33 Ibid., p. 160.
- 34 *New Developments in Biotechnology*, op. cit., p. 71.
- 35 Ibid., p. 81.
- 36 Ibid., p. 81.
- 37 Ibid., p. 82.
- 38 Ibid., p. 82.
- 39 Ibid., p. 82.
- 40 Pauline Lane, “Human Patenting: Blood Money,” *Guardian*, 21 January 1998: 4.
- 41 Nigel Hawkes, “Tribal Treasure,” *The Times*, 4 March 1996.
- 42 Lane, op. cit., p. 4.
- 43 Ibid., p. 4.
- 44 Roger Highfield, “Biopiracy Claim after Patent on Blood Cell,” *Daily Telegraph*, 13 February 1996: 15.
- 45 Ibid., p. 15.
- 46 Interestingly, in a concurring opinion in Moore, Justice Broussard states, “Plaintiff has asked us to recognize and enforce a right to sell one’s own body tissue for profit. He entreats us to regard the human vessel – the single most venerated and protected subject in any civilized society – as equal with the basest commercial commodity. He urges us to commingle the sacred with the profane. He asks much.” However, Justice Broussard, unlike those active against patenting indigenous bodies, agreed that although the UCLA doctors could own a patent over Moore’s cells, it was somehow just inappropriate for Moore to make the same claim. Moore, p. 147.
- 47 Gary Taubes, “Scientists Attacked for ‘Patenting’ Pacific Tribe,” *Science*, 17 November 1995, p. 1112.
- 48 Ibid., p. 1112.
- 49 It also becomes important for those owning the patents to assert that this protection is necessary for future innovation. See: “Patent Blather,” *The Economist*, 25 November 1995: 87.
- 50 Victoria Tauli-Corpuz, “Biotechnology and Indigenous Peoples,” in Brian Tokar (ed.), *Redesigning Life: The Worldwide Challenge to Genetic Engineering*, New York and London: Zed Books, 2001, pp. 232–53.
- 51 Lane, op. cit., p. 4.
- 52 Hawkes, op. cit.
- 53 Ibid.
- 54 Quoted in: Seth Shulman, *Owning the Future*, Boston and New York: Houghton Mifflin Company, 1999, p. 148.
- 55 This is the title of the 1994 World Council of Indigenous Peoples pamphlet about the Human Genome Diversity Project, which will be described in this section. See: Beth Burrows, “Patents, Ethics and Spin,” in Brian Tokar (ed.), *Redesigning Life: The Worldwide Challenge to Genetic Engineering*, New York and London: Zed Books, 2001, p. 244.
- 56 Edmund Pitcher, Dean Charles DeLisi, Michael Gollin, Wendy McGoodwin, and Lawrence Wittenberg, “Symposium: Probing the Human Genome: Who

- Owns Genetic Information?" quoting DeLisi, *Boston University Journal of Science and Technology Law* 4, 1997: para. 2.
- 57 *Ibid.*, para 2.
- 58 Margaret Lock, "Symposium: Genetic Diversity and the Politics of Difference," *Chicago-Kent Law Review* 75, 1999, p. 84.
- 59 Edmund Pitcher, Dean Charles DeLisi, Michael Gollin, Wendy McGoodwin, and Lawrence Wittenberg, quoting Wendy McGoodwin, *op. cit.*, para 77.
- 60 There is a significant criticism and debate over the patentability of the human genome; however, this debate has not tended to focus on the outcomes of the HGP, but is rather centered on the general idea of patenting human genes.
- 61 *OTA Report on the Human Genome Project, Hearing before the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce*, 27 April 1988.
- 62 "Probably the answer is, some combination of the technology itself and, in some cases perhaps, the probes. But there is a belief on the part of both committees that the human genome sequence information itself should be available in the public domain for all to use." Testimony of Mark L. Pearson, Director of Molecular Biology, E.I. DuPont de Nemours and Co. *OTA Report on the Human Genome Project*, p. 70.
- 63 Miller outlines the arguments against patenting to include, "DNA patents are morally unacceptable because patents create a property right in the material that composes human beings." Miller, *op. cit.*, p. 919.
- 64 Testimony of Thomas H. Murray, *OTA Report on the Human Genome Project*, p. 52.
- 65 Murray, *op. cit.*, p. 53.
- 66 Representative Wyden, *OTA Report on the Human Genome Project*, p. 68.
- 67 Dr. Watson, *OTA Report on the Human Genome Project*, p. 68.
- 68 Donna J. Haraway, "Universal Donors in a Vampire Culture: It's All in the Family: Biological Kinship Categories in the Twentieth-Century United States," in William Cronon (ed.), *Uncommon Ground: Toward Reinventing Nature*, New York and London: W.W. Norton, 1995, p. 350.
- 69 Representative Walgren, *OTA Report on the Human Genome Project*, *op. cit.*, p. 74.
- 70 Thomas Murray, *op. cit.*, p. 74.
- 71 *Gene Patents and Other Genomic Inventions, Hearing before the Subcommittee on Courts and Intellectual Property of the Committee on the Judiciary*, 13 July 2000, pp. 6-7.
- 72 The irony for the Moore case was that they used the logic of a generic human genetic code and applied it to a case where it was the unique qualities of Moore's spleen that made it important.
- 73 Haraway, *op. cit.*, p. 352. "At the risk of repeating myself, the Human Genome Project produces ontologically specific things called databases as objects of knowledge and practice. The human to be represented, then, has a particular kind of totality, or species being, as well as a specific kind of individuality."
- 74 Krimsky, *op. cit.*, p. 26.
- 75 Edmund Pitcher, Dean Charles DeLisi, Michael Gollin, Wendy McGoodwin, and Lawrence Wittenberg quoting Edmund Pitcher, *op. cit.*, para. 5.
- 76 Krimsky, *op. cit.*, pp. 25-6.
- 77 DeLisi, *op. cit.*, para. 28
- 78 Edmund Pitcher, Dean Charles DeLisi, Michael Gollin, Wendy McGoodwin, and Lawrence Wittenberg quoting Michael Grollin, *op. cit.*, para. 32.
- 79 Sribala Subramanian, "The Story in Our Genes," *Time*, 16 January 1995. Available online at:

- <http://www.time.com/time/magazine/archive/1995/950116/950116.science.html> and <http://www.2think.org/cavalli-sforza.shtml> [both accessed 22 November 2004].
- 80 McGoodwin, op. cit., para 106.
- 81 Miller, op. cit., p. 895. It should come as no surprise that scientists working in publicly funded research institutes believe the human genome should remain in the public domain and scientists working in privately funded labs believe patents should be issued on all research.
- 82 Ibid., p. 902.
- 83 Ibid., p. 903.
- 84 Lock, op. cit., p. 91.
- 85 Ibid., p. 91.
- 86 L.L. Cavalli-Sforza et al., "Call for a Worldwide Survey of Human Genetic Diversity: A Vanishing Opportunity for the Human Genome Project," *Genomics* 11, 1991: 490.
- 87 Lock, op. cit., p. 91.
- 88 Human Genome Diversity Project, *Testimony before the Committee on Governmental Affairs*, 26 April 1993, p. 4.
- 89 Lock, op. cit., p. 92.
- 90 Carolyn Hong, "Gene Bank of Endangered Peoples Comes under Scrutiny," *New Strait Times* (Malaysia), 29 January 1995: 12; Haraway, op. cit., p. 353.
- 91 Haraway, op. cit., p. 355.
- 92 Quoted in Lock, op. cit., pp. 103–4.
- 93 Lock, op. cit., pp. 103–4. See also Tauli-Corpuz, op. cit., p. 262. "It is good that scientists acknowledge that most of the world's human genetic diversity lies with indigenous peoples and that we are endangered; this underscores the urgent need to save this genetic diversity. Indigenous peoples themselves are saying the very same thing. Yet, there is a lack of decisive moves on the part of governments and international bodies to address the genocide and ethnocide of indigenous peoples. To be told that, since indigenous peoples are vanishing fast, there is an urgent need to collect their DNA is adding insult to injury."
- 94 John Moore, quoted in Beth Burrows, op. cit., pp. 246–7 [ellipses in Burrows].
- 95 Henry T. Greely, "Informed Consent, Stored Tissue Samples, and the Human Genome Diversity Project: Protecting the Rights of Research Participants," in Robert F. Weir (ed.), *Stored Tissue Samples: Ethical, Legal, and Public Policy Implications*, Iowa City: University of Iowa Press, 1998, pp. 89–108. One of the tenets of the Model Protocol developed by the HGDP to deal with these controversial issues is to allow participants to have more control over the outcome of the research. They will control the intellectual property issues and the commercialization issues.
- 96 Michael Halewood, "Indigenous and Local Knowledge in International Law: A Preface to Sui Generis Intellectual Property Protection," *McGill Law Journal* 44, December 1999, pp. 953–96. Assesses general biodiversity and intellectual property issues.
- 97 Human Genome Diversity Project, *Hearing before the Committee on Governmental Affairs*, 26 April 1993, p. 65.
- 98 Alex Wellington, "'Rewriting Genesis': Intellectual Property Rights and Global (In)Justice," in Yeager Hudson (ed.), *Globalism and the Obsolescence of the State*, Lewiston, Queenston, Lampeter: The Edwin Mellen Press, 1999, pp. 45–79.
- 99 Lock, op. cit., p. 101.
- 100 Iain Thompson, "Heidegger, Marcuse, and Feenberg," in Michael Peters, Mark Olssen, and Colin Lankshear (eds), *Futures of Critical Theory: Dreams of Difference*, Lanham: Rowman & Littlefield Publishers, 2003, p. 61.

- 101 Martin Heidegger, *The Question Concerning Technology and Other Essays*, trans William Lovitt, New York: Harper & Row, 1977, p. 4.
- 102 Thompson, op. cit., p. 62.
- 103 Hubert Dreyfus, "Heidegger on Gaining a Free Relation to Technology," in David M. Kaplan (ed.), *Readings in the Philosophy of Technology*, Lanham: Rowman & Littlefield Publishers, 2004, p. 54 [emphasis in original].
- 104 More recent analysis of Heidegger and the philosophy of technology suggests a more complex relationship between technology and humans – one that is reflexive and allows for democratic intervention in the direction of technological change. See: Andrew Feenberg, *Questioning Technology*, London and New York: Routledge, 1999.
- 105 Dreyfus, op. cit., p. 60.
- 106 Thomson, op. cit., p. 65.
- 107 Dreyfus, op. cit., p. 60.
- 108 Feenberg, op. cit., p. 76.

6 Traditional knowledge and intellectual property: seeking alternatives

- 1 Thomas Greaves, "Tribal Rights," in Stephen B. Brush and Doreen Stabinsky (eds), *Valuing Local Knowledge: Indigenous People and Intellectual Property Rights*, Washington, DC: Island Press, 1996, p. 25.
- 2 Kathy Ferguson and Phyllis Turnbull, *Oh Say Can You See: The Semiotics of the Military in Hawai'i*, Minneapolis: University of Minnesota Press, 1999.
- 3 *Ibid.*, p. 121.
- 4 *Ibid.*, p. 123.
- 5 *Ibid.*, p. 124.
- 6 Keith Aoki, "Space Invaders: Critical Geography, the 'Third World' in International Law and Critical Race Theory," *Villanova Law Review* 45, 2000, pp. 926–7.
- 7 The category "Indigenous peoples" can include a large number of culturally different peoples. In no way do I wish to reproduce the lumping of Indigenous cultures into one undifferentiated mass. However, without focusing on a specific tribe, it is necessary to talk generally about the issues confronting the vast majority of Indigenous peoples throughout the world. John Trotti provides some of the complexities of the definitional debate in his article. See: John L. Trotti, "Compensation versus Colonization: A Common Heritage Approach to the Use of Indigenous Medicine in Developing Western Pharmaceuticals," *Food and Drug Law Journal* 56, 2001: 369. "In contrast, a much broader definition of Indigenous people is 'people living in tribal societies and peoples of aboriginal cultures in nation states' thus including both tribal peoples and peasant peoples." This is consistent with more flexible definitions that provide exceptions to accommodate societies that are no longer struggling against colonization. For example, one definition explains that Indigenous people are "existing descendants of non-Western peoples who in general continue to occupy their ancestral lands even after conquest by Westerners, or who have been relocated forcibly in the process of colonization."
- 8 Brian Richardson, *From Longitude to Empire: The Articulations of Place in the Voyages of Captain Cook*, dissertation, University of Hawai'i (2001). Available online at: <http://hwww2.hawaii.edu/~richards>. Forthcoming with University of British Columbia Press.
- 9 Richardson, op. cit., 2001; Adam Hochschild, *King Leopold's Ghost: A Story of Greed, Terror and Heroism in Colonial Africa*, Boston: Houghton Mifflin, 1998.

- Both Richardson and Hochschild provide accounts of humans, animals, and natural artifacts being put on display throughout Europe.
- 10 Edward Said notes in the introduction to *Culture and Imperialism* that, “Western imperialism and Third World nationalism feed off each other, but even at their worst they are neither monolithic nor deterministic. Besides, culture is not monolithic either, and is not the exclusive property of East or West, nor of small groups of men or women.” Edward Said, *Culture and Imperialism*, New York: Alfred A. Knopf, 1994, p. xxiv.
 - 11 In Hawai‘i, the transformation of property paradigms with the mahele in the nineteenth century ensured the disruption of the traditional Hawaiian ahupua‘a system of land tenure with a system of private property. See: Ferguson and Turnbull, op. cit., pp. 112–13.
 - 12 Beth Burrows, “Patents, Ethics and Spin,” in Brian Tokar (ed.), *Redesigning Life: The Worldwide Challenge to Genetic Engineering*, New York and London: Zed Books, 2001, pp. 238–40.
 - 13 Rosemary Coombe, “Contingent Articulations: A Critical Cultural Studies of Law,” in Austin Sarat and Thomas R. Kearns (eds), *Law in the Domains of Culture*, Ann Arbor: University of Michigan Press, 1998, pp. 25–6.
 - 14 Naomi Roht-Arriaza notes that the construction of legal categories to define Indigenous knowledge as “wild” or “primitive” have typically relegated such knowledge to the “common heritage of mankind.” See: Naomi Roht-Arriaza, “Of Seeds and Shamans: The Appropriation of the Scientific and Technical Knowledge of Indigenous and Local Communities,” *Michigan Journal of International Law* 17, summer 1996: 929–31.
 - 15 There is a vast literature on the tactics used to destroy Indigenous cultures. For Hawai‘i see: Haunani-Kay Trask, *From a Native Daughter: Colonialism and Sovereignty in Hawai‘i*, Honolulu: University of Hawai‘i Press, 1999; for a Native American perspective see: Ward Churchill, *From a Native Son: Selected Essays in Indigenism, 1985–1995*, Boston: South End Press, 1996; in terms of academic imperialism see: Vilsoni Hereniko, “Indigenous Knowledge and Academic Imperialism,” in Robert Borofsky (ed.), *Remembrance of Pacific Pasts: An Invitation to Remake History*, Honolulu: University of Hawai‘i Press, 2000, pp. 78–91.
 - 16 Anne McClintock, *Imperial Leather: Race, Gender and Sexuality in the Colonial Contest*, New York and London: Routledge, 1995.
 - 17 It took the Belgians around 100 years to even “discover” the native art of the peoples that were part of what became the Belgian Congo. Hochschild, op. cit.
 - 18 Marie Battiste and James (Sa‘ke’j) Youngblood Henderson, *Protecting Indigenous Knowledge and Heritage*, Saskatoon, Saskatchewan, Purich Publishing Ltd, 2000, p. 147.
 - 19 The deep suspicion on the part of virtually all Indigenous peoples towards white people especially cannot be over-emphasized. This suspicion colors all aspects of the debate and it must be recognized that the history of colonization cannot be separated from talks about traditional knowledge. See generally: Donald L. Fixico, *The American Indian Mind in a Linear World*, New York and London: Routledge, 2003.
 - 20 Michael Halewood, “Indigenous and Local Knowledge in International Law: A Preface to Sui Generis Intellectual Property Protection,” *McGill Law Journal* 44, December 1999: 966–7.
 - 21 Even in the USA this logic structures the relationship of humans to the scientific community. The most widely publicized case is that of John Moore, discussed in the previous chapter. See: James Boyle, *Shamans, Software and Spleens: Law and the Construction of the Information Society*, Cambridge: Harvard University

- Press, 1996; Alan Hyde, *Bodies of Law*, Princeton: Princeton University Press, 1997.
- 22 Michael Brown provides a thoughtful analysis of the dilemmas surrounding the issue of intellectual property and traditional knowledge. See: Michael F. Brown, *Who Owns Native Culture?* Cambridge and London: Harvard University Press, 2003.
 - 23 Victoria Tauli-Corpuz, "Biotechnology and Indigenous Peoples," in Brian Tokar (ed.), *Redesigning Life: The Worldwide Challenge to Genetic Engineering*, New York and London: Zed Books, 2001, p. 253. Tauli-Corpuz who works in the Philippines with the Indigenous Peoples' International Centre for Policy Research and Education argues that the views of Indigenous peoples on the issue of intellectual property are substantively different from other groups. Because Indigenous groups have long been marginalized by market-based economic systems it is difficult for many to believe that a system like intellectual property rights will be of use.
 - 24 *Ibid.*, p. 138.
 - 25 Johan Galtung calls this scientific colonialism. He argues, "a major aspect of scientific colonialism is the idea of unlimited access to data of any kind, just as the colonial power felt it had the right to lay its hand on any product of commercial value in the territory." Johan Galtung, "After Camelot," in Irving Horowitz, *The Rise and Fall of Project Camelot*, 1967, p. 300. Quoted in Laurie Anne Whitt, "Indigenous Peoples, Intellectual Property and the New Imperial Science," *Oklahoma City University Law Review* 23, spring/summer 1998: 228.
 - 26 "For Indigenous peoples, modern intellectual property laws, which are not designed to protect Indigenous knowledge and heritage, can themselves be acts of colonization." See: Battiste and Henderson, *op. cit.*, p. 148. See also: Burrows, *op. cit.*, p. 239.
 - 27 Vandana Shiva, *Biopiracy: The Plunder of Nature and Knowledge*, Boston: South End Press, 1997.
 - 28 Vandana Shiva describes two categories of biopiracy, resource piracy and intellectual and cultural piracy. See: Vandana Shiva, "Biopiracy: The Theft of Knowledge and Resources," in Brian Tokar (ed.), *Redesigning Life: The Worldwide Challenge to Genetic Engineering*, New York and London: Zed Books, 2001, pp. 283–4.
 - 29 Recognition as a tribe is an ongoing area of controversy in the USA. There are several tribes recognized by the state, but not the federal government, and others that are unrecognized by either state or federal governmental agencies. The Code of Federal Regulations administered by the Bureau of Indian Affairs is responsible for issues related to tribal recognition. See: American Indian Policy Center, *Not All Indian Nations Are Federally Recognized*, 2002. Available online at: <http://www.airpi.org/pubs/nonrecog.html> [accessed 7 July 2004]. A full list of Federally Recognized tribes and Native groups in Alaska is available at the same website.
 - 30 Darrell A. Posey and Graham Dutfield, *Beyond Intellectual Property: Towards Traditional Resource Rights for Indigenous Peoples and Local Communities*, Ottawa: International Development Research Centre, 1996, p. 53. Additionally, not all signatories feel that their interests have been met by the TRIPS agreement. See: Carlos M. Correa, *Intellectual Property Rights, the WTO and Developing Countries: The TRIPS Agreement and Policy Options*, Penang: The Third World Network, 2000.
 - 31 Lakshmi Sarma, "Biopiracy: Twentieth Century Imperialism in the Form of International Agreements," *Temple International and Comparative Law Journal* 13, spring 1999: 109.
 - 32 There are emerging different domestic, regional, and international forms of protection for traditional knowledge that may help protect Indigenous people

- both within their nation-state location and more internationally. See: Matthias Leistner, "Existing Legal Provisions Regarding the Protection of Traditional Knowledge," in Silke von Lewinski (ed.), *Indigenous Heritage and Intellectual Property: Genetic Resources, Traditional Knowledge and Folklore*, The Hague, London and New York: Kluwer Law International, 2004, pp. 64–141.
- 33 Hugh Hansen, "Global Intellectual Property Rights: Boundaries of Access and Enforcement: Panel II: The Law and Policy of Protecting Folklore, Traditional Knowledge, and Genetic Resources," *Fordham Intellectual Property Media and Entertainment Law Journal* 12, spring 2002: 754–5.
- 34 Halewood, op. cit., pp. 988–9.
- 35 Michael Blakeney, "Global Intellectual Property Rights: Boundaries of Access and Enforcement: Panel II: The Law and Policy of Protecting Folklore, Traditional Knowledge, and Genetic Resources," *Fordham Intellectual Property Media and Entertainment Law Journal* 12, spring 2002, pp. 762–3.
- 36 See: Draft United Nations Declaration on the Rights of Indigenous Peoples, UN Subcommission on Prevention of Discrimination and Protection of Minorities, Res. 1994/5 at 105, U.N. Doc.E/CN.4/Sub.2/1994/56 (1994); 1993 Study on the Protection of the Cultural and Intellectual Property of Indigenous Peoples, UN Subcommission on Prevention of Discrimination and Protection of Minorities, 45th Sess., Agenda Item 14, U.N. Doc. E/CN.4/Sub.2/13993/28 (1993).
- 37 Halewood, op. cit., pp. 968–9.
- 38 Halewood, op. cit., pp. 976–7.
- 39 Rosemary J. Coombe, "Sixth Annual Tribal Sovereignty Symposium: The Recognition of Indigenous Peoples' and Community Traditional Knowledge in International Law," *St Thomas Law Review* 14, winter 2001: 275–6.
- 40 *Ibid.*, p. 277.
- 41 Halewood, op. cit., p. 986.
- 42 Coombe, op. cit., p. 275.
- 43 Leanne M. Fecteau, "The Ayahuasca Patent Revocation: Raising Questions about Current U.S. Patent Policy," *Boston College Third World Law Journal* 21: 69–104, Winter 2001, p. 77.
- 44 Coombe, op. cit., p. 278.
- 45 Patricia Williams notes that rights have been used to limit the voices of African Americans and American tribal peoples. However, she wishes to retrieve the discourse of rights by suggesting that a more inclusive rights discourse is, and should be, possible. "The task for Critical Legal Studies, then, is not to discard rights but to see through or past them so that they reflect a larger definition of privacy and property: so that privacy is turned from exclusion based on self-regard into regard for another's fragile, mysterious autonomy; and so that property regains its ancient connotation of being a reflection of the universal self." See: Patricia Williams, *The Alchemy of Race and Rights: Diary of a Law Professor*, Cambridge: Harvard University Press, 1991, p. 164.
- 46 Shane Greene documents the problems that emerged when the International Cooperative Biodiversity Group (ICBG), a program administered by the NIH, worked with Washington University on a project to collect medicinal plants in Peru. Every effort was made by Washington University to proceed according to an ethical framework that included informed consent and royalty sharing. However, plans soured when the initial negotiating group for the Aguaruna, the Aguaruna Huambisa Council, became suspicious of the agreement and withdrew. Future negotiations were held with the Confederation of Amazonian Nationalities of Peru (CONAP) and one lesson learned from the research was that Indigenous groups, much like any other political organization, have different agendas and cannot be negotiated with as if there is a common spokesperson for the entire group. For more details and insights see: Shane

- Greene, "Intellectual Property, Resources, or Territory?" in Mark Philip Bradley and Patrice Petro (eds), *Truth Claims: Representation and Human Rights*, New Brunswick and London: Rutgers University Press, 2002, pp. 229–50.
- 47 Nathan A. Busch, "Jack and the Beanstalk: Property Rights in Genetically Modified Plants," *Minnesota Intellectual Property Review* 3, 2002: 64–5.
- 48 *Ibid.*, p. 33.
- 49 *Ibid.*, pp. 64–5.
- 50 *Ibid.*, p. 33.
- 51 *Ibid.*, p. 33.
- 52 *Ibid.*, p. 34. It is estimated that industry will invest approximately 6–7 per cent of the costs of R&D with the government via public institutions picking up the rest of the tab.
- 53 *Ibid.*, p. 130.
- 54 Given the massive concentration in the seed markets, these concerns are very real. DuPont, Monsanto, and Novartis control almost 20 per cent of the global seed trade and control even greater percentages in specific crops. For more information see: Hope Shand, "Gene Giants: Understanding the 'Life Industry,'" in Brian Tokar (ed.), *Redesigning Life: The Worldwide Challenge to Genetic Engineering*, New York and London: Zed Books, 2001, pp. 230–1.
- 55 Gillian N. Rattray, "The Enola Bean Patent Controversy: Biopiracy, Novelty and Fish-and-Chips," *Duke Law and Technology Review* 8, June 2002: para. 11.
- 56 *Ibid.*, para. 11.
- 57 Proctor's company Pod-Ners sued and then settled with several Colorado bean farmers who were growing his beans. Proctor's attorney David Lee said, "The bean industry needs to be aware that Pod-Ners does not intend to stand by idly and permit the misappropriation of its intellectual property." See: John Accola, "Pod-Ners Drops Suit Stemming from Bean Patent," *Rocky Mountain News*, 21 November 2002: 6B.
- 58 Craig Benjamin, "Biopiracy and Native Knowledge: Indigenous Rights on the Last Frontier," *Native Americas* 14, 30 June 1997: 22.
- 59 Miriam Latorre Quinn, "Sixth Annual Tribal Sovereignty Symposium: The Recognition of Indigenous Peoples' and Community Traditional Knowledge in International Law," *St Thomas Law Review* 14, winter 2001: 290. These are listed by Quinn to include patent controversies over Turmeric, Neem Tree, Basmati Rice, Periwinkle, and many more.
- 60 Quoted in Benjamin, *op. cit.*, p. 22.
- 61 Emily Marden, "The Neem Tree Patent: International Conflict over the Commodification of Life," *Boston College International and Comparative Law Review* 22, spring 1999: 288–9.
- 62 *Ibid.*, pp. 288–9.
- 63 *Ibid.*, p. 289. See also: A.B. Cunningham, "Indigenous Knowledge and Biodiversity: Global Commons or Regional Heritage?" *Cultural Survival Quarterly* 15, 31 July 1991: 4.
- 64 Benjamin, *op. cit.*, p. 22. "The legal systems imposed upon Indigenous peoples through centuries-old colonialism have never respected traditional laws governing knowledge and the natural world. And although the Western concept of intellectual property is changing rapidly, Indigenous peoples by and large can't use the Western intellectual property system to their own advantage. The forms of intellectual property recognized under Western law are individual and short term, rather than collective and intergenerational, and remain the domain of the nation-state."
- 65 Marden, *op. cit.*, p. 291.

- 66 Cunningham, op. cit., p. 4. In 1988, “74 percent of the 110 known useful plant-derived drugs have a related use in traditional medicine and the dollar value of prescription drugs sold in the United States containing active ingredients from higher plants totals \$8 billion per year.”
- 67 Fecteau, op. cit., p. 74.
- 68 Benjamin, op. cit., p. 22.
- 69 Greaves, op. cit., p. 26.
- 70 John Locke, *Second Treatise on Government*, ed. C.B. Macpherson, Indianapolis: Hackett Publishing, 1980.
- 71 Robert A. Williams, Jr, *The American Indian in Western Legal Thought: The Discourses of Conquest*, New York and Oxford: Oxford University Press, 1990, p. 312.
- 72 Ibid., p. 313.
- 73 Ibid., p. 313.
- 74 Ibid., pp. 308–17.
- 75 Quoted in ibid., p. 316.
- 76 Johnson v. McIntosh, 21 U.S. (8 Wheat.) 543, 590. Quoted in ibid., p. 323.
- 77 Ibid., p. 317.
- 78 Quoted in Churchill, op. cit., pp. 320–1.
- 79 Churchill makes the argument for cultural genocide in his essay, “A Little Matter of Genocide: Colonialism and the Expropriation of Indigenous Spiritual Tradition in Academia,” in *From a Native Son*, op. cit., pp. 315–36.
- 80 Whitt, op. cit., p. 249.
- 81 The interpretation of a commons as a wasteland and unproductive space is discussed in the first chapter of this book. There is substantial evidence that viable commons in both land and ideas are necessary. Thus, theorizing about the idea of the commons is key. For an examination of how the commons can be interpreted in a positive light see: Bonnie J. McCay and Louise Fortmann, “Voices from the Commons: Evolving Relations of Property and Management,” *Cultural Survival Quarterly* 20, 30 April 1996: 24.
- 82 Greaves, op. cit., pp. 28–9. The effort to protect a broad range of rights over traditional culture is evident. See: Laurie Anne Whitt, Mere Roberts, Waerete Norman, and Vicki Grieves, “Belonging to the Land: Indigenous Knowledge Systems and the Natural World,” *Oklahoma City University Law Review* 26, summer 2001: 701–43; Russell L. Barsh, “Grounded Visions: Native American Conceptions of Landscapes and Ceremony,” *St Thomas Law Review* 13, fall 2000: 127.
- 83 Anthony T. McCann, *Beyond the Commons: The Expansion of the Irish Music Rights Organization, The Elimination of Uncertainty, and the Politics of Enclosure*, doctoral dissertation, University of Limerick, January 2002. McCann documents the enclosure of traditional Irish music.
- 84 One of Disney’s newer films, for example, appropriates from Hawai’ian culture, *The Lion King* appropriates from Africa, and the list goes on.
- 85 Darrell Posey, “Effecting International Change,” *Cultural Survival Quarterly* 15, 31 July 1991: 29.
- 86 Witness the recent failure to overturn Congress’s extension of copyright from life of the author plus fifty years to life of the author plus seventy years. The Supreme Court ruled 7–2 that the law was constitutional.
- 87 Busch, op. cit., pp. 138–9.
- 88 Whitt, op. cit., p. 212.
- 89 Greaves, op. cit., p. 27.
- 90 For example, Donald L. Fixico suggests that protocols need to be developed for Western researchers seeking to do research on Native Americans lands. These

- protocols would first and foremost be based upon a respectful request for permission. Fixico, *op. cit.*, p. 134.
- 91 It is important to clarify that I am not trying to “speak for” Indigenous groups. I am a person concerned with the over-extension of property rights to areas where they do not belong. I wish to respect the earnest desire of Indigenous groups to construct their own realities and make their own claims. In this section, I am not trying to speak for Indigenous groups, or tell Indigenous groups how to proceed, but rather to let the words of Indigenous peoples speak for themselves. However, I think it is time that Western societies learn from Indigenous groups and it is important to make as public as possible the fact that alternatives to intellectual property can and do exist.
 - 92 Fixico, *op. cit.*, pp. 21–37.
 - 93 Battiste and Henderson, *op. cit.*, pp. 41–2.
 - 94 Barsh, *op. cit.*, pp. 127–54; Whitt et al., *op. cit.*, pp. 701–43.
 - 95 Stefano Varese, “The New Environmentalist Movement of Latin American Indigenous People,” in Stephen B. Brush and Doreen Stabinsky (eds), *Valuing Local Knowledge: Indigenous People and Intellectual Property Rights*, Washington, DC: Island Press, 1996, p. 123. “Four cultural domains pertain to the Indian’s ethnic resilience and opposition. One is an extensive Indigenous cultural characteristic we may call the moral management of the cosmos, a type of moral ecology, of environmental ethics that is undeniably the central attribute of the majority of the Indigenous societies.”
 - 96 Fecteau, *op. cit.*, p. 82.
 - 97 Quoted in Whitt, *op. cit.*, p. 240.
 - 98 Declaration of Principles of the World Council of Indigenous Peoples, published in Posey and Dutfield *op. cit.*, pp. 179–80.
 - 99 *Ibid.*, p. 179.
 - 100 *Ibid.*, p. 180.
 - 101 UN Declaration on the Rights of Indigenous Peoples, 1993, published in Posey and Dutfield, *op. cit.*, pp. 181–8.
 - 102 David Bollier, *Silent Theft: The Private Plunder of Our Common Wealth*, New York and London: Routledge, 2002. Bollier develops the idea of “property on the outside” that seems applicable here.
 - 103 The Mataatua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples, First International Conference on the Cultural and Intellectual Property Rights of Indigenous Peoples, 12–18 June 1993. Reprinted in Posey and Dutfield, *op. cit.*, pp. 205–8.
 - 104 *Ibid.*, p. 207.
 - 105 “COICA/UNDP Regional Meeting on Intellectual Property Rights and Biodiversity,” reprinted in Posey and Dutfield, *op. cit.*, pp. 215–18. COICA is the Coordinating Body for the Indigenous Organizations of the Amazon Basin and the United Nations Development Programme.
 - 106 Posey and Dutfield, *Beyond Intellectual Property*, *op. cit.*
 - 107 Joseph Wambugu Githaiga, “Intellectual Property Law and the Protection of Indigenous Folklore and Knowledge,” *E-Law – Murdoch University Electronic Journal of Law* 5, June 1998. Available online at: <http://www.murdoch.edu.au/elaw/indices/issue/v5n2.html> [accessed 7 July 2004]. See also: Sarah A. Laird (ed.), *Biodiversity and Traditional Knowledge: Equitable Partnerships in Practice*, London and Sterling, VA: Earthscan Publications, Ltd, 2002. This edited volume includes numerous contributions on how to develop equitable partnerships with Indigenous communities that will foster knowledge sharing and mutual respect.
 - 108 Michael R. Dove, “Center, Periphery, and Biodiversity: A Paradox of Governance and a Developmental Challenge,” in *Valuing Local Knowledge*, *op. cit.*, p. 61.

- 109 For his full analysis see: Graham Dutfield, "Indigenous Peoples' Declarations and Statements and Equitable Research Relationships," in Sarah A. Laird (ed.), *Biodiversity and Traditional Knowledge: Equitable Partnerships in Practice*, London and Sterling, VA: Earthscan Publications, Ltd, 2002, p. 228–32.
- 110 Nelly Arvelo-Jiménex, "Kuyujani Originario: The Yekuana Road to the Overall Protection of Their Rights as a People," in Michael Finger and Philip Schuler (eds), *Poor People's Knowledge: Promoting Intellectual Property in Developing Countries*, Oxford and Washington, DC: Co-published by Oxford University Press and the World Bank, 2004, p. 45.
- 111 Graham Dutfield, "The Public and Private Domains: Intellectual Property Rights in Traditional Knowledge," *Science Communication* 21, March 2000: 274–95. He argues that there are many systems of intellectual property rights within what the Western world has stereotypically considered to be common property systems. The Western world simply ignores them.
- 112 Battiste and Henderson, op. cit., p. 70.
- 113 Ibid., pp. 70–1.
- 114 Kari-Oca Declaration and the Indigenous Peoples' Earth Charter, World Conference of Indigenous Peoples on Territory, Environment and Development, 25–30 May 1992. Reprinted in Posey and Dutfield, op. cit., p. 189–98.
- 115 The Declaration of São Luis do Maranhao, Declaration of Shamans on Intellectual Property and the Protection of Traditional Knowledge and Genetic Resources, 6 December 2001. Available online at: <http://www.nativeweb.org/pages/legal/shamans.pdf> [accessed 7 July 2004].
- 116 Ibid.
- 117 The Mataatua Declaration, op. cit., p. 206.
- 118 Darrell Addison Posey, "Intellectual Property Rights and the Sacred Balance: Some Spiritual Consequences from the Commercialization of Traditional Resources," in John A. Grim (ed.), *Indigenous Traditions and Ecology: The Interbeing of Cosmology and Community*, Cambridge: Harvard University Press, 2001, pp. 3–23.
- 119 Whitt et al., op. cit., p. 731.
- 120 Michael Finger and Philip Schuler (eds), *Poor People's Knowledge: Promoting Intellectual Property in Developing Countries*, Oxford and Washington, DC: co-published by Oxford University Press and the World Bank, 2004.
- 121 Coenraad J. Visser, "Making Intellectual Property Laws Work for Traditional Knowledge," in Michael Finger and Philip Schuler (eds), *Poor People's Knowledge: Promoting Intellectual Property in Developing Countries*, Oxford and Washington, DC: co-published by Oxford University Press and the World Bank, 2004, p. 207–40.
- 122 See: "Traditional Knowledge," World Intellectual Property Organization. Available online at: <http://www.wipo.int/tklen/index.html> [accessed 7 July 2004].
- 123 Brown tells the story of ethnobotanist Brent Berlin who became caught in the political fray of the traditional knowledge debate when his research and desire to pursue it in the most ethical manner possible led to him being caught between the claims of competing Indigenous groups and NGOs such as RAFI who see any research by Western scientists as biopiracy. Instead of being hailed as a model for future research, his story became an example of biopiracy and eventually he ended the project. See: Brown, op. cit., pp. 109–25.
- 124 Peter Drahos, "The Rights to Food, Health and Intellectual Property in the Era of 'Biogopolies,'" in Stephen Bottomley and David Kinley (eds), *Commercial Law and Human Rights*, Aldershot and Burlington: Ashgate Dartmouth, 2002, pp. 215–33. In this article Drahos argues that the marketization of biological resources has led to a state of "biogopolies." In response, the international framework of human rights must be used to ensure adequate access to food.

Peter Drahos and Michael Blakeney (eds), *Perspectives on Intellectual Property: IP in Biodiversity and Agriculture*, London: Sweet & Maxwell, 2001. In this edited volume Drahos and Blakeney assemble essays by the leading thinkers on issues of bioprospecting and intellectual property to make an argument for moderation on the part of international agreements such as TRIPS.

125 Brown, *op. cit.*, pp. 125–43.

126 Vandana Shiva, “Seed Satyagraha: A Movement for Farmers’ Rights and Freedoms in a World of Intellectual Property Rights, Globalized Agriculture and Biotechnology,” in Brian Tokar (ed.), *Redesigning Life: The Worldwide Challenge to Genetic Engineering*, New York and London: Zed Books, 2001, pp. 351–60.

127 Brian Tokar (ed.), *Redesigning Life: The Worldwide Challenge to Genetic Engineering*, New York and London: Zed Books, 2001, pp. 315–19.

7 Conclusion

1 Jacqueline Lipton, “Balancing Private Rights and Public Policies: Reconceptualizing Property in Databases,” *Berkeley Technology Law Journal* 18, summer 2003: 773–852.

2 Adrian Otten, “The First Five Years (1995–1999): Implementing and Enforcing TRIPs Obligations,” in Thomas Cottier and Petros C. Mavroidis (eds), *Intellectual Property: Trade, Competition, and Sustainable Development*, Ann Arbor: University of Michigan Press, 2003, p. 101. In 1999, thirty-five WTO Members had complied with TRIPS, and the 2000 benchmark was to bring an additional seventy countries into compliance. The final date was January 2006, but in the case of pharmaceutical patents, this date has been pushed back until 2016.

3 India was a significant player in the resistance during negotiations, but ultimately was forced to sign the agreement. See: N.B. Zaveri, *Patents for Medicine: Balanced Patent Law – The Need of the Hour, Issues/Options before the Nation and the Parliament for Patent Law Changes for “TRIPS,”* Indian Drug Manufacturers’ Association: Mumbai, 1998.

4 Virginia Vargas, “Feminism, Globalization and the Global Justice and Solidarity Movement,” *Cultural Studies* 17, 2003: 905–20, p. 909.

5 Mike Godwin, *Cyber Rights: Defending Free Speech in the Digital Age*, 2nd edn, Cambridge and London: MIT Press, 2003, p. 49.

6 *Ibid.*, p. 53.

7 Eric Sawyer, “An ACT UP Founder ‘Acts Up’ for Africa’s Access to AIDS,” in Benjamin Shepard and Ronald Hayduk (eds), *From ACT UP to the WTO: Urban Protest and Community Building in the Era of Globalization*, London and New York: Verso, 2002, pp. 88–102.

8 Jim Thomas, “Princes, Aliens, Superheroes and Snowballs: The Playful World of the UK Genetic Resistance,” in Brian Tokar (ed.), *Redesigning Life: The Worldwide Challenge to Genetic Engineering*, New York and London: Zed Books, 2001, pp. 337–50.

9 For example, the Gene Campaign worked for seven years to get appropriate legislation to protect farmers’ rights in India. See: Suman Sahai, “India’s Plant Variety Protection and Farmers’ Rights Legislation,” in Peter Drahos and Ruth Mayne (eds), *Global Intellectual Property Rights: Knowledge, Access and Development*, New York: Palgrave, 2002, p. 216.

10 Iain Thomson, “Heidegger, Marcuse, and Feenberg,” in Michael Peters, Mark Olssen, and Colin Lankshear (eds), *Futures of Critical Theory: Dreams of Difference*, Lanham, Boulder, New York: Rowman & Littlefield Publishers, 2003, p. 69.

- 11 Ibid., p. 69.
- 12 Peter Drahos, "Negotiating Intellectual Property Rights: Between Coercion and Dialogue," in Peter Drahos and Ruth Mayne (eds), *Global Intellectual Property Rights: Knowledge, Access and Development*, New York: Palgrave, 2002, pp. 161–82, p. 175.
- 13 William F. Fisher and Thomas Ponniah (eds), *Another World is Possible: Popular Alternatives to Globalization at the World Social Forum*, London and New York: Zed Books, 2003.
- 14 Chaia Heller, "McDonald's, MTV and Monsanto: Resisting Biotechnology in the Age of Informational Capital," in Brian Tokar (ed.), *Redesigning Life: The Worldwide Challenge to Genetic Engineering*, New York and London: Zed Books, 2001, p. 415.
- 15 Ibid., p. 416 [emphasis in original].
- 16 Ibid., p. 416 [emphasis in original].
- 17 Andrew Feenberg suggests that it is not possible to view technology deterministically because public voices can change the course of technology by offering resistance to the status quo. See: Andrew Feenberg, *Questioning Technology*, London and New York: Routledge, 1999, p. 224.

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