Content Control: The Motion Picture Association of America's Patrolling of Internet Piracy in America, 1996-2008

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Abstract

This historical and political economic investigation aims to illustrate the ways in which the Motion Picture Association of America radically revised their methods of patrolling and fighting film piracy from 1996-2008. Overall, entertainment companies discovered the World Wide Web to be a powerful distribution outlet for cultural works, but were suspicious that the Internet was a Wild West frontier requiring regulation. The entertainment industry's guiding belief in regulation and strong protection were prompted by convictions that once the copyright industries lose control, companies quickly submerge like floundering ships. Guided by fears regarding film piracy, the MPAA instituted a sophisticated and seemingly impenetrable "trusted system" to secure its cultural products online by crafting relationships and interlinking the technological, legal, institutional, and rhetorical in order to carefully direct consumer activity according to particular agendas. The system created a scenario in which legislators and courts of law consented to play a supportive role with privately organized arrangements professing to serve the public interest, but the arrangements were not designed for those ends. Additionally, as cultural products became digitized consumers experienced a paradigm shift that challenged the concept of property altogether. In the digital world the Internet gives a consumer access *to*, rather than ownership *of*, cultural products in cyberspace. The technology granting consumers, on impulse, access to enormous amounts of music and films has been called, among many things, the "celestial jukebox." Regardless of what the technology is called, behind the eloquent veneer is the case in point of a systematic corrosion of consumer rights that, in the end, results in an unfair exchange between the content producers and consumers. What is the relationship of the MPAA to current piracy practices in America? How will Hollywood's enormous economic investment in content control affect future film distribution, exhibition, and consumer reception? Through historical analysis regarding the MPAA's campaign against film piracy along with interviews from key media industry personnel and the pirate underground, this contemporary illustration depicts how the MPAA secures its content for Internet distribution, and defines and criticizes the legal and technological controls that collide with consumer freedoms.

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Introduction

The number of film piracy cases grew at a breakneck pace in the early 1970s because of an important breakthrough permitting movies to become tangible consumer goods. The appearance of the videocassette recorder (VCR) was significant to consumers in countless ways. While the typical video fan used the technology to collect, archive, share, and learn from an enormous archive of film and video, VCRs also permitted consumers to shift distribution control away from the transnational multimedia conglomerates. Additional technological advances permitted consumers time-shifting recording and content sharing, eventually allowing the rapid and inexpensive reproduction of film products and thereby placing the consumer within the framework of production *and* distribution.[1] Video Cassette Recorders created huge profits for the Hollywood major studios, although initially the studios contested the arrival of the technology in the courts and were slow to respond in creating an ancillary market through the sale of videocassettes.[2] On January 17, 1984, the U.S. Supreme Court ruled 5-4 that the taping of a television program, including movies broadcast on television, was legal for home viewing, rejecting the assertion by the entertainment industry that viewers who recorded programs were stealing copyrighted product.

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[1] Shujen Wang, *Framing Piracy: Globalization and Film Distribution in Greater China* (Oxford: Rowman & Littlefield, 2003).

[2] Kerry Segrave, *Piracy in the Motion Picture Industry* (Jefferson, N.C.: McFarland & Co., 2003), 222.

VCRs also allowed video enthusiasts to share content and duplicate and distribute media on a mass scale.[3] By 1985, the Film Security Office (FSO), an office established by MPAA president Jack Valenti to combat piracy on behalf of its member companies, Columbia, Warner Bros., United Artists, Paramount, Fox, Universal, Allied Artists, and Avco Embassy, estimated the worldwide loss of revenue to the majors due to film piracy was $1 billion.[4] By 1988, the total number of piracy investigations equaled 10,500. Countries with the largest number of illegal tapes included Japan, Italy, the United States, West Germany, Brazil, Taiwan, and the Philippines. In the United States that same year, Valenti, FSO president Richard Bloeser, and MPAA North American anti-piracy director Mark Kalmonsohn discussed anti-piracy enforcement measures with FBI head William Sessions. A decade later (1998), during the initial phases of consumer broadband penetration, public service announcements crafted by the MPAA appeared in 33 New York City movie houses asking the audience to collaborate and report offenders to the appropriate theater authorities by looking for individuals operating illegal camcorders that were recording films.

Purpose

This dissertation aims to illustrate the ways in which the Motion Picture Association of America radically revised their methods of patrolling and fighting film piracy because of the digitization of media, digitization that was marshaled in by two prevailing developments. The invention of the digital videodisc and subsequent introduction to the consumer market created

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[3] Wang, *Framing Piracy*.

[4] Segrave, *Piracy in the Motion Picture Industry*.

marginal revenues for Hollywood; although because of its superior resolution (720 lines versus videotape at 420) and high capacity (a dual layer DVD can hold 8.5 gb of data), it quickly became an extremely profitable media for the studios. Similarly, in 1996 neo-liberalism policies based on deregulation helped the Internet expand to thousands of customers because telecoms began offering bundled services that were previously prohibited by Federal Communications Commission (FCC) rules.

In this investigation, I argue that the DMCA (Digital Millennium Copyright Act), a severe and reckless piece of legislation that the MPAA (Motion Picture Association of America) and the RIAA (Recording Industry Association of America) lobbied Congress to pass in 1998, permitted a whole host of new legal and technological controls that produced a collision with freedom of expression. By freedom of expression, I mean to say that prior to the passage of the DMCA, individuals generally experienced fewer conflicts over the copyright industries' protection of works and the artistic creation of new works influenced by, and based on, previous works. The DMCA made it a civil and criminal act to circumvent a technological measure that effectively controls access to a protected work under this act. Additionally, the DMCA made the manufacture, import, offer to the public, the provision or otherwise participation in any technology, product, service, device, etc an unlawful offense. Ironically, just three short years after the passage of the DMCA, Apple Computer released a new advertisement campaign to sell its new and improved *iMac* home computers: Apple's *Rip, Mix, Burn* promotion celebrated new consumer freedoms with the pairing of a cd-rw drive and an Apple personal computer. Shortly thereafter, the public began ripping mp3's to rewritable compact discs and this eventually became a problem for the RIAA. Then, in what can only be deemed paradoxical, in 2003,

Apple's *iTunes* store debuted and in a dramatic shift in direction, the computer electronics company eventually compromised its vision in order to placate the recording industry and its concerns regarding piracy. Among many criticisms, the *iTunes* store has been called proprietary with regard to devices not manufactured by Apple. Specifically, Apple's use of drm schemes on its audio, video, and e-book products frequently prevents Apple media from being authorized to play on other non-Apple hardware. Generally, Apple achieved incredible success with *iTunes* by offering its products at a cheaper rate than the competition and creating an e-vendor that was convenient and systematized. However, Apple's security encryption schemes do nothing for consumer freedoms as it proclaimed in the 2001 *iMac* campaign.

Following the passage of the DMCA, the movie industry started to incorporate digital protections on saleable media that were far more sophisticated than Macrovision protection on VCR tapes. Macrovision, considered the first global copy protection technology for video, made a veritable fortune from the motion picture industry with its sales of copy protection technology on videotapes in the early 1980s. At this particular moment, the home video industry was all but certain that VCRs would destroy the movie business, failing to recognize that video was a future, critical source for Hollywood ancillary revenues. The first home video cassette containing a major film release encoded with Macrovision protection was *The Cotton Club* (dir. Coppola, 1985).[5]

You Can't Protect What You Don't Own

With the gradual shift of cultural products from the physical to digital universe, consumers experienced a paradigm shift that challenged the concept of property ownership altogether. Certainly, one of the features of the Internet is the ability to enable the spread of content efficiently, but this is a liability to a media producer, and therefore places the burden of

[5] Andy Wickstrom, "Macrovision Hasn't Stopped Tape Copying," *The Ledger*, February 15, 1986.

providing some kind of oversight on consumer Internet usage. Described officially as a mechanism for enforcing copyright, digital rights management goes beyond simply preventing the duplication and distributing of media content and actually exceeds the boundaries of copyright law. Copyright law was originally intended to give property owners the right to control only the public performances and displays of certain works, but DRM actually acts as a kind of private governance system in which computer program code regulates which acts consumers are authorized to perform.[6] Pamela Samuelson, Professor of Law and Information Management at the University of California, Berkeley, suggests that Digital Rights Management is actually a misnomer, with the copyright protection technology more aptly titled "digital restrictions management" since it allows the copyright industries to determine user rights. The DRM technology manages the permissions of the digital information instead of any particular digital rights, and does not understand the nuances of fair use, for instance, when the consumer's use of a cultural product is for commercial or educational purposes. A computer code is a poor arbiter, and begs one to ask ultimately, what fair use is actually good for.

In the digital world, consumers cannot protect what they do not own, and the Internet gives a consumer access *to*, rather than ownership *of*, cultural products in cyberspace. If you can't protect what you own, then you don't own anything.[7] [7] The technology that grants consumers, on impulse, access to enormous amounts of music and films has been called, among many things, the "celestial jukebox." Regardless of what the technology is called, behind the eloquent veneer is the case in point of a systematic corrosion of consumer rights that, in the end,

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[6] Pamela Samuelson, "DRM {and, or, vs} the Law," *Communications of The ACM* 46, no.4 (2003): 41-45.

[7] Jack Valenti wrote a memo to the United States Senate on April 21, 2001, warning that movie studios in the future would have difficulty raising money for new film products if the state could not guarantee copyright protection for filmmakers and their producers. "If copyright is allowed to decay, then this nation will begin the slow undoing of an immense economic asset… who will invest huge amounts of private risk capital in the production of films if this creative property cannot be protected from theft? If you can't protect what you don't own, than you don't own anything." Valenti's plea for regulation is characteristically populist, and from a particularly sardonic point of view, his oratory with respect to ownership is highly interchangeable with the opposition.

results in an unfair exchange between the content producers and consumers.

DRM is one concern of this dissertation, yet another is recognizing the content industry's power determined by the political economic framework of what Tarleton Gillespie calls the "trusted system," the relationships between the technological, legal, economic and cultural arrangements that make all the elements of a regulatory regime work together.[8] [8] These exclusive arrangements are important because the MPAA relies on the strength of this "regime of alignment" to distribute video products. The trusted system is the interlinking of the technological, the legal, the institutional and the rhetorical in order to carefully direct consumer activity according to particular agendas.[9] The system creates a scenario in which legislators and courts of law also consent to play a supportive role with privately organized arrangements that profess to be serving the public interest, but the arrangements are not designed for those ends.

The trusted system scenario, as articulated by Gillespie, illustrates a top down, command and control framework that prevented consumers from performing activities with digital properties that were considered routine with physical media. My investigation is primarily concerned with the MPAA's partnerships with specific individuals in the trusted system and the ways in which their professional activities support the copyright industries' agendas. The MPAA plays a prominent role creating the backdrop for copyright enforcement, but its relationships with its affiliates are diffuse. For this investigation, my primary research question was: Who are the people that uphold the MPAA's trusted system framework on a daily basis? Additionally, the move to digitize and secure Hollywood's media properties affected film post-production and distribution methods. In what ways did the enforcement of copyright in the

[8] Tarleton Gillespie, *Wired Shut: Copyright and the Shape of Digital Culture* (Cambridge, MA: Massachusetts Institute of Technology, 2007).

digital age affect production, distribution, and exhibition? Lastly, the MPAA's new legal and rhetorical responsibilities of upholding the DMCA presented new challenges for the organization, as consumers were experiencing fatigue from being branded as criminals. What were some of the public relations tactics that the film organization utilized to connect more effectively with consumers?

After the failure of the Recording Industry Association of America to successfully implement a trusted system that would protect copyrighted music in digital formats, the Motion Picture Association of America (MPAA) threatened to withhold all film content for Internet distribution until a sufficient regulatory framework was put into place. The incorporation of DRM for Internet film distribution provided the first obstacle to individuals seeking to make unauthorized film copies. The recording and film industries' use of DRM only played a minor factor in a comprehensive four-pronged strategy that sought to limit the control of their products. Also playing a crucial role in the regime of control is the passage of DMCA legislation that prohibited any content user from circumventing copyright encryption schemes. The DMCA, combined with legal efforts to prosecute users sharing and downloading content, along with prohibiting the production of tools and networks that facilitate sharing and copying, are similarly prohibited. The incorporation of technological barriers that interfere with content production and exhibition, as well as devices used for exhibition manufactured in turn prevents casual copying. The contractual arrangements between the content industries ensure that the guidelines imposed through law and technology is followed, and the special interests representing the content industries convince legislators that such systems are compulsory.[10]

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[9] Ibid.
[10] Ibid.

Research Methods

While Digital Rights Management has been at the forefront of the criticism regarding consumer rights on the Internet, it is in fact critical that the DMCA, the legal threat of prosecution, the prohibition of tools and networks that share and facilitate copying (covered under the DMCA), and the incorporation of DRM- all of these arrangements must be in place for the media industries to regulate unauthorized copying. Gillespie's research exposes the arrangements between policymakers, the law, the content industries and the hardware manufacturers. If, for example, the majority of hardware manufacturers refuse to act in accordance with these arrangements and decline implementing copy protection within a bounded set of devices and networks the trusted system collapses. Similarly, if content providers cannot agree on a suitable digital encryption standard, all bets are off and so on.

Gillespie's work provides a political economy of the content industries, and showcases the way in which contractual arrangements between the legal, software, and hardware industries protect content. Gillespie's work is lacking, however, in representing some of the main players in this "regime of control." Of course, the industry players' discourse regarding copyright protection and piracy dominate the media, and receive far more attention because of the absence of a fair and balanced discussion regarding intellectual property and consumer rights. Organizations like the Electronic Frontier Foundation and other consortia supporting privacy and free speech are generally left out of the debates centered on the future role of technology and its role in media distribution and consumption. It is, however, important for this project to include some of the central players involved in streaming and content distribution and respond to some of these concerns.

I suggest that Gillespie's work would be improved if it featured some of the

individuals who played integral roles within the trusted system who could in turn answer some of Gillespie's charges. For instance, Gillespie chronicles the MPAA throughout his investigation by providing remarks from former MPAA President Jack Valenti about his organization's efforts to stop piracy, rhetoric derived from various press conferences. The long-time Washington politico was a veritable quote sensation and certainly the most colorful, discernible representative of the studios' anti-piracy campaign. However, Valenti did not involve himself with the daily machinations of planning the piracy operation, nor did he prepare the litigation against film industry adversaries. For all intents and purposes, Valenti was the important public face promoting the MPAA's ant-piracy propaganda operation and in Gillespie's trusted system framework, functioned as the discursive, rhetorical apparatus supporting the MPAA's goals to control Hollywood's content.

Likewise, Gillespie spends an extensive amount of time discussing the SDMI (Secure Digital Music Initiative) and CPTWG (Copy Protection Technical Working Group) coalitions, and conveys that the existing literature is short on industry consortia, and therefore utilizes popular press articles to chronicle both the SDMI and CPTWG's activities. No person is interviewed in the work that can actually speak about the activities that transpired during the SDMI's attempts to build copy protection for the .mp3 format, or the CPTWG's creation of CSS (content scrambling system), which was the DVD copy protection scheme. From a political-economic perspective, the relationships among the policy makers, intellectual property attorneys, and engineers are compulsory for the trusted system to function properly, and Gillespie's investigation lacks the primary data to support his claims of collusion among institutions, in spite of the argument's apparent likelihood on paper. Moreover, while Gillespie's book

investigates the ways in which digital content is "wired shut" within devices whose specifications are devised through the hawkish gaze of the MPAA, he does not speak with anybody from Hollywood about how this affects security or piracy matters related to the film industry. Gillespie argues that the MPAA has contractual relationships with outside interests that not only regulate content but also essentially shut out outside competition through a type of cronyism in which consortia and standards-bearing groups become the standard operating procedure. Although seemingly factual and correct, Gillespie does not include anyone to interview in his investigation that can answer his assessment.

Without hearing from some of the individuals who enforce this "trusted system," readers of *Wired Shut* may come away thinking that the MPAA is monolithic or immutable, and that is simply not the case. Although the organization's enforcement of copyright control seems to be carefully calculated, the MPAA does not have the unity and cohesion that people assume. At the same time, I want to make it clear that by speaking to actual people in my own investigation, I am not seeking to masquerade the MPAA and its affiliates as something they are not. I am not offering, for instance, superficial human-interest pieces or trying to deflect attention away from the organization's overall policies to dominate the film market and take down potential competition. My interest in interviews arises from the notion that individuals are living their daily lives trying to uphold the content industries' agendas, and these important perspectives have not historically been featured in the research. The MPAA, as I argue, is not monolithic. Organizations like the MPAA and RIAA often administer their agendas by means of conflicting and/or competing interests that, while in the midst of

enforcing the various directives, the organizations perform erratically or make colossal mistakes. Sadly, the size and scope of the errors dims in comparison to the aforementioned agendas that are often rapidly set in motion before the press or a consumer advocacy group sounds the alarm that the conjectured organization sponsoring the legislation lied or got "creative" with statistics. To illustrate, in 2008, the MPAA convinced Congress to pass legislation to make colleges and universities responsible for reducing copyright infringement activities on campuses by threatening that universities who failed to comply would be passed over for federal funding.[11] The law was a test to see if Internet service providers would shoulder some of the responsibility to patrol users, but in order to get the bill passed, the MPAA actually lied about the number of infringement cases that occurred on college campuses. The film industry organization originally claimed that 44% of its economic losses came from the file sharing activities at universities and was forced to apologize and admit error when it reduced its assertion to 15%.

During this series of developments, an MPAA lawyer actually went as far to argue that the primary purpose of Internet access on campus was for students to illegally trade files. The Government Accountability Office (GAO) then asked the MPAA to support its revised assertion of 15%, and, in fine form, the MPAA refused to provide any data. Most unfortunate about this story is that although the organization was caught in a lie and publicly chastened by the press, the law placing ISP's in charge of users' activities continues to remain in effect and has not been repealed by Congress. The MPAA gambled all along that producing false evidence about file

[11] Mike Masnick, "No Surprise: MPAA Wouldn't Reveal Data on How It Came Up with Bogus 'Piracy' Numbers," April 21, 2010, http://www.techdirt.com/articles/20100420/1046519111.shtml

sharing would not impede its ability to successfully advance legislation, and nobody stepped forward to challenge the legislation after it passed.

In a far less serious case that emphasizes the overall decentralized nature of the MPAA and RIAA lobbying organizations, the RIAA frequently engages in scenarios that illustrates disunity among its copyright enforcement partners. The Department of Homeland Security (DHS), which is responsible for the domain seizures of Internet sites deemed guilty of posting copyrighted materials, acts on behalf of the MPAA and RIAA and has frequently seized and disabled internet sites that are in fact following the law. The DHS was discovered to be seizing sites that were hip-hop blogs and forums continually supported by some of the leading artists in hip-hop, and the DHS used affidavits filled with technical and legal errors.[12] The Internet sites that were seized and disabled contained songs that were actually sent by the artist or record label representatives themselves. Record label representatives, for the specific reason of promotion, actually gifted the songs to the sites. An employee working for the DHS, Agent Reynolds, became embroiled in an embarrassing situation that placed him against a segment of the recording industry since the RIAA's left hand (lawyers) was unaware of what the right hand was doing (promotions and marketing). If there was any previous doubt that the content industries make mistakes, these two depictions should counter notions that the MPAA and RIAA lobbying organizations are absolute and integrated.

Using Tarleton Gillespie's trusted system as my template, I interviewed subjects who work directly with the MPAA or who function as the various contractual affiliates

[12] Mike Masnick, "More & Bigger Mistakes Discovered in Homeland Security's Domain Seizures," December 22, 2010, http://www.techdirt.com/articles/20101222/02112912376/more-bigger-mistakes-discovered-homeland-securitys-domain-seizures.shtml.

that enforce digital copyright control in the consumer electronics market. By contractual affiliates, I mean that the trusted system scenario is based on the MPAA's partnerships with legal institutions, with software and hardware manufacturers, all who descend on Los Angeles, California every 3-4 months to attend the Digital Video Disc-Copyright Control Association (DVD-CCA) meeting and the Copy Protection Technical Working Group (CPTWG). These two groups are part of the industry consortia that Gillespie describes as constituting one interest though they would seem to represent many. The meetings are held at the Westin Hotel in downtown Los Angeles. It is here where trusted system partners confer with one another about the various technical specifications for video products and their attendant playback devices. The CPTWG meetings are considered a public forum; therefore no proprietary information may be disclosed at the gatherings.[14] I attended a CPTWG meeting in January 2011. The CPTWG group attendees include consumer electronics makers, the information technology sector, and the movie and music industries including the Consumer Electronic Manufacturers of America, the Motion Picture Association of America, and the Recording Industry Association of America.

From an outsider's perspective, the MPAA's connections to the aforementioned consortia are difficult to decipher, although the film association is responsible for the inception and formation of the groups. All of the participating attendees have a contractual relationship with the film lobbying organization as it has publically called for digital technology that is enhanced by the legal and technological protection of the industry's product. The MPAA has a bevy of lawyers, engineers, hardware and software experts at its disposal that deal with the daily minutiae of creating a digital environment that offers the necessary security to attract "high value" content and

provides the necessary legal climate that ensures strong worldwide protections for creative efforts to be preserved.[13] The presence of the film organization as it relates to the consortiums and their working meetings is elusive, however. I spent some time clicking on the various links contained on the CPTWG website that persistently directed me to the MPAA's main website. Although the MPAA sends a designated representative who functions as the official CPTWG contact, this person's duties are limited to greeting members and taking attendance. The representative does not raise concerns or present research at the meetings. The contact's duties, insofar as my own recollections and observations at the meeting, included arranging hotel space and sending out correspondence about the consortium's future gatherings.

I also interviewed founding CPTWG member, James Burger, who is a tech lobbyist. In the trusted system, Mr. Burger fills at least two roles; as an expert in intellectual property law for the technology industry, Mr. Burger must understand Capitol Hill and its policy-making activities so he may better serve his clients who have jobs in the consumer electronics industry. As a lobbyist for the technology industry, he assists the MPAA and its legislative efforts in support of the publishing industries.

In the MPAA's trusted system, leading the rhetorical charge against piracy is the film organization's president and CEO, who seeks to ensure an environment that is ideal for political and economic activities, and a stable legal climate allowing the film studios to be profitable.[14] Although I was unsuccessful trying to interview former MPAA President Glickman (2004-2010), I spoke with Dean Garfield, former executive Vice President and Chief Strategic Officer of the Motion Picture Association of America (2003-2008). Mr. Garfield operated with a team that functioned as both the legal and

[13] Gillespie, *Wired Shut*.
[14] Ibid.

rhetorical arm of the trusted system. Mr. Garfield, an intellectual property lawyer, worked as an expert in both traditional and emerging digital media during his tenure with the Recording Industry Association of America (RIAA), where he helped manage the court cases against the file sharing services *Grokster*, *Kazaa* and *MusicCity*. During his tenure at the MPAA, he was the public face enforcing copyright on behalf of the eight film studios: Disney, Warner Bros., Universal, Sony, Fox, Paramount, United Artists and MGM.

In *Wired Shut,* Gillespie does not illustrate how the trusted system's influence on film production, distribution, and exhibition figures into the exhibition market; therefore, I ventured beyond Gillespie's focal point and also interviewed John Hurst, whose Burbank, California-based company, *Cinecert*, was selected by the six Hollywood film studios to convert Hollywood to a digital standard. The argument for digital, Hollywood argues, is that the medium a higher quality, safer, and more economical alternative to film stock. *Cinecert,* Mr. Hurst's employer, was selected to participate in the *Digital Cinema Initiative* project, or DCI, which is the global name for this massive venture.[15] Mr. Hurst spoke to me in detail about the ways that Hollywood secures its films for the exhibition circuit, with the major film studios delivering movies to theater chains on encrypted hard drives via United Parcel Service (UPS) or Federal Express, which is cheaper than placing content on film platters and subsequently using bonded couriers for delivery. In the trusted system framework, Mr. Hurst helps devise the "trusted" portion of the system in which computer code is the law, acting as the necessary speed bump that prevents a majority of copyright infringing activities. The encryption schemes are only part of the climate that makes up the trusted system and in

[15]Laura Holson, "Film Studios Reportedly Agree on Digital Standards," *New York Times*, July 26, 2005.

Chapter Four, I look specifically at six legal cases that involve the Electronic Frontier Foundation and its advocacy efforts to defend individuals and companies from penalties arising from the Digital Millennium Copyright Act.

For Chapter Four, I used the Electronic Frontier Foundation (EFF) archive, a web site containing numerous white papers that chronicled some of the precedent setting court cases involving digital copyright and fair use. The EFF is a not-for-profit consumer advocacy group that defends free speech and fights for consumer privacy on the World Wide Web. My primary purposes for using the EFF archives were to discuss the organization's legal challenges the organization brought against Digital Rights Management technology and to showcase its formal arguments criticizing the technology in the Supreme Court. The organization's participation in thousands of court cases, and its routine of taking on large corporations and even the U.S. government regarding digital copyright enforcement is well known. As legal scholar Lawrence Lessig states, code is law in terms of how rules are built into technological systems. The heavy lifting of deliberation, in this particular context, is an oversight. The law, at least in principle, is supposed to be the product of public deliberation by elected officials.[16]

Coexisting Trusted Systems

When I started writing this dissertation, I aspired to go beyond the confines of Hollywood, the MPAA and its relationships with institutions that form what Gillespie terms a "regime of control." I wanted to include several perspectives from individuals that actively resist Hollywood's production, distribution, and exhibition efforts. Although I initially sought to frame these subjects as demonstrating economic or

[16] Lawrence Lessig, *Code Version 2.0*, (NewYork, Basic Books, 2006).

political resistance through their counterfeiting and hacking activities, I eventually realized that my "criminalized" subjects endorsed the very same procedures as the Hollywood studios, trying to enforce their own monopolies on distribution channels. In fact, I maintain that my representatives from the underground are actively engaged in coexisting or parallel trusted systems.

Like pirates of the ocean, digital pirates are outsiders against whom a form of propriety, in this case capitalism, is defined, defended, and upheld as fundamental to order.[17] Ideologically, capitalism values the products produced by entrepreneurial activity, all the while encouraging monopoly as a means of controlling the market. Simon Petersen and Dan Mickell are both interested in making enough of a profit to pay for their overhead and ideally pocket a surplus. They enjoy making money and do not purport to be political ideologues. Although both of my featured individuals operate in their own individual piracy networks and employ DIY (do it yourself) modes of engagement to counter conventional media making practices, they manage their own trusted systems that co-exist with Hollywood. It is farfetched to say that my subjects who exist in the piracy underground have equal footing with Hollywood, however. They do not. Be that as it may, using Gillespie's concept, I am arguing that my criminalized subjects provide a regulatory framework of their own that erects strong barriers to entry and protects their products from other pirates. My subjects seek to reproduce, not to originate, although they may try to improve upon the original. In terms of political economy, they substitute Hollywood manufacturing and distributing techniques with their own and dispense with directives in favor of expediency. Technologically savvy pirates like my subjects use more efficient and flexible networks

[17] Adrian Johns, *Piracy* (Chicago: The University of Chicago Press, 2009).

that seriously undermine Hollywood's control. Wang discusses the importance of speed in a globalized economy where pirates will compete with Hollywood's windowing strategies in what becomes a battle over technology.[18] The shortening of release windows illustrates just how serious is piracy's effect on Hollywood and demonstrates how the film studios are scrambling to be the champion in the contest over speed.

Interview Sample

The MPAA's relationships, albeit diffuse, are designed to assert control over its film properties in the digital domain. I spoke of my three interviewees who play specific roles in the trusted system's attempts to enforce copyright control on the consumer electronics or cinema exhibition market: Garfield, Burger, and Hurst all come to my investigation with long professional histories working in the film and media industries. With respect to my interview selection process, I should reveal that a small number of subjects I initially intended to interview were unable to commit. I initially spoke with a former vice-president of technology for a major film studio, and the legal conditions around his present contract prohibited him from giving me specific information. Correspondingly, a former executive director with Dolby Laboratories was also bound by the same contractual terms. One subject ultimately declined to participate in the project completely while the other indicated that he would prefer remaining anonymous and not have his particular comments made public. I mentioned that I tried to interview former MPAA President and CEO Dan Glickman and was unsuccessful. I made attempts via e-mail and phone to contact him when he was transitioning away from *Refugees International*, a not for profit agency in Washington, D.C. to his current

[18] Shujen Wang, *Framing Piracy: Globalization and Film Distribution in Greater China* (Oxford, UK: Rowman & Littlefield Publishers, Inc., 2003).

position as a senior fellow with the Bipartisan Policy Center, also in Washington. I also spoke informally at the CPTWG meeting with Mr. Brad Hunt, former technology director with the MPAA (1999-2007) and his contributions are slight. He did not wish to be pursued for further information.

Piracy

Throughout the dissertation, I frequently refer to the word "piracy," a word that comes fully functional and pre-loaded with a variety of political, social, and economic overtones. The word is negatively charged, and particularly open to question when creativity somehow becomes plagiarism. Mimesis, or the act of imitation, is one of the most important concepts in Western literary and art criticism, and its roots can be traced back to Plato and Aristotle.[19] Mimesis is a contested point of disputation where Plato sees it as purely a passive act while Aristotle sees the artist asserting a creative agency. Aristotle's belief would certainly be challenged in today's consumer market where it is typically technology rather than the human hands doing the copying.[20] Asian scholar Laikwan Pang, for example, discusses how pirated Hollywood cinema illustrates the complex global politics of world cinema.[21] From a producer's vantage point, Pang shows that Hollywood has been the biggest pirate incorporating or copying creative ideas from one national cinema to another. Alternatively, at the point of consumption, Chinese audiences inject their own discourses through the use of subtitles. Because acts of piracy and their production and distribution system exist outside the control of the transnational conglomerates, the interpreter of the pirated product relies on prior cultural assumptions that are frequently incorrect. In *Kill Bill: Volume 1* (dir. Tarantino, 2004), the set of subtitles does not generally correspond to the onscreen dialogue. The Bride, a female character in the Tarantino film, is

[19] Lessig, *Code Version 2.0*.
[20] Ibid.
[21] Laikwan Pang, *Cultural Control and Globalization in Asia: Copyright, Piracy, and Cinema* (New York: Routledge, 2006).

more apologetic for her angry and dangerous behavior in order to conform to the Chinese stereotype that American women are not rude or violent. This particular example demonstrates tremendous authorial inscription at the point of reception, and contains the agency that Aristotle speaks of. Segrave illustrates historically that some American artists were not necessarily open to any particular ideas of an "exchange." Although borrowing was alive and well during the days of vaudeville, at the height of her popularity in 1909 vaudeville superstar Eva Tanguay ranted onstage that she was tired of at least 20 people copying her act: "I make this whole statement to the public because only the public can protect an originator, and that would be by hissing the imitator."[22]

The trade magazine *Variety* often published reports of "lifters" that were exposed by an inspector. The inspector's job was to continually visit New York theaters to uncover copyists. A suggested plan to protect the artist was set up in 1914 that permitted an association to be formed for annual dues of $100, payable in advance. From that money, an office was set up and maintained by the "inspector."[23]

When people I meet from the United States, especially, come to find that my research is about film piracy, the majority of the questions asked of me are influenced by the rhetoric surrounding the piracy debate, rhetoric couched in the narrow confines of "property" and "theft," which forces me to subsequently define the phenomenon from an ethical or moral posture. First, I use the word piracy to describe it as the appropriation and reproduction of an invention or work of another for one's own profit, without authority; it is the infringement of the rights conferred by patent or copyright. Piracy is also the knowing or unknowing of copying a protected work, and the performing or distributing copies of the work. My investigation will especially focus on

[22] "Eva Tanguay on Imitators," *Variety*, March 6, 1909.
[23] Segrave, *Piracy in the Motion Picture Industry*.

the use of peer -to -peer technologies (hereafter known as P2P networks) used to share cultural works such as music, film, books, and other media. In contrast, the Recording Industry Association of America, in a section on their website, argues that it is Internet driven peer-to-peer file sharing and transfers that constitutes piracy:

> Online piracy is the unauthorized uploading of a copyrighted sound recording and making it available to the public, or downloading a sound recording from an Internet site, even if the recording isn't resold. Online piracy may now also include certain uses of "streaming" technologies from the Internet.[24]

The MPAA is similarly narrow in its definition of piracy and relies on deft rhetorical campaigns to define the debate in its own terms. In the 1980s, the MPAA went as far as suggesting that typical video pirates were taking their VCRs to hotels to record closed circuit movies in order to help themselves to an evening's worth of illicit film fare. This characterization became one of the MPAA's typical tropes to describe the most egregious of offenders.

One of this investigation's chief concerns is recognizing the political economic framework of the "trusted system." To understand the relationships between the film industry, hardware manufacturers, content distributors, the law, and political policy, an individual needs only to look at a DVD player's façade to see that it lacks a record button. Prior to the success of the DVD player, there was only the Video Cassette Recorder and Betamax player to reference, technologies that represented a stark contrast to the regulatory regime accompanying the movement to selling digital cultural products on the Internet. Gillespie illustrates that the DVD player lacks a record button because DVD manufacturers signed a license with the major movie studios; the license mandates a series of technical requirements for the device, the purpose which

[24] "Piracy: On the Street," September 27, 2009, http://www.ria.com/physicalpiracy.php?content_selector=piracy_details_street.

is to protect DVD content from being duplicated.[25] The mandates include the prohibition of a record button. All major hardware manufacturers signed the same license because every Hollywood DVD that is distributed is encrypted, requiring that any DVD player must include one set of decryption keys, which can only be acquired by signing the license. The DVD is encrypted for several reasons, to prevent users from making copies but to also ensure that DVD manufacturers agree to the terms of the licenses, which gives Hollywood studios the power to dictate what DVD players will or will not allow.[23] To summarize, the DVD player specifically prevents copying, and the DRM encryption technology prevents the disc from being readable. It is all of these elements that work together that render some activities possible and others not. The technological innovation here is not copy protection specifically, according to Gillespie, but the more powerful assurance that this complex partnership will be necessary and enforceable, in other words a "trusted system."[26] The system must be constructed to withstand attack, technologically and legally. If a user is able to break the encryption, or somehow dupe the system by batch dumping unprotected digital copies onto a hard drive, or break open and rewire the device, or reprogram it so it does not charge per use, the system is obviously leaky. If a hacker develops a tool to accomplish some or all of these things, whether it involves distributing unauthorized content or tools to break content encryption on the Internet, the trusted system disintegrates. The shift from Content Scrambling Systems (CSS) encryption code to the bold trifecta of DRM and the legal and commercial arrangements eventually constructed a massive infrastructure enforcing copyright protection.

Digital Rights Management is an umbrella term for a family of technical applications, and for the legal and commercial agreements they require. Starting with the kind of protective measures typically utilized in the delivery of television through cable and satellite and in the sale

[25] Gillespie, *Wired Shut*.
[26] Ibid.

of software, DRM systems depend on the use of encryption to mathematically alter digital information according to sophisticated algorithms. The data the DRM shields can be retrieved by using a key that removes the mathematical distortions in a very precise way.[27]

The concept of intellectual property and the litigious conditions the word brings forward gradually became less of a third-tier, technical issue in the lexicon of U.S. trade policy to become "priority number one" in the 1990s when Congress added more than a hundred pages to the copyright statute, almost all of them billed as loophole-closers.[28] Long before the discovery of the Internet, intellectual property and the copyright wars routinely materialized and affected other, smaller mass communications outlets. In the 1730s, for example, the United Kingdom witnessed the "Battle of the Booksellers", a conflict occurring between London booksellers who believed they possessed perpetual rights over the reproduction of authors' works based on natural rights, or rights independent of any legislative procedure.[29] After an extended battle concluding with conflicting judicial decisions, the author received copyright protection for a limited period of time.

Three hundred years later, entertainment companies discovered the World Wide Web to be a powerful distribution outlet for cultural works, but were suspicious that the Internet was a Wild West frontier requiring regulation. The entertainment industry's guiding belief in regulation and strong controls were prompted by convictions that once the copyright industries lose control, companies quickly submerge like floundering ships.

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[27] Ibid.
[28] Hilderbrand, *Inherent Vice*, 2006.
[29] William Patry, *Moral Panics and the Copyright Wars*. (New York: Oxford University Press, 2009).

Legislation

There are three rather important pieces of legislation that play a large role in navigating the practice of digitizing cultural works towards the consumer standard we witness today.

The Audio Home Recording Act (AHRA), enacted by Congress in 1992, sought to address the possible problem posed by the digital reproduction of sound recordings. More commonly known as Digital Audio Tape (DAT), the technology certainly had the capacity for widespread piracy but never caught on as a mass media format, and the legislation prevailed longer than the technology itself. The only portion of the law that remains important for consumers is that they still are permitted to make non-commercial digital or analog copies of musical recordings without fear of copyright infringement liability.

The Sonny Bono Copyright Term Extension Act (1998) essentially extended works created on or after 1923 for 20 more years. Until then, copyright lasted the duration of an author's life plus 50 years. As a consequence of the act, current copyrighted works will not enter the public domain until they expire in January 1, 2019. Because the act was so powerful in scope in terms of its newly enhanced restrictions- several Disney characters including Mickey Mouse, for example, were set to enter the public domain between 2000-2004. Copyright seemed more like a vehicle for publishers to squeeze out all of the possible commercial value from works of authorship, even though some works that previously were deemed permissible to use were brought within the copyright owner's control. The Bono act pleased the Disney Corporation and other important beneficiaries like the estate of George Gershwin. The DMCA (Digital

Millennium Copyright Act) became law on October 28, 1998 and represented the most dramatic change in the history of American copyright law.

Nuances of the Debate

Some conditions and distinctions need to be articulated when discussing media piracy, and the use of various technologies to acquire, duplicate and redistribute products via digital distribution channels, or through alternative means. For example, defining all-and-out piracy versus sharing (or bootlegging) requires an understanding of the history of discourse where the two words are used freely and interchangeably. Before the digitization of media that eventually brought into view compact discs, laser discs, and digital video discs, VCR enthusiasts bootlegged and shared media as part of a sometimes-egalitarian redistribution of culture and information. Not all instances of bootlegging were necessarily resistant or progressive, just as contemporary examples of peer-to-peer sharing are not. However, although the law often overlooks the difference, I argue there is an critical distinction between piracy, which is the outright stealing or performance of a work without compensation to the creators or rights holders of the works, versus productive, non-infringing media reproduction and sharing. For example, it was only within the last decade that the MPAA finally acknowledged that film professors with access to audio-visual works in a university or college library were exempted from the DMCA and consequently permitted to circumvent copyright protection measures without fear of prosecution. The choice of words for any legal statute is fundamental, and I must point out that the DMCA exemption stating that a "college or university library" must exist provides no specific illustrations or distinctions of professors working in departments without access to an on site

library. On certain campuses such as Florida State University in Tallahassee, Florida, the College of Communications offers film and screenwriting classes to undergraduate students and relies on the professors to provide the materials. How does the law, therefore, interpret the acts of these teachers? This is just one example in which productive, non-infringing reproduction and sharing requires a skilled defense in a court of law.

The Statement of Best Practices, a document crafted by Pam Samuelson who is a noted attorney and legal scholar, received assistance from members of the Society for Cinema and Media Studies (SCMS), a professional organization of college and university educators, filmmakers, critics and scholars, and the resulting document created from this collaboration attempts to provide clarification requiring the permissible use of copyrighted works for teaching; however, the fair use claim remains a difficult defense to maintain given the extraordinary cost of legal fees. The claim of fair use has emerged as one of the most contested and celebrated ideas in U.S. Copyright law, as both an exception and a contradiction, yet it is the core of copyright. For example, in 1976 the fair use provision was written into American law in order to balance the interests in favor of the public good while the majority of the 1976 modifications actually created more advantage for copyright holders. The fair use exemption allowing circumvention of the encryption code on copyrighted works is up for renewal in October, 2009, and it will be important to see how or even if the exemption is modified.

With regards to intellectual property concerns, the film and music industries have repeatedly blamed financial losses on piracy. This investigation considers how the film industry particularly confronts piracy in an era where media is ubiquitous and consumer acquisition and consumption is "simple and straightforward." Henry Jenkins describes this era as a time of

"media convergence," when the shift towards a hyper- mediated society is not simply predicated on technology, but when the relationships between existing technologies, industries, markets, genres and audiences also change.[30] Jenkins emphasizes the blatant contradiction between the increased ways to watch media versus the number of media outlets, bringing up critical questions surrounding media consolidation and ownership. To some, media convergence is a godsend, a world without gatekeepers, while others are cautious and see the gatekeepers as possessing unparalleled control. For the purposes of this study, discussions will be centered on the policies and technologies that limit freedoms in favor of the copyright industries.

The movie studios are the main forces that direct the Motion Picture Association of America (MPAA) policy, and it is the studio executives themselves who are especially vociferous regarding film copyright infringement and piracy issues.[31] According to recent numbers offered by the MPAA, the Hollywood film industry loses nearly six billion dollars annually because of Internet theft, or piracy, which is the unauthorized downloading, copying, and distribution of cultural products such as films, television shows, computer games, and software.[32] Peer- to- peer (P2P) networks, private servers, websites and computers that have been hacked all serve as instruments for the illegal downloading and duplication of content. The Internet plays a central role in consumers' first acquiring the media, then burning it to Digital Video Disc (DVD) and, finally distributing it as a pirated good on auction sites like *Ebay*. The designated price of the pirated version is the "featured attraction" here, which is much lower than price at retail.

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[30] Henry Jenkins, *Convergence Culture: Where Old and New Media Collide* (New York: New York University Press, 2006), 308.

[31] J. D. Lasica, *Darknet: Hollywood's War Against the Digital Generation* (New Jersey: John Wiley & Sons, 2005), 308.

[32] Mark Sullivan, "Hollywood Goofs on Campus Piracy Numbers," *PC World*, January 23, 2008, <http://blogs.pcworld.com/staffblog/archives/006350.html>.

Literature Review

Digital copyright, intellectual property on the Internet, and the Digital Millennium Copyright Act are subjects that have earned generous attention in the last decade by legal scholars, and this branch of study is now a burgeoning area not only for law researchers, but also for those individuals who are stakeholders in the battle over creativity, cultural freedoms, and consumer rights on the Internet. The academic literature regarding the history of the MPAA's battle to fight piracy, however, is scarce. Kerry Segrave's *Piracy in The Motion Picture Industry* (2003) is an extensive historical account of film piracy that is exhaustive in its chronological detail of various cases involving piracy, although it neglects any particular scholarly analysis. Additionally, Segrave's lack of any strong, authorial voice gives the impression that her work is simply multiple factoids in search of a thesis. From a strictly historiographical perspective, the author implements seemingly arbitrary practices of constructing the narrative, all the while neglecting any overarching research questions or arguments. The author's previous works adopt a similar vein, avoiding the esoterica and chronicling the banal and/or excessive: *Shoplifting: A Social History* (2001), *Tipping: An American Social History of Gratuities* (1998), and *Women Serial and Mass Murderers: A Worldwide Reference, 1580 through 1990* (1992) are just a few examples of Segrave's random fascinations with popular culture. Though certainly questionable in its approach, *Piracy in the Motion Picture Business* is one of the first published books solely devoted to film piracy and examines how the culture of borrowing became a culture of pirates. From the early days of vaudeville and the salad days of film exhibition, when projectionists somehow "misplaced" reels, allowing their colleagues to show celluloid images in their own theaters, to the technological breakthrough of video cassette players in the 1970s, which created a whole new fandom of videophiles bootlegging and sharing their favorite television shows,

Segrave illustrates a multi-faceted viewpoint of the piracy phenomenon. While consumers have a fascination with entertainers and the cultural products showcasing their favorite stars, corporate and legal interests have always intervened in order to control access to, or restrict their intellectual properties from being used in ways contrary to the profiteering goals of transnational media conglomerations.

Segrave illustrates the MPAA initially as a fledgling association, operating in the 1920s as the MPPDA (Motion Picture Producers and Distributors Association), an organization whose main goal was to clear up the public's negative perception that Hollywood was a bastion of moral decadence. The MPAA also was to begin confronting film piracy on an international level, specifically trying to stop a piracy hub operating in the United Kingdom from making unauthorized film copies and furtively shipping the merchandise to Canada. In parts of Canada, films were exhibited illegally and then shipped to the United States for identical purposes. Readers of *Piracy in the Motion Picture Business* also learn that former FBI and Scotland Yard operatives are employed to shut down particular rings like this. Segrave chronicles how the MPAA evolved into a multi-faceted organization using every means necessary to combat the piracy phenomenon, from forming strong relationships with the Office of the U. S. Trade Representative to participating in anti-piracy campaigns in 19 nations in 1978. Additionally, the MPAA sent a comprehensive Prosecutor's Manual and Investigator's Manual to every U.S. Attorney and FBI office in America in order to support the ongoing efforts to combat piracy in the United States.

Segrave presents research that is revelatory, such as how the MPAA created the Copyright Protection Bureau in the 1930s because it was afraid of the piracy threat. Segrave

constructs her own narrative from articles pulled from *Variety*, the *New York Times, Billboard,* and *American Film.* Segrave's lack of any analysis prompts a number of questions: How did the Internet challenge the MPAA's conventional methods of fighting piracy? And how did the identity of the typical film thief operating in the pre-internet age change, when multitudes of teenagers and college students without any previous criminal histories began using peer-to-peer file sharing to trade music and films online? Before the digital age, the illegal copying and distribution of cultural products relied on sophisticated methods to transport products internationally or between states. Now, individuals engage in peer- to -peer file sharing on their computers because, as Edmund Hillary answered when he climbed Mt. Everest because "it's there."

Another book that prominently considers the MPAA's battle against contemporary digital piracy is *Darknet: Hollywood's Role Against the Digital Generation* (2005) by J.D. Lasica. Lasica. a journalist by profession, uses some valuable contacts to penetrate the "darknet," a clandestine space in real or virtual settings where people can share copyrighted material to avoid the restrictions on digital media imposed by entertainment companies. Of course, this kind of space has powerful currency because users have little or no fear of being detected. Lasica argues that while the content industry claims that no one is anonymous on the Internet, the proponents of this kind of fear mongering are lying. Millions of people find ways to engage in a shared media experience by finding and joining one of these secret places. For this particular book, Lasica concerns himself with investigating the "underground" Internet, a cluster of private networks that people join by invitation only, receiving a password for access. Lasica tells readers that these secretive networks function like a pyramid, where the most daring thrill seekers, the technologically savvy, stand at the top by ripping or decoding media, or distributing

the titles to other Usenet news groups or Web-based file-sharing services. The ones positioned at the top of the pyramid possess a complete disregard for authority and have strong convictions that Web content should be free. These subjects are predominantly male. At the bottom of the pyramid, on the other hand, are the people focused more on consumption, or downloading, rather than contributing to uploading or sharing material on networks.

Lasica's assertions are familiar arguments: associations like the MPAA are relying on old business models (the windowing of product, treating the paying public like felons, using outdated technology unlike smaller startup companies who are also competing in the digital distribution business) by allowing their fears regarding piracy to put them in a rigidly defensive posture. By placing digital restrictions on media and attempting to control content access, the movie studios are partially responsible for scaring consumers away to illegal, underground networks. It is interesting to note that Lasica makes the point that Darknet members are primarily involved not because of any motive to make a political statement, but instead members have a desire to affiliate and belong to an "edgy, secretive brotherhood." Furthermore, the race to upload and make available the best content becomes a sporting competition for Darknet members, and the winner wins bragging rights against his opposition. "It all comes down to status," states a piracy consultant hired by the movie studios to monitor illegal activities on the Web.

Among some of the high profile contacts Lasica interviews is former MPAA President Jack Valenti, whose long tenure (1969-2007) at the association became legendary. Valenti, before he passed away, asserted that plugging the analog hole was the number one priority for his association because media consumers could run an analog line through hardware to copy content to a hard drive, therefore bypassing the restrictions the content providers placed on media. The MPAA's efforts ultimately failed, although Valenti's efforts created some

interesting headlines: the press referred to the overreaching attempt by the MPAA to change consumer hardware as the "analog sunset."

Lasica's ability to identify the specific players in the piracy debate is laudable, but there are some minor problems with the book and the way it frames the controversy. The author often relies on journalistic hyperbole to make points, asserting that the media companies are going to "war" with the digital generation. To Lasica, the digital generation is all that that is youthful and creative, all that is good. These people are the salt of the earth, the creators, the fans, the independent filmmakers. Hollywood, on the other hand, is bad. The typical Hollywood executive is far from proactive, instead resting on his laurels by profiting from his studios' film libraries culled from previous decades, or gaining property rights over additional cultural products from mergers or acquisitions. Today's film executive, according to various studies, is not even visionary or creative. Many CEO's have been promoted to the top after working previously for the same company in an accounting capacity. While Lasica's binary may be partially accurate, it conveniently passes over people in Hollywood who are consciously trying to appeal and stay ahead of the curve with their fans. As a matter of fact, an exception to the binary occurs when Lasica describes a music executive recalling that she was in a staff meeting with some of her colleagues in order to discuss the role technology played in the illegal sharing of music. While another of the executive's associates begins reading the *Billboard* Top Ten list, she opens up *Kazaa* and easily locates the content online, the *free* content which was ready for consumption. "This was so cool as far as a future business model was concerned."[33] Lasica's binary does not identify who represents the face of Hollywood in its contemporary piracy campaign. Is it Jack Valenti? With his fiery and

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[33] Lasica, *Darknet*.

controversial oratory, Valenti is referenced in this book multiple times, but it is far too easy to give him the sole focus while making some serious omissions. Identifying the proponents in the piracy debate is much more difficult now that Valenti is dead. Additionally, other than mentioning the DMCA, the author does not engage in discussions about policy, which is a cornerstone of my investigation.

My dissertation's principal concern is the continuously evolving vertical and horizontal relationships built between the state, the content industries, or in this case, the film industry, the law, and hardware manufacturers. These partnerships are strongly bound through contractual arrangements that affect everything from protecting proprietary information such as the use of code to regulate media products to the codification of internal hardware inside media consoles such as Sony's *Playstation* and Microsoft's *Xbox*. Essentially, it is the hardware manufacturers who are coerced and strong armed into partnerships where they have to either participate or be placed on a blacklist, and forced out of business because the MPAA will withhold all future content. Tarleton Gillespie's *Wired Shut: Copyright and the Shape of Digital Culture* examines this "regime of control" by showing the importance of the exclusive arrangements between political, economic, and cultural entities that have managed to severely change the relationship between law and technology.[34] Gillespie argues that previous research has tended to focused on Digital Rights Management software as the main culprit in the protection of intellectual property rights while skirting the more important political economic characteristics which privilege anti-

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[34] Gillespie, *Wired Shut*.

copying software as both a physical barrier to copying and an artifact that, if tampered with, constitutes a serious anti-circumvention crime. What is most important in this scenario is not the intention of the user, for example consumer use or specifically why the DRM is bypassed, but rather that the technology is tampered with *at all*. As an aside, the mattress industry has often been the subject for comedians who pretend to cower in pantomime hysteria from imagined threats transmitted in bold typeface on small, generic mattress tags. The tags, of course, are to be taken seriously and warn individuals that removal of the seemingly harmless artifact constitutes a serious crime. However, the tag fails to clarify that people owning the mattress can do whatever they wish with the tag. The mattress tag warning is primarily a protection for the mattress industry, which lays claim to the tag as a signifier for upholding certain product safety standards. In the digital universe, technological artifacts have far more leverage than my mattress tag parallel, and the artifacts bear extraordinary legal power by infusing legal authority, authority that infringes on conventional property ownership rights. The technology has *become* the law, based on the prior political and legal efforts of the "regime of control."

Lawrence Lessig's *Code* (1999) is often acknowledged as the first study to frame the discussion around the distribution of cultural works on the Internet, intellectual property, and the monitoring and restriction of access to such works. To Lessig, the directives of government-influenced cyberspace and commerce will build an architecture that will perfect control and make highly efficient regulation possible.[35] While some of this regulatory increase of the World Wide Web will produce positive results, Lessig is concerned with the technology, or "code" that will govern how laws in cyberspace function. Code, as defined by Lessig, is the software and

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[35] Lawrence Lessig, *Code and Other Laws of Cyberspace* (New York, NY: Basic Books, 1999).

hardware that represents as well as regulates cyberspace. For the World Wide Web, code has become, and is law.

While it is correct that there is a distinction between the regulatory effects produced by code versus the regulatory effects produced by law, the differences are especially compelling when one considers that legal regulation should reflect the values of the society imposing the regulation. In another public arena, for instance, laws regarding pollutants and pollution amount reflect a societal principle, and these principles therefore restrict industry behavior. Cyberspace code has characteristics at play which make it much harder to determine how and if societal values are first reflected and then actualized in situations between people and objects. Therefore, Lessig argues that when constructing the code of cyberspace it is important to ask fundamental questions regarding the values being protected, and the values concomitant to future generations. Lessig's research is always asking the fundamental questions regarding copyright and intellectual property laws, such as what values are being reflected as society becomes more technologically dependent? What role does deliberation play in a democratic society that relies on technology to enforce the law? How did the basic role of copyright, as far as being a cultivator of innovation, actually come to stifle technological progress? These are important questions this investigation will consider as it looks at the role of media content control in the digital age. While Lessig consistently speaks about the wonders of technology, he never loses sight of seeking to promote human welfare, which is a critical component to this investigation.

Dan Schiller's *Digital Capitalism: Networking the Global Market System* (1999) is a seminal work that illustrates the political economy of networks that encompass cyberspace.[37] It is important to this particular investigation because it is one of the first studies looking at the

production, distribution, and consumption components of the World Wide Web. Schiller illustrates in infinite detail the ways in which cyberspace is transformed from primarily a messaging platform used by the military, to a digital marketplace where transnational companies begin selling digital goods in cyberspace. Schiller's view of the Internet is written in broad strokes from a macro-level, and his work is helpful to this study in the way it approaches the initial steps of how policy, economics, the legal and the corporate engaged in a partnership to accelerate internet growth, and expand capitalism to the digital universe. As an illustration, the author specifically mentions former well-known media executive Steve Case and his company, the formerly robust AOL which began selling CD-quality MP3's in September 1997 directly over the Internet. Before AOL's entrance into the marketplace selling digital music legitimately, however, the Recording Industry Association of America had plans to shut down hundreds of web sites selling unauthorized music, and it is quite clear that other associations like Broadcast Music Inc. (BMI, representing music publishers and recording companies) were using technologies that mined the web to regulate the use of its products before any encryption measures were put into place on musical properties. Additionally, another organization, the Association of American Publishers, acted with the RIAA to obtain court orders and take its consumers to court. This period of time in the late 1990s is fascinating because the music industry was sorely unprepared for how to deal with secure, consumer-friendly digital distribution, and the book is useful to this investigation because it considers how the Internet was initially considered an unproven, contentious space to sell cultural works. How does this

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[37] Dan Schiller, *Digital Capitalism: Networking the Global Market System* (Cambridge, MA: Massachusetts Institute of Technology, 1999).

particular view held by the culture industries contradict the rhetoric regarding the Internet as an information super highway? This investigation, informed by Schiller's work, will highlight some of the cleavages between "cyberpole" and the media industry's need for extreme control of its properties.[38]

The telecommunications industry, specifically AT&T, eventually used the Internet for "accelerated commodification," a term originating from Schiller which means a process where corporate and political powers mobilize their efforts to create new profit opportunities, in this case helping the United States economy shift from a manufacturing to an information industry; computers, telecommunications, and the services which grow out of or depend on those technologies. The 1990s was a time in which the Internet transformed from primarily a messaging platform to a vehicle for commerce, and, from a policy vantage point, the Telecommunications Act of 1996, a piece of legislation signed under Bill Clinton, represented the desire to create and foster competition among providers by dissolving the line between telephony and services such as cable and the Internet. At this particular time, legislators did not see that the Internet represented a veritable watershed in terms of future communications such as Voice Over Internet Protocol (VOIP) and mobile wireless. As a direct result of this disputed piece of legislation, AT&T began to offer bundled packages including providing the connection to the Internet for a subscription fee, as well as offering various other services.

What became the advancing U.S. neoliberal policy model of the 1990s served the purpose of supporting the growth of companies whose offices and factories existed across transnational borders and, in order to implement a global telecommunications grid worldwide,

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[38] Vincent Mosco, *The Digital Sublime: Myth, Power, and Cyberspace* (Cambridge, Mass.: MIT Press, 2004), 218.

international companies needed direct political intervention. Two important U.S. government initiatives ratified in 1997 allowed the Internet to grow exponentially. First, the Supreme Court decided that the government found it "unlikely" that imposing restrictions on Internet content would be upheld as long as it had some intrinsic constitutional value. As a result, the government decided that it viewed the Internet differently as other, more regulated electronic media like telephony and broadcast television. Secondly, it was decided that the government should not stand in the way of "digital capitalism" because "unnecessary regulation could cripple the growth and diversity of the Internet." This was a far different time than a decade later when consumer cries for regulation rang out from the millions who were victimized from the market bubble burst in March 2001. The long-winding recession then began crippling the global markets. Looking back, the 1990s is frequently demarcated by laissez-faire markets and Alan Greenspan's "over exuberance" reference that built on a wholesale ethos of indulgence, indulgence that eventually spread like white water.

Schiller's *How to Think About Information* (2007) extends the investigation of the Internet and commodification of information and considers, among a host of variables, and considers how the romantic conception of authorship helped the culture industry to profit far beyond industrial capitalism's rise in England in the 1830s.[39] Drawings, books, theatrical performances, photographs and films all eventually came to bear the legal impress of copyright, and private ownership rights became fixed in particular cultural commodities. With the growth of the Internet and the large scale profits for legally constituted private property in information, accelerated commodification permitted corporations who joined an intensive pan-corporate rush

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[39] Dan Schiller, *How to Think About Information* (Urbana, Illinois: University of Illinois, 2007).

to patent, copyright and trademark anything in sight. Digital media such as DVD burners, MP3 players, personal computers, and mobile phones were, at least in economist's terms, systems that were thought to enlarge the capacity to develop information as a public good. However, the institutional response to these technologies has been instead to mobilize and guard against emergent forms of property. For the purposes of this project, *How to Think About Information* is fundamentally important because it avoids rejecting the Internet based on the fallacies created by pre-2001 pipe dream rhetoric, and sees it continuing to operate "conditioned and structured by the institutions and relations in which it is embedded…social relations that are creating a capitalist organization agenda across an unprecedented range."[40] How does the global communications and information industry information continue to function as a "fountainhead of economic transformation" since the high tech bubble in 2001? Schiller's study illustrates how the Internet consists of a diversified set of cultural conglomerates, their advertiser patrons, and technology suppliers who have been empowered to make the Internet a more effective sales apparatus. Schiller calls it a "self-service vending machine of cultural commodities" which is not a liberated zone existing beyond the market, but simply a new and effective channel to target and track desirable groups of shoppers.[41] The research will be especially useful in how it theorizes information and the growing authority of copyright in cyberspace. Schiller's work prompts this study to consider how this emphasis on IP (intellectual property) influences corporate and state power, overall, as well as how the film industry uses copyright to advance its own agenda.

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[40] Ibid.

[41] Schiller, *How to Think About Information*.

The copyright industries are a rich consortia of copyright owners, lobbyists, and lawyers who persuaded Congress in 1998 to develop and enhance legal and technological controls over cultural works to create what Jessica Litman wryly refers to as a digital multiplex. Jessica Litman's book *Digital Copyright* (2001) encapsulates this argument. The book poses various questions vis à vis the invasiveness of copyright law and the exchange of information within a free society, first identifying the presumption that in the United States facts and ideas cannot be owned, inhibited, censored or regulated and are part of a larger cultural ideal where people are supposed to find, study, pass along and trade knowledge in the marketplace of ideas. The presumption of freedom, however, fails to take into account the private vested interests wielding influence over policymaking, interests operating in a cloud of secrecy whose representatives hold conferences without any public hearings.[42] The book will be useful as a historical reference that contains certain legal precedents that severely limited consumer freedoms in cyberspace.

Litman argues that, in relation to fairness and copyright, there has been a long history of disregard for democracy. Litman recounts how the Library of Congress convened a conference of experts and interested parties to consider codification of copyright laws in 1905, completely ignoring representatives who were not beneficiaries of the existing copyright statutes. Groups excluded from the gathering included newer interests that had not received statutory recognition, such as the motion picture industry, the piano roll industry, and the "talking machine" (phonograph) industry, technologies that eventually induced piracy claims. The claims were inevitable, considering that the phonograph and the player piano, important technologies of the late 1800s, had the capacity to record. Critics of the technologies, at the time, argued eerily like

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[42] Jessica Litman, *Digital Copyright* (Prometheus Books, 2001), 208.

intellectual property attorneys and rationalized that the music publishing industry was at the complete mercy of pirates because of these inventions. Likewise, the innovators who created the player piano argued that the introduction of their invention deprived the composer of nothing he had before the technology was introduced, and rather that the machine actually was responsible for increasing the sales of sheet music. The law eventually adjudicated the matter in the early 1900s by granting both parties legal reinforcement. Composers were paid for the "mechanical reproductions" of their compositions, and the recording artists received the right to record the music at a price set by Congress after the composer granted permission for it to be recorded. All in all, the legal decision was determined to be fair and evenhanded at the time. As a legal historian and expert on copyright, Litman's work will inform this investigation regarding the changes and permutations of copyright since its origination in the physical world as a vehicle to promote innovation, to its growing authority in cyberspace as a means of controlling ownership.

Additional research looking at consumer freedoms being limited as a result of transnational conglomerates' control over information is Siva Vaidhyanathan's *Copyrights and Copywrongs*. Similar to Lessig, Litman, Gillespie and Schiller, the author argues that expansions in copyright law have restricted public access to the arts and stifled innovation, new technologies and ideas. Vaidhyanathan contends that copyright law needs to be more flexible and humane, indicating that in 1996 Congress decided that copyright protection should not be fixed, and therefore extended it beyond the life of the author for an additional 50 years.[43] Prior to 1996, copyrights were generally not renewed and eventually became part of the public domain, but the 1976 law changed copyright in several critical ways. First, it extended the

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[43] Siva Vaidhyanathan, *Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity* (Oxford: Rowman & Littlefield, 2001).

protection beyond the life of the author, as previously mentioned. Second, the 1996 law made copyright applicable to all expressions fixed in any tangible medium.[44] What used to constitute a fair exchange between the media industries and the consumer (Vaidhyanathan is far less charitable explaining this, indicating the agreement before 1976 permitted a "temporary" monopoly) has shifted to the publisher possessing an endless monopoly over cultural works. As long as the rhetoric of intellectual property is strictly focused on content, the people fighting for cultural freedoms and expression are forced to work within the very narrow definition of "intellectual property." Vaidyanathan, then, clearly defines how the foundation of copyright, which is built on property ownership, instead obfuscates the discourse regarding more important issues of freedom and expression. Since this investigation considers the rhetoric of the media industry, specifically the MPAA, Vaidyanathan's work will assist the investigation as it attempts to frame discourses around intellectual property versus fair use amidst the advances in technology and the speed of cultural reproduction.

Kembrew McLeod's *Freedom of Expression: Resistance and Repression in the Age of Intellectual Property* (2005) also argues that current copyright law stifles creativity and the free exchange of ideas.[45] McLeod views creativity and expression as a democratic value, and uses his expertise as a music historian to illustrate that the rich tradition of borrowing is part of the cultural exchange between artists. McLeod is particularly interested in examining borrowing within the folk song tradition, citing musician Woody Guthrie as an artist who is emblematic of a

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[44] Carrie McClaren, "Copyrights and Copywrongs: An Interview with Siva Vaidhyanathan,"*Stay Free!* May 15, 2009 <http://www.ibiblio.org/pub/electronic-publications/stay-free/archives/20/siva_vaidhyanathan.html>.

[45] Kembrew McLeod, *Freedom of Expression: Resistance and Repression in the Age of Intellectual Property* (University of Minnesota Press, 2007).

culture that values the borrowing of lyrics and melodies. McLeod is especially critical of elitism and "high art" ideals, and devotes time to criticizing the notion that the author is a necessarily a fixed supposition. McLeod argues that copyright law is an abuse of power, that corporate and legal values fail to grasp the nuances of borrowing and free expression. The deterioration of the public space is at the forefront of McLeod's critique, and he points to privatization schemes that shifted what was originally a society valuing collaboration to a society navigating through corporate and litigious values. A study about the problems of the MPAA, copyright law, and the strong jurisdiction over digital works would not be complete without looking at the RIAA struggling with the same issues, although the music industry is shifting its public position regarding digital restrictions management, in this case offering more expensive, yet drm-free, watermarked content. A watermark is an embedded digital symbol that allows content owners to locate and identify their property on computer networks.

McLeod's work extends the critique regarding how corporate greed trumps innovation and creativity. His research about the RIAA and the organization's concern over piracy will help this investigation as it looks to the MPAA in order to compare and contrast the two organizations as they struggle with how to securely distribute products over the World Wide Web.

Framing Piracy (2003), by Shujen Wang, examines film distribution, both legal and illegal, in Greater China.[46] While China's "shadow economy" is protected by a bureaucracy that values China's large and relatively cheap labor base, that its long coastal lines and shared borders which provide easy entry and connecting points for smugglers, the country operates within a

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[46] Wang, *Framing Piracy*.

fascinating context that provokes further questions about technology, politics, culture, and globalization. For example, how does digital technology disrupt the balance of power and forms of control in the film industry? How has China's entry into the World Trade Organization affected its views regarding sovereignty, and accepting cultural products beyond its own borders? How do Chinese citizens who participate in piracy define themselves vis a vis the process of globalization? The book is one of the few studies that places the author directly in the center of a piracy network, in this case in Shanghai, Beijing, and a small coastal town in the Zhejiang Province. Wang asks the various case subjects in her interviews their reasons for pirating cultural goods, and how they define the media products they purchase and consume. For this study, the book is extremely useful in how it depicts the Motion Picture Association of America shaping national and international trade policies, anti-piracy efforts, and the organization's overall global film practices as they relate to copyright and intellectual property issues.

Overview

Chapter 2 provides a brief overview of the MPAA prior to its development of the trusted system framework as both a strategic player in promoting Hollywood film internationally, as the author of the ratings system, and as the enforcer of copyright control related to videotapes, finally shifting its approach to ratcheting up the enforcement of piracy laws owing to rapid Internet growth.

Chapter 3 includes interviews with individuals who are actively or formerly involved with the MPAA's enforcement of the trusted system, performing the legal, political, technical, or

rhetorical functions necessary to protect Hollywood's film products. I interview Dean Garfield, who worked first as an intellectual property attorney for the Recording Industry Association of America and was recruited by the MPAA to become Executive Vice President and Chief Strategic Officer for the MPAA's piracy campaign from 2003-2007. Also interviewed for this chapter is James Burger, founding member of the Copy Protection Technical Working Group (CPTWG), one of two organizations responsible for holding discussions centered on content protection technologies for film. Additionally, I interview Chief Technical Officer (CTO) John Hurst, whose Burbank, California-based company, *Cinecert*, was selected by the six Hollywood film studios to convert Hollywood to a digital standard, which Hollywood argues is a higher quality, safer, and more economical alternative to film stock. In this chapter, Mr. Hurst discusses the future of digital film distribution and exhibition and provides some intimate details about how the Hollywood Studios are providing advanced forensic watermarks on their films so the studios can identify where a film was illegally recorded through a camcorder device.

In this chapter, I also include two individuals who demonstrate economic and political resistance to conventional media production and distribution practices. I speak to Simon Petersen (pseudonym) who calls himself a "piracy consultant" and professional media bootlegger as well as Dan Mickell (also pseudonym), creator of *Movie Land*, which is a software program that illegally downloads and streams film and television programs to Apple's mobile *iPhone* devices. I include these people in the investigation to illustrate several perspectives from the piracy underground and the ways in which they support a broader argument that the trusted system's opposition is more closely aligned to Hollywood's grand designs than many people assume.

Chapter 4 looks at the subject of piracy and the ways in which the Motion Picture Association of America aligned with political, legal, and technological authorities to lobby for

legislation that legally challenged and refashioned conventional views of property and ownership. Congressional legislation created the Digital Millennium Copyright Act (DMCA) in 1998, which functioned as a rigid blueprint for the future consumption of digitized, cultural goods. This chapter presents some of the key lawsuits involving the DMCA brought forth by the Electronic Frontier Foundation (EFF) with regard to film and media products. The EFF archive contains an extensive amount of information about the thousands of lawsuits involving the non-profit agency acting as either litigant or defendant, and I selected several of the precedent-setting cases with regard to DVD copying and fair use. Additionally, this chapter discusses several landmark cases involving general digital goods where companies were sued and unceremoniously brought to an end for producing products that were deemed to be violating the DMCA. The DMCA is a severe, uncompromising piece of legislation introduced in 1998 that capsizes over two hundred years of copyright law, and is a major cornerstone for this investigation. The DMCA legislation criminalized the circumvention of the digital encryptions placed on digital products, as well tampering with personal property such as removing the screws off the cover of, or tampering with a home entertainment console like an *Xbox*, *Playstation 3*, or *Wi*.

Chapter 2: Overview and Development of the

Motion Picture Association of America

Introduction

Chapter 2 ventures away from the "trusted system" configuration and chronicles the rise and establishment of the Motion Picture Association of America (MPAA), the world's most powerful lobbying group that promotes American cultural exports. The MPAA is persuasive and dominant; in fact, the industry alliance is currently ranked as the second largest export industry overall, following aerospace.[47]

Responsible for contributing nearly $80 billion in annual growth to the U.S. economy, the MPAA is the only American industry to run a positive balance of trade in every country that it does business.[48] The actual promoting and politicking of the Hollywood film market is handled by two distinct administrations: the MPAA, which specializes in the American, domestic film market and the MPAA's international counterpart, the Motion Picture Association (MPA). Although the MPA serves as the official voice and advocate for American film and its television and video market abroad, it is not a central feature to the research focus of this dissertation and will only be mentioned momentarily.

This chapter provides a brief overview of the MPAA film organization itself and of its dual role as a business enterprise and major advocate of cultural goods in U.S. trade activities. The chapter then brings forth a historical overview of the

[47] "Motion Picture Association of America's Research and Statistics Page," April 21, 2010 <http://www.mpaa.org/researchStatistics.asp>.

[48] Kevin Lee, "The Little State Department: Hollywood and the MPAA's Influence on U.S. Trade Relations," *Northwestern Journal of International Law and Business*, 28, no. 371 (2008): 371.

industry alliance and examines the MPAA's piracy and media security campaign as it passes into a new era of championing digital cinema.

Characterization of the MPAA

In 2010, the United States' economy is continuing to recover from slipshod lending practices initiated by the world's largest banks, the country's unemployment index is said to be almost 10%, and there is staggering debt of over 11 trillion dollars.[49] Indeed, the country's poor economic health in 2010 places the MPAA's success into an uncertain, idiosyncratic category. Historically, the United States has not seen an economic downturn so synchronized, or a downturn in trade so sharp and widespread since post-World War II. The current economic situation is rare in that so many other economies in the advanced world, which account for the lions' share of world gross domestic product (GDP), are all simultaneously experiencing financial crises comparable to the 1930s. How does the MPAA continue to succeed in an economic climate so dismal that in 2009 64% of Americans and 47% of consumers surveyed internationally indicated they would reduce future spending on entertainment? [50] There are several reasons that explain this prosperity.

Previous scholarship featuring the MPAA and its various modes of operation often centered on the lack of any particular custodianship when it came to the MPAA's dealings in international commerce. In the United States, especially the MPAA's position as premier power broker is facilitated by its multifarious, albeit

[49] "National Debt Hits Record 11 Trillion Dollars," *CBS News*, March 17, 2010, <http://www.cbsnews.com/8301-503544_162-4872310-503544.html>.

[50] "It's A Recession, Consumers Agree- But Until When?" *Nielsen Wire*, October 29, 2008, April 7, 2010. <http://blog.nielsen.com/nielsenwire/consumer/its-a-recession-consumers-agree-but-until-when/>.

elusive status, which permits the organization to be both a big business syndicate and government enterprise simultaneously. We know historically that the U.S. Government has conceded authority to the MPAA and MPEA (Motion Picture Export Association) as well as their predecessors in negotiating international trade deals. And while there is certainly documentation that some international competitors tried to negotiate preferred terms with Hollywood, determining the fairness of the contracts would be immaterial in that Hollywood is known to be less than reciprocal in its negotiations with international film market representatives, as we shall see. The MPEA, however, was not acting as the exception in terms of its drive to exploit foreign markets. The Italian film industry, which long coveted access to distribution channels in the United States with its motion pictures reached an agreement, the "Italian Film Export "(IFE) in 1951 with the MPEA.[51] For Italy, however, the agreement fell short of its original aspirations when independent film distributors affiliated with the Independent Motion Picture Distributors Association of America (IMPDAA) argued that the IFE allowed Italian distributors to book its films at prices that independents could not realistically meet. In February 1954, the Federal Trade Commission (FTC) ruled that the IFE was anti-competitive, and in 1954 the MPEA's payments to the Italian film industry were suspended, officially symbolizing the termination of the IFE.[52] The barriers for international film competitors to legitimately compete with Hollywood have always been extraordinarily high, as this chapter will continue to highlight.

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[51] Thomas Guback, *The International Film Industry: Western Europe and America Since 1945* (Ontario: Fitzhenry & Whiteside Limited, 1969).

[52] Ibid.

Thomas Guback frequently observes the strict barriers of entry for international film markets wanting to distribute their products in America in his book *The International Film Industry: Western Europe and America Since 1945* (1969). Calling the MPEA a "legal cartel," Guback's analysis focuses on the ways in which American industry helped to determine the policies of international companies through bolstering its membership in overseas film industry trade groups. While membership in these associations is one way that the MPEA demanded free competition, open access to markets, and free trade, foreign industries or governments tried to control the activities of American companies.[53] On the subject of the MPEA's seemingly hypocritical behaviors i.e. demanding unhindered trade while bold and brazen in its goals for monopoly, Guback argues that the maxims are not necessarily at odds with monopoly in that the behaviors work to create market conditions overseas that are "healthy" for American companies. The MPEA, as Guback rationalizes, was legally emboldened to monopolize export business for is members. Hence, one then begins to understand why there is no discussion of equal footing or reciprocity for America's trade competition. One of the themes of this dissertation is looking at how the market dominance of cultural products begins with powerful entities, who, guided by self-interest, are able to effectively co-opt legal authority while constructing a trusted system.

MPAA and South Korea's Screen Quota

Historically, many countries with motion picture industries have sought to protect themselves from the onslaught of Hollywood's cultural flows through the

[53] Ibid.

incorporation of protectionist policies. The justification for a government shielding a country's domestic industries from foreign competition is usually dictated by economy of scale or imperfect competition, coupled with fears over the eventual loss of cultural sovereignty.[54] Protectionism measures consist of directly subsidizing local film production, providing content regulation, tax concessions, entry barriers, licensing conditions, and screen quotas. The South Korean government's screen quota system constitutes the foundation of its protectionism policy.[55]

The South Korean government has been engaged with the United States in a long disputation over trade. For the purposes of this investigation, it is important to know that Korea has battled the Motion Picture Association (MPA) and Motion Picture Association of America (MPAA) for decades over preservation of its film industry. Korea first introduced legislation in 1966 requiring that Korean cinemas show only homegrown films for at least 146 days of the year, sheltering a domestic cinema industry that would begin to quickly gain an international reputation for excellence.[56] Although the history of the quota goes back forty years, it was not actually imposed until 1993 when the Coalition for Cultural Diversity in Moving Images (CDMI) was formed to enforce it.[57]

According to multiple accounts, Korea's screen quota is severely outdated, considering that the market share of Korean domestic film product has grown at a record-breaking pace over the last 5-7 years.[58] Information from the Korean Film Council (KOFIC) illustrates that domestic Korean film product accounted for 59.3%

[54] Shi Young Lee, Eun-Mee Kim, and Kim Young Il, "The Effect of the Korean Screen Quota System on Box Office Performance," *Journal of World Trade* 42, no. 2 (2008): 335, 336-346.
[55] Ibid.
[56] James Clasper, "Hollywood Squeeze," *New Statesman*, July 17, 2006: 18.
[57] Lee, Kim, and Young Il, "The Effect of the Korean Screen Quota."
[58] James Clasper, "Hollywood Squeeze."

and 58% of the box office take in 2004 and 2005, respectively.[59] To illustrate, domestic films made in Korea gained more audience attendance than Peter Jackson's *The Lord of the Rings* (2003) or the Wachowski Brothers' *The Matrix Revolutions* (2003).[60] Percentage wise, the domestic Korean film market grew by 32% in box office revenue in 2004 and almost 25% the previous year.[61] Besides the United States, there are only a few countries where the market shares from domestic box office profits exceed 25%.[62] The success of the Korean film market is therefore quite unusual.

Jack Valenti, former MPAA president, devotes a considerable amount of print to excoriating Korea's preliminary screen quotas in his memoir, *This Time, This Place*.[63] Valenti, playing the role of the pot calling the kettle black argues that the Korean government is a "cartel," profiting "mightily" from the "freeze-out of American movie distribution companies."[64] The Korean screen quota mandated that American studios be barred from opening offices in the country's capital, Seoul, and American studios were prohibited from distributing American films throughout Korea. If by chance Hollywood films happened to come into the hands of strictly government-approved Korean distributors, the films were sold at a flat price for an average of less than $50,000 per film. The rules and regulations governing Hollywood studios in Korea were "lunacy" according to Valenti, especially since Korean distributors profited enormously from the wide distribution channel of

[59] Lee, Kim, and Young Il, "The Effect of the Korean Screen Quota."
[60] Ibid.
[61] Ibid.
[62] Anonymous, "Lights, Cameras, Activists," *Business Asia*, February 6, 2006: 12.
[63] Jack Valenti, *This Time, This Place: My Life in War, the White House, and Hollywood* (New York: Harmony Books, 2007), 378.
[64] Ibid.

American product, leaving the Americans "outside with their noses pressed against the cartel's windowpane."[65] Valenti chronicles his long fight with the Korean government, a "battle" illustrated a la Valenti with substantial conflict, high stakes and the compulsory Hollywood denouement. Although Valenti was initially unsuccessful removing some of the major restraints against the Hollywood film market, United International Pictures (UIP), a hybrid of studios consisting of Universal, Paramount, and MGM led by Michael Williams-Jones, was eventually able to open its Seoul headquarters for internal Korean distribution in 1998, after U.S. government political pressures provoked the Korean government to capitulate. Nevertheless, some Korean citizens who were angry over the proceedings began engaging in grass roots efforts to intimidate Hollywood and audiences who dared to attend films distributed by UIP. According to various press reports, at one point live poisonous snakes were set loose in two theaters playing UIP's films, an event that had a "depressing" effect on the audience, according to Valenti.[66] Other Korean representatives affiliated with the UIP received threats towards their families, and their homes were vandalized.[67] Despite this extraordinary pressure to cease operation, UIP continued to stay in Korea, and other Hollywood studios that originally abstained from doing business gradually opened their doors for film distribution in Korea. During his long tenure with the MPAA, Valenti lobbied consistently for Korea to decrease its screen quota from 146 days to 73. Shortly after Valenti's retirement, the

[65] Ibid.
[66] Ibid.
[67] B. M. Yecies, "Parleying Culture Against Trade: Hollywood's Affairs With Korea's Screen Quotas," *Korea Observer* 38, no. 1 (2007): 1.

Korean government did indeed drop its screen quota to the desired 73 days with the help of newly hired MPAA president Dan Glickman.

Hollywood's Ascent Into International Markets

Kristin Thompson's "Exporting Entertainment: America in the World Film Market, 1907-1934" (1985) notes that by the 1920s, people in every imaginable social and cultural situation worldwide were seeing American films along with every imaginable American consumer product like cars, furniture and fashions.[68] After World War I, specifically, the beginning of American film domination over its international counterparts symbolized a much larger theme of American commerce influencing and propelling the United States into the prime position among world markets through technological advances in electricity, the internal combustion engine, and various chemical products and goods that all came to be manufactured on an assembly line. The Industrial Age boom was, of course, very fortuitous for the United States.

The more explicit move of the American film industry and its initiation towards oligopoly coincided with the formation of the MPPC (Motion Picture Patents Corporation), which first attempted to block imports.[69] Following this, America continued pursuing fierce trade policies, fighting especially hard to expand its film market and distribution abroad after both World Wars when there was a colossal void in European production.

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[68] Kristin Thompson, *Exporting Entertainment: America in The World Film Market* (Tonbridge: The Whitefriars Press, 1985).

[69] Ibid.

Up to this point, this chapter touches on various examples throughout film's brief history depicting the Motion Picture Patents Corporation and the Motion Picture Exports Group seeking to dominate the international film market. But there is scarce scholarly material available that illustrates the MPAA involved in the daily machinations of setting and administering policy abroad in its forty plus years as an organization. Those who follow the MPAA are aware of many of the organization's positions because, like any public politician, the president uses his clout with the studios (his electorate) and his relationship with the media to try to curry public patronage. Jack Valenti, who never hid from a public opportunity to champion America and its manifest destiny to dominate media flows, was quoted innumerably throughout his tenure as MPAA president regarding his organization's obsession with controlling international markets.

Shortly after Mr. Valenti assumed his role as MPAA president in 1966, he met with Erik Pleskow, the manager of United Artists' worldwide distribution network, and he quickly realized that the expansion of American film into international markets should be his highest priority for the following two decades, through the year 1986.[70] At the time of Valenti's first briefing with Pleskow, total American industry's world revenues equaled some $1.5 billion dollars.[71] Thirty-eight years later, when Valenti stepped down as chief executive of the MPAA, global revenue of world cinema, television programming and video appreciated to more than 41% of the total world revenue ($45 billion).[72] During this considerable ramping up in terms of negotiating and securing foreign film markets, Valenti was criticized for acting as a

[70] Valenti, *This Time, This Place*.
[71] Ibid.
[72] Ibid.

kind of "cultural emperor" when it came to projecting American values around the globe.[73] Coupled with these criticisms was the tendency to mythologize Valenti's circle of powerful relationships that the seemingly indefatigable Valenti first developed in Washington, D.C as chief of staff to Lyndon Johnson, and finally in Hollywood as MPAA president. In a concentrated effort as president, Valenti became the public face for Hollywood's campaign to 1) dominate international trade flows and 2) to enforce anti-piracy measures. Former Kansas Congressman Dan Glickman went on to succeed Valenti in 2004 and, whether he orchestrated it or not, permitted Dean Garfield, MPAA vice-president amd head of legal strategy, to assume the public role of the anti-piracy "enforcer."

Explaining specifically what the MPAA is and how it conducts business requires the assistance of others who have published works on the organization's various modes of operation, especially since the organization is secretive and lacks transparency. Kevin Lee's article "The Little State Department: Hollywood and the MPAA's Influence on U.S. Trade Relations" (2008) notes that the U.S. government is actively advocating domestic film industry interests in bilateral and multilateral trade agreements because of the Hollywood film industry's importance to the U.S. economy, to which the credit goes to the MPAA's influential lobbying efforts.[74] The arguments coming from the international community are familiar to those who follow film distribution: foreign competitors argue that Hollywood's self-interest and power permit them to invade the trade flows which ultimately results in an inequitable

[73] Phillip Adams, "Cultural Emperor Took No Prisoners," *The Australian* 2007, All-round Country Edition ed., sec. Opinion.

[74]Kevin Lee, "The Little State Department: Hollywood and the MPAA's Influence on U.S. Trade Relations," *Northwestern Journal of International Law and Business* 28, no. 371 (2008): 371.

playing field. To illustrate, although the number of film releases have diminished world wide, Hollywood still releases enough domestic film product to act as a non-tariff barrier for those wanting to do business in the United States. Moreover, international critics of Hollywood's grand designs claim that the U.S. does not offer enough economic incentives to interest the international film community enough in doing business with the United States.

Any incoming president of the MPAA has at least two fundamental objectives as part of the job description, most importantly to make sure the film organization perpetually mollifies the top brass of each of the six film studios (Universal, Sony, Columbia, Disney, Fox, and Warner Bros). Secondly, the organization must be profitable internationally to sustain its influence over film markets. The MPAA carries special *carte blanche* status bestowed upon it by the U.S. government, allowing it to negotiate international trade deals.[75] Historically, attempts to categorize the MPAA as either a government or business enterprise have been challenging because of the important historical symbiosis between the film association and big government. In short, the two critically need each other as partners. The chapter will highlight this connection following a general historical overview of the organization and its first encounters with film piracy.

Historical Overview of the MPAA

Concerns about piracy and copyright infringement within the film industry can be traced back to between 1900-1906 when many film production companies in

[75] Lee, "The Little State Department."

the United States, France and England enthusiastically pirated each other's films, typically because the films were not secured through the Library of Congress. International film companies such as France's Pathé did not fully understand the concept of intellectual property and, through their sheer ignorance regarding American laws, waived their claim to enormous profits during the early 1900s.[76] Pathe´s notable international film, George Meliés' *Trip to the Moon* (1902), for instance, was widely distributed in American cinemas because of illegal copying. Consequently, Meliés was unable to collect a single penny from the film's release in America during his lifetime.

Historically, the ever-powerful American film cartels, which include the Motion Picture Patents Company (MPPC), the Motion Picture Producers and Distributors Association (MPPDA), and finally the Motion Picture Association of America (MPAA), shifted extensively throughout the years in their institutional designs. The MPPC in the early twentieth century carried out Thomas Edison's unyielding opportunism by administering the controls and patents Edison himself first established in 1908. Edison is known historically for establishing uncompromising rules around copyright, especially creating stringent barriers for entry. Indeed, the MPPC was the first film organization concerned with copyright issues, and it exercised its jurisdiction over unlicensed "outlaws," otherwise known as independent filmmakers.[77] Edison's patent company responded to the independent film movement by forming a subsidiary called the General Film Company that blocked the entry of

[76] Richard Koszarski, *An Evening's Entertainment: The Age of the Silent Feature Picture, 1915-1928, Vol.3* (London, England: University of California Press, 1990).

[77] Lawrence Lessig, *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity* (New York: The Penguin Press, 2004).

independent filmmakers who did not have a license to use Edison's equipment. The General Film Company's harsh treatment of unlicensed filmmakers through the confiscation of unlicensed equipment, its cancellation of product supply to theaters who dared to show unlicensed films, and its general monopoly over distribution with the acquisition of all US film exchanges, except for the one owned by William Fox, became legendary. Independent filmmakers eventually fled the East Coast and went to California, which was far enough from Thomas Edison's influence for filmmakers to pirate Edison's products without fear of arrest.[78] Eventually, the enforcement of Edison's laws moved westward, but Edison's patents expired by the time federal marshals arrived in California. Edison's MPPC was shut down by the courts in 1918.

The Motion Picture Producers and Distributors Association (MPPDA) was created in 1922 with the primary aim of enforcing strict censorship rules over film distribution. Reaching a crisis in the United States in 1921 with the censorship issue, state and local censor boards decided to forcefully intervene in Hollywood with their own independent set of film standards because support for the National Board of Censorship had all but disappeared, and pressure for federal censorship mounted.[79] In his seminal work *An Evening's Entertainment*, Richard Koszarski discusses a spate of racy films released between 1920-1921 that exploited infidelity themes, the portrayal of crime, brutality, nudity, narcotics, and suggestive sex. The films' illicit themes were supposed to serve as the antidote to a postwar recession and subsequent weak box office ticket sales, but audience reception of the films posed an entirely new problem for Hollywood: the public disapproval of its leading performers. Quite

[78] Ibid.
[79] Koszarski, *An Evening's Entertainment*.

often, public reputation actually coincided with the fictional story and the film's story line echoed the actors' real life activities. For instance, when actress Mary Pickford starred in *Stella Maris* (1918), portraying a physically disabled girl who competes for the affections of a married man, Pickford in her real life was going through a tremendously public divorce scandal brought about by her love affair with silent film star Douglas Fairbanks, Jr. Meanwhile, popular vaudeville and silent screen actor Roscoe "Fatty" Arbuckle was incarcerated in San Francisco on the rape and murder charges of a twenty-six year-old woman.[80] Arbuckle's trial is notable in that he was one of the highest paid film actors at the time of the scandal. Because of Arbuckle's elite position as a wealthy performer, when push came to shove it resulted in an ambitious, albeit public display of courtroom theatrics when the actor's case went in front of a judge. The highly combative San Francisco District attorney Matthew Brady, who was already known for his histrionic displays in the courtroom, forced Arbuckle's trial onto the docket and, in an anticlimactic series of events, the trial concluded with a hung jury. As pressure mounted to bring Arbuckle's second case to trial, Hollywood's industry leaders announced in late January 1920 that Will Hays, President William Harding's then postmaster general, would leave his cabinet post in order to oversee the cleanup of the Hollywood film industry which the MPPDA would make its primary goal.[81] After 1922, state reformers concerned with censorship allowed Hays and the MPPDA to construct a thirteen-point criterion that the MPPDA used to consider future story material and consequently accept or reject

[80] Ibid.

[81] Tino Balio, *The American Film Industry,* Rev ed. (Madison, Wis.: University of Wisconsin Press, 1985): 664.

screenplays for production.[82] Note that the submitting of materials to the MPPDA for consideration was voluntary, and there was no penalty for ignoring the recommendations of the board, but the thirteen points served as the first in a series of codified standards that illustrated strong interventions to keep Hollywood as a self-regulated industry. Any film company choosing to overlook the recommendations of the film industry body was taking extensive risks, as they were almost certain to have problems later with distribution and exhibition.

The MPPDA organization, because of Hays' efforts to establish a moral standard on Hollywood film distribution, became more commonly known as the "Hays Office" as it eventually authored the Production (Hays) Code in 1930, and its influence over scripts and personnel grew even stronger.[83] The organization went on to form the Production Code Administration (PCA) headed by Joseph I. Breen, a former Philadelphia journalist who subsequently asked Martin Quigley, a Catholic layman of enormous influence, to collaborate with Jesuit priest and teacher Daniel A. Lord to construct the Quigley-Lord code in 1930, but the studios ignored it. Breen eventually became the Production Code Administrator after realizing that, although establishing a set of moral standards for Hollywood was indeed essential, a formula would have to be devised allowing sex and crime pictures continued entrée into American theaters, or the industry would fail miserably.[84] For Breen and his Production Code office, it was unthinkable and unprincipled that the audience could sympathize with crime or sin. Thus, the formula of compensating moral value became an important operative on the principle that if characters committed certain

[82] Ibid.
[83] Ibid.
[84] Ibid.

objectionable acts onscreen, eventual countermeasures would guarantee some form of punishment and retribution, or reform and regeneration, of the "sinful" one.[85]

In 1940, the MPPDA (Motion Picture Producers and Distributors Association) helped to establish the Copyright Protection Bureau (CPB), the organization's first non-profit anti-piracy unit. At the time, Hollywood's eight major film producers decided to contribute $200,000 annually.[86] This was a negligible amount, even for the time period. Jack Levin, chief of the bureau, had worked previously with the Mutual Studio in New York (studio home to Charlie Chaplin, D.W. Griffith, and other silent screen stars) in 1915 when the illegal practice of "bicycling", one of the more popular scams of the early 1900s, was widespread. The term bicycling referred to the hurried methods of biking film reels from one theater to the next directly after a particular screening's conclusion. Bicycling also consisted of a variety of ways to illegally exploit a film's official run, namely that (a) an exhibitor who rented a film legitimately for a specified period could try and extend the run an extra day or two before or at the conclusion of the film's official run, (b) the cinema owner could rent the film for one of his own theaters and then screen it illegally at another theater he owned (c) two exhibitors could rent half as many films as they needed and then swap and share the titles back and forth nightly, giving each a full program at half the cost. Bicycling was the indirect reason why the CPB was formed, according to Kerry Segrave, author of *Piracy in the Motion Picture Business* (2003). Aside from this bit of history, one of Levin's duties before his ascension to Copyright Protection Bureau chief was working for the Mutual Studio, delivering movie prints to local exhibitors.

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[85] Ibid.
[86] Segrave, *Piracy in the Motion Picture Industry*.

In 1945, Will Hays retired and was succeeded by former U.S. chamber of Commerce leader Eric Johnson. The motion picture industry at the time faced the ongoing challenge of television, which was slowing box office sales by creating a diversion for people who typically attended the cinema. This trend forced studio executives to implore their workers to develop new technologies like Cinemascope to excite audiences and bolster business. It was also in 1945 that the MPPDA split into two distinct branches: the MPAA, which would focus on the continued enforcement of the Hays Code, and the Motion Picture Association (MPA), which would concentrate exclusively on the international trade markets.[87] Both of these branches functioned as part of the larger Motion Picture Export Association (MPEA), which became the sole export sales agent setting prices and terms of trade for films and their distribution to international markets. Foreign markets became especially important to Hollywood after World War II. Production facilities and filmmaking equipment were destroyed in most of continental Europe, and by 1944 Hollywood relied on a European market that was significantly scaled down from wartime activities. Only the British Empire, Latin America and a host of smaller, neutral countries functioned as Hollywood's foreign revenue stream and, by 1944 the American film companies concentrated their efforts in the United Kingdom, the most important international market at the time.

The importance of international markets cannot be overstated when it comes to Hollywood's success. In an interview given with a reporter in 1968, former MPAA President Jack Valenti discussed his views on film and, to a larger extent, the

[87] Balio, *The American Film Industry,* 664.

role the MPAA plays as it functions within the framework of American trade policy. Valenti discloses that the motion picture business relies on the earnings brought back by international distribution, which are critically important to the U.S. balance of payments, part of the "sinew that builds the industry."[88] That the MPEA had the only U.S. operation that negotiated exclusively on its own with foreign governments was of special significance to Valenti, and in this interview he earnestly embraces the MPEA's nickname as the "little state department." Valenti pointed to international markets, declaring that the MPAA was especially concerned with 1) expanding film markets and keeping them open and viable, 2) reducing restrictions on American film by directly negotiating with its foreign trade partners, and 3) negotiating film import agreements as well as their rental terms.

Kevin Lee argues that the cultural flows as they relate to film are entirely lopsided: American films now dominate foreign markets, but foreign films have failed to establish a notable presence in the U.S. market, accounting for only 1% of movies shown.[89] The U.S. government has actively advocated domestic film industry interests in bilateral and multilateral trade agreements because Hollywood is of paramount importance to the U.S. economy. The MPAA's lobbying efforts, by which officials often intervene in bilateral trade relations to protect the MPAA's interests, are notorious, even when these interests are counter to more immediate U.S. economic interests.[90]

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[88] "The 'Foreign Service' of the Motion Picture Association of America," *The Journal of the Producer's Guild of America* 22, no. 10 (1968): 21-25.

[89] Lee, "The Little State Department," 371.

[90] Ibid.

Historically, it is not uncommon for conflicts of interest to dominate the MPAA's agenda. In the 1950s, studios began investing in the medium of television to increase their distribution power, eventually capitalizing on product distribution windowing, where media content is distributed from one channel to another within a certain time frame, in this case products and the redistribution of their films to television networks in the 1970s. The decision to invest in television was not without its own set of conflicts.

Other disagreements between the MPAA and the six studios include choosing the appropriate methods to stop piracy. In 2002, for instance, Walt Disney Co. and Fox appealed to the United States government to push for legislation that directed the U.S. Commerce Department to provide ongoing oversight over peer to peer technologies such as the *Napster* platform which was used for sharing unauthorized films.[91] Warner Bros., meanwhile, opposed government intervention because the studio believed the private sector should assume responsibility.

The globalization and subsequent growth of the transnational corporation has bedeviled the MPAA, supplying the organization with a myriad of conflicts throughout its history. When the Motion Picture Association was founded over 80 years ago, the organization was essentially functioning for a one-reel town, and Hollywood had only censorship to battle. Eventually, globalization affected not only the studios but the conglomerates who owned them, creating a diverse and often competing set of interests including multinational interest and ownership in Internet,

[91] Jack Goldsmith and Timothy Wu, *Who Controls The Internet? Illusions of a Borderless World* (Oxford: Oxford University Press, 2008).

broadcast, cable, satellite, consumer electronics, music, publishing, theme parks and so on.

As stated previously, the MPAA remains initially responsible for serving as an advocate for the six film studios: 20th Century Fox, Warner Bros., Paramount, Universal, Columbia, Universal, and Disney. Based in Washington D.C.; it also has several branches operating in Los Angeles, California, an anti-piracy department in operation in New York, and international operations in Brussels, Sao Paulo, Singapore, and Toronto.

MPAA's Relationship with U.S. Federal Government

Many of the MPAA's leaders and employees have previous experience working within high profile positions with the federal government. Will Hays, the first MPPDA (Motion Picture Producers and Distributors Association, the film industry's earliest organization, formed in 1922) president, was the former U.S. Postmaster General and former chair of the Republican National Committee. Hay's experience with parcel and mail delivery would be especially advantageous in today's film market when speed is so very crucial in matters related to media distribution and the continuous challenge to fight piracy. Before the internet movie rental company Netflix shifted its business strategy to leveraging its internet streaming business, the company hired former U.S. Postmaster General William Henderson for a single year to help improve the delivery times of its large, red envelopes to consumer mailboxes.[92] Providing a segue back to the MPAA's tendency to recruit high-level

[92] Reuters, "Netflix Names Former U.S. Postmaster as COO," *Los Angeles Times*, January 19, 2006, <http://articles.latimes.com/keyword/william-j-henderson>.

government officials, Jack Valenti, the legendary MPAA president (1966-2004), was former President Lyndon B. Johnson's adviser. And Dan Glickman, the previous MPAA president (2005-2010), is a former Congressman from the state of Kansas, where he held the title of Secretary of Agriculture before his congressional appointment to the House.

Historically, the MPAA has been chronicled frequently by its critics as an equal opportunity offender: As I already illustrated, the organization's aforementioned authority to negotiate on its own has earned it the moniker "the little state department." Domestic interest groups like the MPAA are always trying to advance their own agendas in foreign trade relations, and American industry groups have played prominent roles in treaty negotiations since 1878. Historically, the increased emphasis on global IP (intellectual property) has placed American private sector actors in the forefront with agreements such as the Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the General Agreement on Tariffs and Trade (GATT).[93] Overall, the MPAA exemplifies how private sector interests often cross over into the international sector, allowing an organization to flex its economic influence in international trade discussions.

The film industry and U.S. government have ties going back to both World Wars. In 1916, American dominance of the global film market caused an international move to establish trade barriers in order to protect domestic film industries. In response, Hollywood sought assistance from Washington to advocate fewer restrictions in the international trade market. During World War II, Hollywood

[93] Lee, "The Little State Department."

played an instrumental role in assisting the United States to support the war and America's information campaign. Propaganda films such as the Frank Capra *Why We Fight* series (1942-1945) created a patriotic mindset for American citizens because it argued that human sacrifices were inevitable in military combat if Americans wanted to be free citizens.

MPAA's Public Stances on Piracy

The MPAA's public fight against piracy is well known and has been a major concern for the motion picture industry for over a century. But what do audiences think of the recent multi-million dollar campaigns put forth by the MPAA? Specifically, is the message that piracy is equivalent to stealing acting as a deterrent? As a whole, the American public seems to respond in contradictory ways. On the one hand, while the majority of the public is highly aware that using peer-to-peer technologies is illegal, they are not buying into the larger argument that the law, as it stands currently, is a compelling enough reason to "cease and desist." Moreover, previous research trying to link piracy with lost revenues has not been conclusive. A recent Government Accountability Office (GAO) study attempting to quantify the size and scope of piracy, including the impact of Web piracy to the film and music industries, show that piracy is a drain on the U.S. economy, the country's tax revenue, and in some ways it has the potential to threaten national security and public health.[94] Several influential entertainment industry trade groups, including the MPAA, RIAA, and Screen Actors Guild (SAG) argued to the U.S. Intellectual Property Enforcement

[94] The U.S. Government Accountability Office, *INTELLECTUAL PROPERTY: Observations on Efforts to Quantify the Economic Effects of Counterfeit and Pirated Goods,* ed. GAO (Washington, D.C.: U.S. Government, 2010): 2.

Coordinator how they thought the government should be preventing piracy.[95] The trade groups believed that the Department of Homeland Security and the Department of Justice should arrange "preventative measures" to combat piracy before major motion pictures are released. One might assume that piracy falls under the legal domain of domestic law enforcement, but the U.S. Immigration and Customs Enforcement, a department within the Homeland Security Office, is constantly investigating and implementing piracy protocols. The DHS is made up of 22 components, with one of them being the traditional customs service, which is the largest investigative arm of the DHS.[96]

The MPAA has tried to link film piracy with national security for many years. In a 2009 study funded by the MPAA, the RAND group found that organized crime and terrorism are funded by pirated DVD sales, showing that mobsters from Russia to Malaysia and in a variety of gangs including the Big Circle Boys in Canada, and the Camorra Mafia in Italy have relied on pirated goods to fund their illegal activities for years.[97]

The data used to quantify piracy, however, is not reliable, according to the GAO. In effect, each attempt by the U.S. government establishing economic losses resulting from counterfeiting had methodological limitations. In this particular case, the method of measuring the losses was at issue. In its 32-page report, the GAO comments, "Each method (of measuring) has limitations, and most experts observed

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[95] "Is CD Piracy a Matter For Homeland Security?" *Daily Finance*, April 20, 2010, <http://www.dailyfinance.com/story/media/is-cd-piracy-a-matter-for-homeland-security/19445139/>.

[96] Ibid.

[97] Gregory F. Treverton, et al, *Film Piracy, Organized Crime, and Terrorism* (Santa Monica, California: Rand Corporation, 2009).

that it is difficult, if not impossible, to quantify the economy-wide impacts."[98] After the report was issued publicly, the press pronounced the report a "setback" for Hollywood and the MPAA, especially because the research revealed information considered to be taboo in countries like the United States which stringently enforces intellectual property laws. The accountability office noted in its report the existence of data that shows piracy may actually benefit consumers in some contexts because consumers knowingly purchase a counterfeit product over a legitimate item because it is less expensive, or because the genuine product is not available. [99]

Many Americans continue to engage in peer-to-peer trading and other forms of piracy, and apparently they feel indifferent about the debates, according to Gallup polls. The MPAA's campaigns to shape the public perception that piracy is wrong receives widespread attention, yet in many cases the campaigns still do not inhibit illegal behavior. In a survey by the Gallup Poll (2003), 83% young people said that downloading music for free was acceptable.[100] Freestone and Mitchell (2004) found evidence that Internet piracy, in the form of downloading music, was seen as the "least wrong" of misconduct because respondents did not do harm to others.[101] Similarly, it was found that most college students believed that downloading digital copyrighted files was neither illegal nor an offense.[102] Typically, the respondents in these studies knew that stealing the property of another was illegal and unethical, and significant majorities were highly aware of intellectual property laws and regulations

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[98] Ibid.

[99] Ibid.

[100] Gallup, *Moral Acceptability of Downloading Music for Free*, (Gallup Youth Survey ed. Gallup, 2003).

[101] O. Freestone and W. Mitchell, "Generation Y Attitudes towards E-ethics and Internet-related Misbehaviours," *Journal of Business Ethics* 54, no. 2 (2004): 121.

[102] Ipsos Public Affairs, *Higher Education Unlicensed Software Experience – Student and Academics Survey*. (2005).

prohibiting such behavior. In short, college-aged individuals felt indifferent about piracy. Besides price, being connected to the cultural milieu, and geography (many major films are simply not scheduled in small markets for exhibition), there are other reasons to explain illegal peer-to-peer file trading behaviors. Certainly, the immediacy of Internet technology, the perceived anonymity of participating in peer-to-peer file sharing and the relative ease of access to various unauthorized distribution channels are compelling reasons for piracy to occur.

Conclusion

As Mr. Glickman prepared to finish his six-year tenure with the MPAA and transition to the non-profit Refugees International, his time with the association was marked by criticism from many Hollywood insiders. In March 2009 Hollywood CEOs agreed to extend his contract for only 18 months because they were reportedly unhappy with his inability to preserve $246,000,000 in tax breaks for the Hollywood studios and filmmakers as part of the massive U.S. economic stimulus package.[103] Illustrating the dire condition of the economy in Southern California, the *Los Angeles Times* remarked recently that Hollywood is now operating within a climate where even hosting a movie screening and dinner is fraught with ethical complications.[104] The Obama administration's current campaign to impose strict rules on lobbying makes the job formidable for any future MPAA leader.

[103] "Toldja! Dan Glickman Says He's Stepping Down From MPAA in September 2010," *Deadline Hollywood*, October 2009, April 10, 2010 www.deadline.com/2009/10/dan-glickman-says-hes-stepping-down-from-mpaa-in-sept-2010.

[104] Richard Verrier and Joe Flint, "Role of Motion Picture Assn. of America Chief is Tough to Fill," *Los Angeles Times* (Los Angeles, CA), April 6, 2010, sec. Company Town.

Understanding the MPAA and its history of strong enforcement with intellectual property rules is crucial to knowing how the trusted system works. Chapter 2 chronicled the long history of the association and its efforts to clean up the public perception that Hollywood was morally decadent. It also discussed how the MPAA typically tried to obtain unanimity in its dealings with the six film studios, especially with the decisions centered on content control. But the film association will often venture beyond the confines of Hollywood in order to build alliances that secure its products. The film association also helps to persuade major players in other industries like consumer electronics and computers that they must align themselves politically and economically with the content industries.[105] According to Gillespie, institutional agreement must exist for the future adaptation of technical standards to materialize.

The next chapter discusses the development of the Internet with respect to the arrangements between the MPAA and its affiliates to manage copyright over cultural products. I speak to three people who currently or used to work with the film lobbying organization in a legal and/or technical capacity. For this chapter, I also interview two individuals who demonstrate economic resistance to conventional media production and distribution practices through the management of their own parallel or co-existing trusted systems.

[105] Gillespie, *Wired Shut*.

Chapter Three
Putting Names to the Trusted System

Introduction

In this chapter, I spoke via telephone to Dean Garfield, former RIAA lawyer, Executive Vice President and Chief Strategic Officer for the MPAA's piracy campaign from 2003-2007. Mr. Garfield was specifically recruited by the MPAA to help the film industry combat film piracy, which was increasing due to peer-to-peer file sharing that transpired on the Internet. In Hollywood's trusted system, Mr. Garfield operated with a team that functioned as both the legal and rhetorical arm of the campaign that countered film piracy activities. Garfield was also chiefly responsible for the MPAA's legal strategy against individuals and businesses engaged in alleged copyright infringing activities.

I also interviewed John Hurst, Chief Technology Officer for *Cinecert*, whose company was chosen by the six film studios to assist Hollywood and its conversion to a digital standard, which Hollywood argues is a higher quality, safer, and more economical alternative to film stock. To illustrate, according to one studio executive, in 2005 a movie print cost $1,000-$1200 to manufacture versus a digital version which totaled a fraction of the amount, as it could be either played back on a disc or transferred electronically.[106] I travelled to Burbank, California and met with Mr. Hurst at Cinecert in March 2010. Besides Mr. Hurst and Cinecert, the Research Institute for Digital Media and Content housed at Keio University in Tokyo, Japan tests the digital standards and its attendant copy protection for use in international markets. The Digital Cinema Initiatives (DCI) program, which is the formal name for this massive

[106] Laura Holson, "Film Studios Reportedly Agree on Digital Standards," *New York Times*, July 26, 2005, sec. Theater.

venture, is a partnership between Disney, Fox, Paramount, Sony Pictures Entertainment, Universal and Warner Bros., and came together in 2002 after Hollywood's major studios made the announcement. For the following three years, Hollywood was in discussions about how to effectively create and distribute digital films, but the parties involved could not agree on a standard technology for projectors, or who would reimburse or replace the theater equipment.[107] As a whole, theater owners were opposed to footing the equipment costs, fearing that the $100,000 projectors would quickly become obsolete if a set of standards were not available.[108] Conversely, the film studios argued they were not responsible for the projectors because they did not own the theaters. From a numerical standpoint, Hollywood's desire to convert thousands of theaters to digital playback standards deemed appropriate by DCI was a colossal enterprise. There were only 250 digital cinema-ready screens available out of approximately 105,000 worldwide, at the time of DCI's announcement.[109] Besides our meeting in March 2010, I spoke with Mr. Hurst once on the telephone prior to our visit, and another time in April to follow up with some of the information we discussed.

Also interviewed for this chapter is founding member of the CPTWG (Copy Protection Technical Working Group), James Burger, who additionally acted as the chief intellectual property attorney representing the consumer electronics industry as part of the SDMI coalition. Burger is a long-term participant in the music and film industry's various consortia, helping to draft the technical specifications and standards

[107] Ibid.
[108] Ibid.
[109] "CBG focused on AccessIT for D-cinema - The Hollywood Reporter," May 13, 2011, http://www.hollywoodreporter.com/news/cbg-focused-accessit-d-cinema-108512.

of digital media on behalf of the consumer electronics industry (CE) and its products. He fills at least two roles in the trusted system; as an expert in intellectual property law for the technology industry, Mr. Burger must understand Capitol Hill and its policy-making activities so he may better serve his clients. He is a lobbyist for the technology industry, and has previously voiced concerns over privacy regarding the Hollywood studios control over consumer hardware in people's homes. In J.D. Lasica's *Darknet,* Burger is quoted gratuitously throughout the book on a number of technology issues, but this is the first time he has given an interview about the CPTWG. It is important to note that these "working groups" are careful not to present themselves as standards organizations, and can pursue the shared technical, economic, and political arrangements that accompany them.[110] I had the pleasure of speaking with Mr. Burger in Los Angeles at the CPTWG meeting in early January 2011, and on the telephone in late January, March, and also July 2011. Mr. Burger is an attorney in Washington DC with Dow Lohnes.

To further the discussion of the audience and how it functions within the piracy nexus, in the conclusion of the paper I speak to Simon Petersen, piracy consultant and professional media bootlegger and Dan Mickell, creator of *Movie Land*, which is a software program that illegally downloads and streams film and television programs to Apple's mobile *iPhone* devices. Both of these individuals operate within their own individual piracy networks and counter conventional media making practices by employing DIY (do it yourself) modes of engagement.

The political economy of the media and the ways in which the structures of media power limit and frame the activities of audiences is in constant tension with the

[110] Gillespie, *Wired Shut*.

active dimension of audiences and their response to media messages. It is a dichotomy that plays out in this investigation about media piracy. How is the new media audience positioned when it is both consuming and producing content, or insofar as this investigation is concerned, when it is burning, copying, uploading and sharing content claimed by a third party? In political economic terms, theorists have tried to define the file-sharing environment as a form of economic claims-making because the environment illustrates exchange relations associated with a set of means, whether it is music, films, games or software.[111] The claims making becomes disputable when it impinges on others, in other words when it bears on someone else's interest.[112]

In a conventional political economic framework, critical approaches consider the audience as a commodity, emphasizing the "work" engaged by traditional audiences via the consumption of media content, given the monetization of audience attention by media structures that occurs in the media marketplace.[113] However, the notion that the audience "works" exclusively through watching is no longer valid.[114] User generated content is playing an increasingly central role in the business models and strategies of media industries, advertisers and marketers. Terms like "prosumers" and "crowd sourcing" are a few of the ways that theorists try to illustrate the changing dynamics of the audience. Napoli is correct in that the ability for audiences to produce content is not necessarily new (VCRs, video cameras, tape recorders) but the powerful distribution possibilities availed to individuals in the last decade because of the Web.

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[111] Leon Tan, "Theory Beyond The Codes: The Pirate Bay: Countervailing Power and the Problem of State Organized Crime," *CTtheory* (2010).

[112] Ibid.

[113] Phillip Napoli, *Revisiting "Mass Communication" and the "Work" of the Audience in the New Media Environment,* Working Paper ed., (2010).

[114] Ibid.

The notion of the consumer-producer and its reciprocal conforms to traditional interpretations of political economy because the audience is framed as being in service to or "monetizing" the media industries. But in the world of illegal file sharing and bootlegging, defining the role of the audience is more difficult because file-sharers, peers, and other equivalents are not necessarily serving the media empires. With film piracy, individuals who are not part of the Hollywood film complex are nonetheless actively engaged in the production and distribution process. Laikwan Pang describes how pirated films in Asia are part of a larger production and distribution system that falls outside the control of the US-centric cinemascape, which explains the fierceness of copyright discourses with regards to the criminalization of piracy.[115] While pirates usually rely entirely on the official distributors for their advertising, they must work on the dubbing and subtitling themselves because the screener copies that serve as the master sources generally lack subtitles. The subtitles and dubbing are added to the DVD at the eleventh hour, and the added features demonstrate how people outside the United States understand Hollywood movies. For the moment, framed within a prevailing and countervailing power structure, the audience is demonstrating variations of resistance when it engages in piracy whether it is legal, economic, or political opposition.

In the case of the MPAA, I have spent some time discussing the organization's political modes of engagement in order to monopolize cultural flows. The amount of foreign films distributed within the United States totaled less than 1% in 2010 versus

[115] Laikwan Pang, *Cultural Control and Globalization in Asia: Copyright, Piracy, and Cinema* (New York: Routledge, 2006).

63% of Hollywood films in the international market.[116] With film piracy, the Pirate Bay operation illustrates how the battle over existing pricing and distribution regimes extends to the state. As an example, around the world many followed the day-to-day activities of the Pirate Bay court case, culminating in 2009 when a Swedish Court decisively delivered a guilty verdict to the file-sharing service charged with contributory copyright infringement. The decision came after an enormous amount of pressure was placed upon the Swedish judicial system to take down Pirate Bay, including when letters of protest from the heads of trade groups all over the world were sent to Swedish Justice Minister Asa Tortensson, charging that Pirate Bay was a place of collusive activities between state and anti-market.[117] Future investigations will need to consider piracy in accordance with both traditional and new media definitions of political economy.

The MPAA made the termination of Pirate Bay a top priority in 2006 as it pursued a host of other p2p networks for copyright infringement. Dean Garfield, head of legal strategy and vice-president of the MPAA, managed the litigation team that eventually shut down Pirate Bay's operation in Sweden, and was able to use information generated from another file infringing case involving Torrentspy in order to identify the names and locations of Pirate Bay's founders. In the next section, I talked with Mr. Garfield about his priorities with the MPAA when he stepped into the role as Hollywood's chief copyright prosecutor.

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[116] Carrie Rickey, "Americans are Seeing Fewer and Fewer Foreign Films," *The Philadelphia Inquirer* (Philadelphia, PN): May 9, 2010.

[117] Napoli, *Revisiting "Mass Communication"*

Dean Garfield

I spoke with Dean Garfield on the telephone for one conversation in August 2010 regarding his tenure with the Motion Picture Association of America (2003-2008). Mr. Garfield worked first with the Recording Industry Association of America (RIAA) as Vice President of Legal Affairs before he was recruited to become Executive Vice President and Chief Strategic Officer of the MPAA in 2003. The Motion Picture Association of America is a broker between the six major film studios, building consensus and developing strategies over the global and domestic film market while also providing ongoing oversight on film ratings, trade, its partnerships with U.S. distribution and exhibition circuits, and its ongoing piracy campaign. When Dean Garfield was hired away from the Recording Industry Association of America in 2003 to serve as vice-president and head of the MPAA's anti-piracy division, he was acutely aware of the media industry rhetoric consisting of the celestial jukebox, or "media anytime anywhere" campaign and spoke with me regarding how the MPAA could not successfully deliver on these promises.

The "celestial jukebox" rhetoric proclaims that consumers of the future will experience unparalleled freedom, the freedom, for example, to access media whenever and wherever possible, constituting a fair exchange between producers of media products and consumers. While the consumer will experience the freedom and flexibility of unconditional access, copyright owners will have a more exact measure of demand for their inventory, as well as the assurance that the technology is rigidly securing the media streams. Yet online media stores and a host of other merchants continue wrapping their media files in Digital Rights Management software, software

that is antithetical to the celestial jukebox and ultimately translates into an unfair exchange weighted to the advantage of the media industries. Likewise, never-ending contract disputes between the various actors prevent viewers from being "free" any time soon, in this case where content is easily distributed to mobile platforms such as phones and computer tablets.

At the MPAA, Mr. Garfield was responsible for planning and enforcing litigation that led to the formal dissolution of several landmark file-sharing services including Torrentspy, Kazaa, Grokster and Limewire.[118] In this interview, Mr. Garfield spoke with me about the objectives he pursued as head legal strategist and the public face overall of the organization's campaign against media piracy. At the time, the MPAA was trying to distance itself from the public relations debacle provoked by the RIAA, who used litigation and technological encroachment to dissuade music fans from illegal file sharing. The RIAA mishandled their consumer base on several counts, using litigation excessively. This unfortunate strategy, coupled with the RIAA's inability to protect their digital products caused fans to rapidly bypass conventional, brick and mortar music stores in favor of acquiring music digitally. I first ask Mr. Garfield if his colleagues at the MPAA ever discussed that he be out in front, publically, in the campaign against piracy, and mention that people could easily equate Jack Valenti's name with film piracy because he was operating as the front man for he campaign. His successor, Dan Glickman, was less of a public persona, which left a considerable void that someone needed to fill. Garfield indicated that Glickman was very concerned with the issue but was faced with a film industry that experienced

[118] "Hollywood's Copyright Enforcer - CNET News," May 13, 2011, http://news.cnet.com/Hollywoods-copyright-enforcer/2008-1026_3-6204654.html.

a fairly significant downturn in revenue and he spent more time trying to come up with solutions for driving and understanding why the industry was losing large sums money. Garfield also reported that he could not recall ever being approached by members of the MPAA to be the "public face" in the piracy campaign:

> DG: You know, I don't recall whether it was that well-calibrated (he chuckles) I think it was--you know, we had many a strategy session and at the time I was also transitioning between running our litigation efforts on a global basis and also running our strategy (laughs again) and so I think because of the dual role I played with the organization it just happened almost by default. Played out that way. I mean one of the discussion points internally was making sure that whatever we did, since much of our focus was on education, would resonate with the folks we thought that were engaging in piracy. And so the fact that I was in my early or mid-I was still in my early 30s I guess you know, it made sense for me to be out front on all these issues. The other thing was that I developed a relationship as it turns out (he laughs) with a lot of the developers of the sites that were most problematic for us. And so I just developed a deep understanding of what they were doing-- some personal relationships-- some of those guys are people that I keep in touch with, and so I think because it was easier to play that role.[119]

In the interview, I asked Mr. Garfield to discuss his priorities with the piracy campaign when he became chief strategic officer of the MPAA in 2003, using his experience at the RIAA to plan future decisions with regard to public relations and legal strategy:

> DG: One of the things we tried to do at the Motion Picture Association was to learn lessons from the experiences of other industries, and certainly the recording industry because they were one of the first to be significantly impacted, certainly on the revenue side by the digital transition and the ability for people to, on a mass basis, to rip content. And some of those lessons were, you know, one making sure our communication with consumers was clear and making sure they recognize that the industry wanted to provide a wide range of consumer choices and meet consumer demand. Two was to be as clear as possible about the repercussions of engaging in piracy both for the long-term health of the content they were interested in but the kinds of people that piracy generally supported because there was a lot of evidence and still a lot of

[119] Dean Garfield, telephone interview by Matthew Cohen, July 15, 2010, transcript.

> evidence that those who are heavily engaged in piracy are involved with organized crime. There's actually a report out published by the RAND Corporation making this particular connection. And so those were some of the lessons that we learned. The one other important lesson was that technology was going to be an important part of the solution set but not the only solution. So recognize that whether it be technology or litigation which were two tools that were used by the recording industry, it had to be broader than that.[120]

Here, Garfield describes the technological and legal apparatus as being part of the solution set, but not the only solution for the MPAA and their enforcement of anti-piracy measures. Garfield is very clear that reaching out to film goers was crucial at the start of his tenure, and that educating customers about appropriate use of copyrighted materials was the best method to improve the negative public perceptions brought on by the MPAA's previous missteps with its fan base. More importantly, Garfield expresses that the film industry was not in the position to deliver on the promises of the "media everywhere" campaign despite the fact that the consumer electronics industry had already laid the foundation. All in all, according to Garfield, it was impossible to deliver on the promises of a celestial jukebox because the battles over intellectual property were much too pervasive and copyright laws were constantly being rewritten to meet the needs of a digital marketplace. Later in Chapter 4, I discuss some of these important legal cases involving copyright that directly challenged the DMCA.

During my conversation with Mr. Garfield, I introduced Tarleton Gillespie's idea of a trusted system centered on content protection, which I argue for in this dissertation. The "trusted system" refers to the relationships between the technological, legal, economic and cultural arrangements that make all the elements of a regulatory regime work together. These exclusive arrangements are important

[120] Ibid.

because the MPAA relies on the strength of this "regime of alignment" to distribute and ultimately protect its video products.[121] The trusted system is the interlinking of the technological, the legal, the institutional and the rhetorical in order to carefully direct consumer activity according to particular agendas. The system creates a scenario in which legislators and courts of law also consent to play a supportive role with privately organized arrangements that profess to be serving the public interest, but the arrangements are not designed for those ends.[122]

After the RIAA's failure to successfully implement a scheme that would protect copyrighted music in digital formats, the MPAA threatened to withhold all film content for Internet distribution until a sufficient regulatory framework was put into place. The incorporation of DRM for Internet film distribution provided the first obstacle to individuals seeking to make unauthorized film copies.[123] The recording and film industries' use of DRM only played a minor role in a comprehensive four-pronged strategy that sought to limit the control of their products. The passage of DMCA legislation also played a crucial role in the regime of control, which prohibited any content user from circumventing copyright encryption schemes. Also, legal efforts were employed to prosecute any users who were sharing and downloading content. The production of tools and networks that facilitate sharing and copying were banned. The incorporation of technological barriers that interfere with content production and exhibition, as well as devices used for exhibition manufactured in turn, prevented casual copying. The contractual arrangements between the content industries ensure that the guidelines imposed through law and technology are followed, and the special

[121] Gillespie, *Wired Shut*.
[122] Ibid.
[123] Ibid.

interests representing the content industries convince legislators that such systems are compulsory.[124] I asked Mr. Garfield to respond to the viability of the "trusted system" and its pre-existing assumptions:

MC: Looking at these elements as collaborative units in terms of all working together, the legal, the technological, you have the contractual agreements between the different players--looking back on your efforts with the MPAA, did you see any particular problems either from a legal, a technological standpoint from some of the individuals you were trying to work with, to produce content with, did you see leaks in the system at times? Or are you fairly comfortable with all of these elements working together and the strength of those partnerships?

DG: Here's my initial impression: there were many problems (laughs) and I'm intrigued by--I'm not familiar with the idea of the trusted system-- but I'm intrigued by it because it all suggests that these are integrated systems that work well together and presumably would work better over time together as they become more integrated and trust is built. My sense is, in hindsight, is you had these pillars and some sort of system in place and that you had institutions, well-established institutions, you had a legal regime and all of these people and personalities and technology, but the relationships were, and the integration of all of those systems were fairly new. And so we were figuring out what kind of system we wanted to create in a time that was pretty chaotic and disruptive. And so there were many occasions in which it worked fairly well but perhaps more occasions where it just didn't work well at all. I would say that it worked better at the MPAA than it did at the RIAA but that may have been just a factor of time in that we had more time for cohesiveness and integration and trust to develop among the various systems. The law was exceptionally unclear: you had legislation in the DMCA that was untested particularly as it related to the challenges of the time, so we were all trying to figure out in grappling with some solid foundation, while all the while realizing that whatever solutions we were coming up with at the time were intermediate because the real long-term solutions were ones that we could not immediately deliver, which is allowing people to enjoy and appreciate the content wherever, whenever they wanted to.[125]

Garfield's comments about his day-to-day experiences reflect chaos at the MPAA that is not made plain in Gillespie's investigation. Readers may come away with erroneous ideas that the MPAA's regulatory framework is monolithic or immutable, but the DMCA, which is the cornerstone of the MPAA's trusted system, was implemented several years before digital distribution became plausible for the

[124] Ibid.
[125] Dean Garfield, telephone interview by Matthew Cohen, July 15, 2010, transcript.

masses. Following the DMCA's passage, the RIAA and MPAA's subsequent lawsuits against individuals and companies tested the legislation's margins. For instance, during the precedent-setting cases featuring p2p file sharing services Napster and Grokster, both defendants sought protection under section 512 of the DMCA, otherwise known as the Safe Harbor Provision, which essentially pardons an online service provider for the illegal activities of its users. This exemption, which I discuss in detail in Chapter Four, was initially granted as a limited concession to free-speech advocates, librarians, and other advocacy groups. The Napster case was the first to challenge the definitions of the Safe Harbor Provisions. Napster subsequently lost the case as the service was not officially determined to be "transmitting, routing or providing connections for a system or network controlled or operated by an OSP" (online service provider), but instead it pointed users to one another in order to exchange digital materials.[126] In the case of Grokster, the Supreme Court reversed the 9th District Court decision and proceeded to narrow the definitions of the safe harbor provisions, which was a major departure from the Sony vs. Betamax case, which I will discuss later.

One of the central issues to take away from this dissertation is that although repeated challenges to the DMCA legislation gave way to some rather minor exemptions, the Library of Congress ultimately made room for the alterations. Unfortunately, despite the Internet-provided tools to make communication faster, the DMCA is not adapting to the Internet ecosystem fast enough.

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[126] Joseph Menn, *All The Rave: The Rise and Fall of Shawn Fanning's Napster* (New York, New York: Crown Publishing Group, 2003).

In reality, following the official signing of the DMCA legislation, almost two years passed before the enormously popular file-sharing service Napster received word it was the target of a colossal lawsuit brought on by eighteen music companies on December 6, 1999.[127] The RIAA was not interested in quashing the p2p service and actually participated in informal discussions for many months with Napster executives regarding how it could legally incorporate the p2p file sharing technology into its own business model. With Napster, the press generally endorsed Napster's open source technology and declared that it laid the foundation for future, lawful sales of digital music. In the May 15, 2000 issue of Business Week, Napster founder Shawn Fanning is even featured on the cover along with four other most influential people in the "electronic" business.[128] At the same time, the courts were uniformly supportive of the DMCA and the publishing industries and shut down the service as it tried unsuccessfully to negotiate a partnership with Bertelsmann, the world's fifth-largest media conglomerate.[129]

"Who Makes Movies?" Campaign

Previously, Mr. Garfield discussed how the MPAA needed to redraft its public relations operation to connect more directly with consumers. The MPAA knew that movie fans were tired of being depicted as the public enemy in piracy advertisements, which provoked the organization to launch a new series of public service announcements. In this next section, I ask Mr. Garfield to address a specific commercial crafted by the organization that attempted to show the economic harm

[127] Corey Rayburn, "After Napster," *Virginia Journal of Law and Technology* 6, no.16 (2001).
[128] Ibid.
[129] Ibid.

from piracy affecting ordinary people who work on Hollywood production crews. The campaign, entitled *Who Makes Movies?* (2005), was jointly helmed by several international associations and by various motion picture workers' guild heavyweights, including the Directors Guild of America, the International Alliance of Theatrical Stage Employees, Moving Picture Technicians, Artists and Allied Crafts, the Motion Picture Editors Guild, the Screen Actors Guild and the Writers Guild of America. In all of the public service announcements, the argument is that film piracy directly jeopardizes "below the line" workflow. The campaign consists of five individual short films featuring Hollywood blue-collar crewmembers describing how their livelihoods depend on a full schedule of workdays. The subjects of the spots include a set painter, a director of animation, a grip, a make-up artist and a stuntman, all explaining their job responsibilities and offering sometimes intimate details about their backgrounds. For example, a set painter divulges that he met his wife while working on The Big Chill, all the while imploring viewers that illegal downloading diminishes the earnings of ordinary workers. In the following section, I ask Mr. Garfield about this particular campaign:

MC: There was one particular campaign that the MPAA created, and I'm not sure if--were you still there when the MPAA started to put faces on the individuals that were dealing with piracy losses? I'm speaking specifically about the commercials that featured gaffers, and lighters and scenic designers--

DG: Yes. (Laughs) No, no--I was there.

MC: Okay. Because it seemed to me--and I have to ask you this because as someone who actually saw the commercial… and it's my understanding the folks that were being featured were being hurt by piracy--at least from an economic standpoint-- and it was certainly being argued that these folks were losing-- I'm not sure what they were losing. They were losing something in the commercial. But it seemed when looking at it from an economic perspective it was always my understanding that the folks being featured were being paid on a per job or per day basis, so I wasn't really understanding

how they were losing money due to consumer piracy. And maybe that's something you can explain and help me understand.

DG: (laughs) Yeah. I think the idea is--I can always try. I don't know how good it will be because I didn't look at the book (laughs). I think the idea is that everyone loses- so if there are less dollars coming in and your costs are remaining fairly constant, or going up, then you have to make cuts somewhere and you may make those cuts, not in saying I'm going to not work with this particular makeup artist or grip but you'll say, which is played out to be true is I will produce--and I think all the studios have done this--I will produce 12 movies each year rather than 20. And so even though that grip may be working on a contractual per film basis, it just means that there are 8 less movies he or she can compete to work on. So that's the economic argument.

MC: And the argument is less output is due strictly to piracy, or other factors?

DG: Oh sure. I mean, come on. You have a minute to tell a story and that story is about piracy so that's the story you tell. It's a lot more complicated than that because if you look at also public records-what the MPAA put out every year (which the research group reported to me, so I know this to be true) is that the cost of production was increasing, at the same time that the sector was being challenged, so it wasn't just that we were losing money because fewer people were going to the theater--that was true--but we were compounding it by paying actresses and actors otherwise spending more money to make each movie. We told a simple story, recognizing that it was a lot more complex than that. But commercials are also partial truth.

MC: I had to ask.

DG: No. No. It's reasonable. It's reasonable. Truth be told, internally a lot of folks (laughs) thought those commercials were kind of hokey, and whenever you went to the theater and you saw it, the reactions suggested that the general public thought they were a bit hokey, too.[130]

Many consumers felt the MPAA was being disingenuous through the Who Makes Movies? ads, venturing to manufacture sympathy among audiences who, despite being previous rhetorical targets for the film industry on many occasions, still went to the theater. Although general box office attendance was down for 2004,

[130] Dean Garfield, telephone interview by Matthew Cohen, July 15, 2010, transcript.

overall ticket gross exceeded previous years because Hollywood raised the price of an individual movie ticket.[131]

At least three videos were released by individuals via the YouTube platform to counter and lampoon the organization's new and "improved" piracy ads.[132] The YouTube mock public service announcement includes an actress working in pornography films, a person made to look like a zombie, and a writer. The "writer" gag is an industry specific joke in which the screenwriting profession is typically made out to be invisible among the larger film complex. Another video, "Who Steals Movies?" features a bootlegger who worries incessantly that his career will end if the MPAA's piracy campaign is successful.[133]

Garfield's admonition that the public service announcements were "hokey" again reflects disunity at the MPAA that has not been made public. Although not necessarily throwing mud on the wall and seeing what sticks, the MPAA was clearly struggling with public relations as it retooled its new and improved piracy ads to resound more effectively with consumers.

Through my discussions with other individuals in the industry who are dealing with content protection it seems like that there is some unanimity that--a lot of these people felt that Twentieth Century Fox specifically had very different ways or very different views in terms of how to manage content and that sometimes stances taken by that particular studio may have prevented things from moving forward.

DG: Hmm. I don't know. No. I mean, I was the person managing the litigation. Look, we all approached it from different perspectives and came away different. The one -- the unique thing about where we were is that we heard from everyone because at the time I was coordinating a lot of this litigation and so, unlike some of the other studios or people, they saw it from their perspective. I would say that, sure, each of the studios

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[131] "Studio Spotlight 2004," May 13, 2011, http://www.boxofficeguru.com/studio_2004.htm.

[132] "Who Makes Movies? - Reading For New Times – Exposing Intellect, People and Esthetics," May 13, 2011, http://r4nt.com/article/who-makes-movies/.

[133] "Who Steals Movies? Free Video Clips" *SPIKE*, May 13, 2011, http://www.spike.com/video-clips/ywnxmq/who-steals-movies.

had their own personality and their personality probably stood out-- at least Fox, to the extent that a studio can have a personality, but certainly a culture. They probably stood out because they were more aggressive in advancing their perspective at certain points in the litigation. But I don't think that necessarily resulted in delay and prevented us from doing anything. I think more than anything, they just wanted to be really aggressive (laughs). And there were other studios, perhaps, more… and that's not to suggest that Fox wasn't cerebral-- but more cerebral. Warner Bros., for example, had a litigation team that included folks who spent hours and a lot of time grouping over these issues and were very cerebral about it and so you know, you've got those sorts of dichotomies where groups of folks who have thought about it think here's a particular road and it may end up because they thought about it for so long, it may it end up being a little more conservative and others like Fox who think we've got to be as aggressive as possible and take this approach in advancing our agenda. I think it worked because the issues were so new and so complex that schism and diversity in perspective actually helped us to navigate it all in a way that made sense-- because we weren't pulled to any one extreme, at least on a consistent basis. The reality was there was no law or guiding principles, so we were all figuring it out.

MC: Is there one particular disagreement that you can talk about? Anything in particular with the studios?

DG: There were tons. (Laughs).

After the creation of Edison's Motion Picture Patents Corporation (MPPC) in the early twentieth century, the drive towards the "Americanization" of the domestic market was aided by the legal codification of film as intellectual property, and Hollywood continues to prosper internationally because it understands that content protection is part of the infrastructure that binds otherwise competing companies together, and it has a willing servant in the state.[134] Studio moguls who would otherwise balk at cooperating with one another agree on the importance of enforcing intellectual property and lessening the international trade restrictions on audio video products. To no one's surprise, when Hollywood's war with technology is placed within the context of IP enforcement and free trade, there is a resounding clash, as

[134] Toby Miller, *Global Hollywood 2* (London, BFI Publishing): 2005.

when Hollywood complains that new communication technologies cause programming to flow too freely.[135]

The Hollywood studios also band together when it comes to promoting joint ventures such as web distribution start ups (BitTorrent), and co-production (such as the agreement to furnish Los Angeles studio space for the Indian Bollywood industry. Co-production terms also included a joint effort to fight film piracy.)[136] Before the 1950s, film output was dominated by the major studios, which tended to use their own stages, facilities, and staff on productions, but further production capacity in these locations was provided by smaller independent companies that made only a few films a year.[137] The independents could not own or even afford to occupy entire studios for the entirety of filming, and relied on rental studios and some of the larger Hollywood studios (like Universal) that could rent space and provide labor support to the independent producers.

The studios also cooperate with one another when their films are produced in international locations. More recently, the three Matrix films coproduced by Warner Bros. and Village Roadshow were made at Fox Studios Australia in Sydney. 20th Century Fox and Disney Television have both produced a collection of movies of the week at the Warner Roadshow Studios in Queensland. When sufficiently motivated, the film studios work together. In order to lower the amount of restrictions and trade barriers that affected the Hollywood industry after World War II, the MPAA's foreign-office distribution equivalent, the Motion Picture Association (MPA), was

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[135] Ibid.

[136] "Hollywood and Bollywood Come Together," *Studio Briefing*, November 11, 2010, July 28, 2011, http://www.studiobriefing.net/2010/11/hollywood-and-bollywood-come-together/.

[137] Ben Goldsmith and Tom O'Regan, *The Film Studio: Film Production and the Global Economy* (Lanham, MD: Rowman & Littlefield, 2005).

created. The association consists currently of Disney, Sony, 20th Century-Fox International, Paramount Pictures, Universal International Films and Warner Bros. International Theatrical Distribution.[138]

MC: Is there one where you can actually articulate to me where there was a problem and a solution that was implemented?

DG: A big one was that each stage in the Grokster litigation for example, we lost twice before we ultimately won at the Supreme Court. So, there were divisive agreements on one, what legal theories to advance? And then two, who should be our lawyer? At the District Court, (and this is all part of the public record) the person who argued the case at the District Court was David Kendall. The person who argued the case at the Court of Appeals was Russ Frackman. What happened to David? (Laughs) And the person who argued the case at the Supreme Court was Don Virelli. So what happened to Russ? So, you know I think some of the smaller disagreements ultimately rolled up into choice of counsel at each stage that we were unsuccessful. Those were really challenging because each of those counsels had long-term relationships with particular studios and particular record companies because that case in particular was one in which both the entire industry was aligned. So is the motion picture industry, the publishers, and the record companies and so were a lot of strong personalities that had to be managed, and what was due after each loss became the tension.[139]

This rather intimidating "alignment" of the content industries versus Grokster was owed to the millions of copyrighted music and film properties being traded via the online platform, to the chagrin of both industries. At the district level, David Kendall, the primary lawyer representing the six film studios, specifically stated that his plaintiffs had no problem with the peer-to-peer technology if the content being shared was "proper," but in this scenario, Grokster defendants were essentially running a cybernetic Alice's Restaurant, and the menu featured his client's protected content.[140]

Garfield talks about how changes in counsel and disagreements over legal strategy were brought on by the MPAA's failure to win the Grokster case at the

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[138] Ibid.

[139] Dean Garfield, telephone interview by Matthew Cohen, July 15, 2010, transcript.

[140] Andrew Bridges and David Kendall, *MGM et al. v. Grokster et al.* (Los Angeles, CA: Electronic Frontier Foundation, 2002).

district level. The MPAA initially lost in federal district court when a judge ruled that the decentralized nature of the file sharing service made it difficult for Grokster to supervise and control content being uploaded and shared by its users. When the studios appealed the decision in 2004, a different attorney, Russ Frackman, represented the plaintiffs and adopted a different interrogation to advance the studios' claims: Could Grokster knowingly build, operate, and profit from a business that was constructed and depended on preventable, massive copyright infringement?[141]

Using Sony research that came out of the Universal vs. Betamax case, Frackman argued that 75% of Betamax users were more interested in the device's time-shifting capabilities than copying and profiting from the device's recordings. Additionally, Frackman asserted that there was no evidence the device's "infringements" could be separated from legal behavior. Thirdly, unlike Grokster, Sony did not pursue a relationship with its clients following the sale. A consumer simply purchased a VCR or VTR device at a consumer electronics store, and this constituted the extent of the relationship, as there were no more direct exchanges between the two parties. With Grokster, according to Frackman, the company actually gave away the software; in fact, Grokster licensed it for the very purpose of capitalizing on its price of free. And Frackman argued that unlike Sony, who had no knowledge of how many infringing products were made available via the Betamax, Napster knew that 90% of its files were copyrighted.[142] Napster, of course, was the first dominating emblem of copyright owner's fears because its principal aim was to

[141] "Groklaw - Oral Arguments in Grokster & Ch. 4, 5 of 'Free Culture'," May 13, 2011, http://www.groklaw.net/article.php?story=20040823002045984.

[142] Ibid.

enable anyone with a computer and a connection to the Internet to copy music for free from another Napster user.[143]

Despite Grokster's claims that it was impossible to monitor the content being shared, the Supreme Court ruled in favor of the content industries. The central problem of how to prevent access and use of certain kinds of content transitioned to how to monitor access and use. Following Grokster's surprising court decision, technical projects from around the world were enlisted to help see the idea of a celestial jukebox come to pass. The systems were designed to provide an ecosystem that recorded and rewarded the individual digital works being used, in other words the logging and remuneration to the appropriate party. The technical measures protecting the content, however, were an essential piece of the puzzle still missing with this new "control lightly, audit tightly" attitude, as well as the need for developing controlling legislation that reinforced technical protection. Two consortiums, the DVD-CCA and the CPTWG, were implemented by the MPAA in the mid-1990s to take charge of the content protection issues related to digital videodiscs.

DVD-Copy Control Association and the Content Protection Technical Working Group (CPTWG)

In the following section, I investigate the various consortia centered on content protection technologies for the film industry, in this case the DVD-CCA (DVD-Copy Control Association) and CPTWG (Content Protection Technical Working Group). I also interview a founding member of the CPTWG, who played an essential role from his participation in the Secure Digital Music Initiative (SDMI) consortium. The

[143] Patry, *Moral Panics*.

SDMI, as you will see, failed to arrive at consensus in order to protect .mp3 files online; likewise, the Recording Industry Association of America's inability to transition away from the economic juggernaut made from compact disc sales became a tale of what not to do while the content industries as a whole studied how it would capitalize from Internet distribution.

The DVD-CCA and the CPTWG are the two primary organizations responsible for holding discussions centered on content protection technologies for film, originally coming together when the film industry began discussions with the Consumer Electronics industry in 1996 regarding the technical specifications for Digital Video Discs (DVDs). Both organizations commenced out of initiatives put forth by the MPAA. A third organization, the DVD Forum, is based in Japan and is an international organization where hardware manufacturers, software firms, and content providers discuss improvement to the DVD format and its technical specifications and innovations.

The CPTWG and DVD-CCA organizations focus their energies on copyright protection, bringing together intellectual property attorneys, engineers, and representatives from the consumer electronics industry. The organizations schedule joint meetings on a quarterly basis, occurring at a hotel in downtown Los Angeles near the Los Angeles International Airport. On Tuesday, January 11, 2011 I attended the public session of the CPTWG's coalition. The meeting occurred at the Westin Hotel-LAX.

In the next section, I discuss my observations and overall impressions as an attendee at the CPTWG gathering. I should state that the CPTWG and DVD-CCA

operate in a clandestine fashion. For instance, when I visited the CPTWG website, CPTWG.org, I discovered that only a partial portion of the day was open for citizens' participation. As an aside, the website is not operating at the time I am writing this. When the site actually functioned, it was clear that the MPAA paid no notice to it, as there were multiple, non-working "dead" links supposedly containing archived information from previous meetings. Additionally, the official CPTWG site stated that the next meeting would be held in July 2010, but I was reading this information and six months had passed with no new meeting announced. Clicking through crudely devised web content, I was finally able to locate an MPAA contact, Jill Whitley, who arranged through e-mail for me to attend the gathering.

When I checked in at the Westin Hotel, the front desk staff informed me that there were no consortium materials available that described the agenda for the meeting. Later, I was able to glean from one attendee that the consortium opened their meetings to the public because of external advocacy group pressures, and for now, a two-hour window exists at each meeting for citizens to attend the event. The CPTWG does not admit individuals affiliated with the press.

Via the hotel elevator, I arrived at the second floor and examined the various events scheduled at the Westin conference center. One medium-sized conference room was reserved for the DVD-CCA, and in another, larger room down the hallway was a much larger room set-aside for the CPTWG. I briefly thought of Kirby Dick's *This Film is Not Yet Rated* (2006) where the director surreptitiously chronicles the banal, day-to-day activities of MPAA film ratings board members. I knew that I was definitely interested to see what a DVD-CCA meeting looked like and found myself

knocking and then walking directly into their conference room. I estimated eight to nine individuals to be situated around a conference table, with a large tablet of paper poised on a tripod at the front of the room. This was the DVD-CCA, the organization that developed copy protection, or CSS (content scrambling system) code for DVDs I was quickly redirected to leave when I asked if the DVD-CCA meeting was open to the public. The man with whom I spoke did not introduce himself or tell me what organization he represented.

Next, I went to the CPTWG meeting room and met Jill Whitley, Motion Picture Association of America (MPAA) representative, who told me that she did not know specifically what was happening at the working group meeting. She then asked me to put my name and e-mail address on a master list so I would be informed of future CPTWG activities. I have not received any correspondence from the MPAA since the January event, although, as I mentioned, the MPAA purposefully suppresses information and does not make the affairs of these consortiums public. Ms. Whitley informed me that the "regulars" would be in attendance, a cross section of people from companies like Toshiba and Hitachi, although the annual Consumer Electronics Tradeshow (CES) occurring simultaneously in Las Vegas would prevent some individuals from attending this particular CPTWG meeting. Ms. Whitley told me to come back at 10 am when the meeting was scheduled to begin.

When the meeting commenced, a gentleman read a memorandum reminding attendees that the organization was not a government entity, and no individual could speak of any particular company's product marketing or business plan (trade secrets or proprietary information) nor speak to a member of the press regarding the meeting's

proceedings. We were then told to introduce ourselves in a round-robin fashion, and finally the moderator, intellectual property attorney James Burger, launched into the formal agenda. Representatives from Hewlett-Packard, Pioneer, Phillips, IBM, LMI, Disney, Toshiba, Sony, Panasonic and many other high profile companies were in attendance.

One of the characteristics of industry niche-specific gatherings like this is the almost code-like humor that is generally only understood by the professionals in attendance. As an example, in his seminal album *Comedy Isn't Pretty*, comedian Steve Martin jokes that he just returned from attending a hardware convention and then launches into a routine using acronyms and industry speak that both alienates and makes the audience laugh because the comedian's expressions are incredibly esoteric. Mr. Burger's opening comment to the group reminds me of Martin's routine as he quipped that he normally plays military music when the CPTWG meeting begins because the compositions are in the public domain. Mr. Burger then spoke about the various pending, high-profile lawsuits that involve the music and film industry, including EMI vs. MP3 Tunes, an important legal case that will set future precedents regarding cloud-based music services. In the case, EMI, a multinational music label, claims that MP3 Tunes is violating copyright laws by offering a virtual locker service where consumers can sync personal digital music and video collections to the cloud and access them from anywhere. EMI claims that MP3 Tunes should be held responsible for any of the infringing content stored in the lockers. MP3 Tunes is relying on the DMCA Safe Harbor Provision. To qualify for the exemption, an OSP must not receive a financial benefit directly attributable to the infringing activity, but it

is difficult in some cases to prove what a "direct financial benefit" actually is.[144] In other court cases, the defendant had to be depicted as providing a draw or incentive to consumers that induced the infringement to occur. The safe harbor provision dictates that the service provider take down or disable access to the infringing content when the copyright holder has notified it in writing. As an illustration, Google's *Youtube* conducts its operations in this way, although Mr. Burger mentions that the *Youtube vs. Viacom* case continues as Viacom attempts to reverse a decision ruled on in 2010 that found Youtube to be in compliance of DMCA statutes.

Other cases mentioned at the meeting include the four major U.S. television networks (CBS, ABC, NBC, FOX) against Internet video company *Filmon*, which had a temporary injunction filed against it to stop streaming television channels over the web. The company does not charge consumers for the service and generates its revenue through advertisements. In an amusing moment that detracted from a somewhat dry session, Mr. Burger mentioned that the judge chastised the defense for copying large amounts of the plaintiff's briefing to its own brief.

During lunch, the engineers discussed some of the major developments at the Consumer Electronics show, and conversations about the latest 3-d televisions tend to dominate discussions. Brad Hunt, former CTO (Chief Technology Officer) with the MPAA (1999-2007) tells me that Hollywood is excited about the upcoming DECE initiative (Digital Entertainment Content Ecosystem) that allows a consumer to buy digital content online and make unlimited copies of such content, which can be played

[144] "Online Service Providers," *U.S. Copyright Office*, August 1, 2011, http://www.copyright.gov/onlinesp/.

on up to 12 different devices registered to the consumer's account.[145] Apparently, the content is bound to the consumer's domain, and the ecosystem supports multiple DRMs in order to solve the DRM interoperability problem. Mr. Hunt has blamed DRM interoperability for being intrusive and frustrating consumer attempts to play purchased content on different devices. At a 2006 Digital Home Developer's Conference, Mr. Hunt argued that piracy was the inevitable outcome of the movie and music industries' inability to provide an interoperable DRM solution. UltraViolet, which in the brand name for DECE content and devices, will encourage a reversal in the downturn of DVD sales, according to Mr. Hunt. Before the meeting concluded, I introduced myself to Mr. Burger and he agreed to speak with me at a later time about the CPTWG's history.

Interview With James Burger, IP Attorney, Charter Member of the CPTWG and SDMI Coalitions

I conducted the following interview with Mr. Burger in late January 2011 where he spoke with me about his background with the CPTWG organization. He first distinguished the various consortia centered on Digital Video Disc standards and technical specifications.

MC: Are you an official member of the CPTWG?

JB: I'm as official a member as one could be. I've been to every meeting except one. I can tell you, if you're curious how many people attended the last meeting? Well over 100. The DVD forum is two sets of organizations. The DVD Forum and the DVD-CCA. The DVD forum was really the general set of specifications as to what constitutes different types of DVDs. With respect to copy protection, that is the DVD CCA. These are two different organizations and it's easy to get confused.

[145] Brad Hunt, interview by Matthew Cohen, January 24, 2011.

MC: Can you explain the official role of the copy protection technical working group?

JC: It's an interesting question when you say "official" because it's never had organizational papers or stuff like a formal body. Essentially what happened to take you back in time is through--I don't know the exact dates because our industry wasn't much involved in the development of the DVD technology. There were two competing standards for a while--Sony and Philips. And then Toshiba, Matushita. And some others were battling out the standards. In the first place in our industry, the IT industry chose to stand on the sidelines. So they settled on a joint standard, ultimately, and of course they--and I'm oversimplifying here- but they went to Hollywood, and Hollywood took a look at the DVD and said, "This is really great-it's digital, it's cheaper to make at the end of the day as opposed to making a VHS tape. The quality is much better. And the color- even on NTSC. You know the joke about NTSC? The old analog TV standard-never the same color. And we have surround sound stereo. It's a smaller package. It's easier to ship. Better to put on the shelf. It will also make people rebuy their VHS collection because it's so much better. You know, everything is wonderful! Wait. It's digital. People can make copies of it if we don't protect it. So they went off and then negotiated (they, meaning the MPAA members) went off and negotiated with the consumer electronics industry to figure out a copy protection standard, and the consumer electronics industry had this familiarity with a technology called… I stumble over technology-a technology called "serial copy management system" which was what was in CDs. And it's just two bits, but you have to look for that tells you whether the "in clear "material can be copied and under what conditions. And they were very simple conditions-- you know--it was only two bits so you can't have a lot of states. So you have two bits and the device has to look for those two bits and decide based on those bits how to treat whether it can copy or not copy the material. They brought that same system into-without consulting our industry into the DVD and they had a draft statute-- it was about 39 pages, and a draft out of 49 technical reference documents telling everything that you had to do to protect the content. And they gave us two weeks because they wanted to get it into Congress-this was like April of 1996-they gave us two weeks to get into-to tell them what we thought. And there were two reactions. The technical reactions were ridiculous because the two bits came with every 1 million bytes essentially or bits. So you had to keep going back and forth iterating and looking for these two bits. Which, at that point, overwhelms the process of a PC. This was 1996 and we didn't have gigahertz processors. The technical people didn't know whether to laugh or cry and the other thing was the content was in the clear. I mean what junior high student couldn't write a routine to flip the bits? The whole thing was ridiculous.[146]

I should mention that Mr. Burger's concerns about consumer privacy are sometimes overshadowed by economics, which is illustrative of the trusted system's "command

[146] James Burger, telephone interview by Matthew Cohen, March 14, 2011, transcript.

and control" stance when it comes to the protection of its properties. In 2005, he was interviewed in J.D. Lasica's *Darknet* and described the MPAA discussions that led to the construction of the first DVD player. Burger tells Lasica that a representative from Universal Studios actually floated the idea to other participating committee members that a Global Positioning System (GPS) satellite chip be placed in every DVD player and computer sold with a DVD drive, and Hollywood could then enforce its system of copyright control from the sky.[147] Burger recounted the reaction of the various computer and electronics people at the table who listened to this "audacious" idea of inserting a tracking mechanism in millions of consumer machines. "We all looked at each other, a little dumbfounded," say Burger. "Because of the privacy issues?" asks Lasica. "Oh, no. Because of the added expense. Do you know how much GPS-chips cost back then?"[148]

Burger tells me that the consumer electronics industry did not initially agree to the MPAA's statuette listing the rules and regulations over the newly minted DVD player, and when it could record and not record content. Consequently, Burger had to inform MPAA president Jack Valenti as designated representative for the Consumer Electronics Association and following this, the CPTWG formed:

> So I had the pleasure of getting up in front of Jack Valenti at the mirrored Versailles conference room of Patton Bo--I was representing Sony at the time--to stand up and say there's no way our industry is going to agree with this legislation. Now, we had managed to negotiate our way out under the Audio Home Recording Act, although it took the ninth circuit to remind Carey Sherman and the RIAA that we did but I knew this time weren't going to get out of it. Hollywood was absolutely crazy about this. So I said, "Look, here's what we'll agree to do. Form an organization with our best technical people, encryption people, and computing people, with your best engineers. Plus, our businesspeople and lawyers, and let's create self-protection. In other words,

[147] Lasica, *Darknet*.
[148] Ibid.

> encryption for the movies. And then that organization will turn this all over ultimately to a private entity which will license the keys and algorithms and we'll have content protection rules so people want to build a device that has a DVD in it to do recording and stuff, but does not want to play movies that don't have to agree. And I said at the time, "And by the way, this will be broken. It's not a question of "if," it's a question of "when." But the point being is that it will hopefully keep honest people honest and it will give you time to get on the market, and all that proved to be true and so that's when we formed CPTWG. I think it took us almost 3 years to get to a final organization and then we were negotiating over issues for years later.[149]

In the next section, I ask Mr. Burger to explain the purpose of the CPTWG group and the influence it has over the film industry. I was especially concerned with how the overall influence of working groups and consortia like this organization are not considered to be collusive or anti-competitive:

JB: In the very beginning, this came about- the MPAA and consumer electronics industry back in 96 had agreed that they would get a law passed to require every digital device capable of making a recording to comply with the ridiculous CGMSD and so that would be what we would call "tech mandate" so we said was "look, what you do is you encrypt the disk and you create a license so if you want to play an encrypted disk you have to get a DVD CSS license. You're free to get it or not get it. We would've said, here's this distribution system that we all agree to use but you have to agree to comply with this DRM otherwise you can't play. But it isn't that you have to do it. It's a quid pro quo. Look, I'm not a big fan of DRM. My personal DRM would let you play anywhere, but if you attempted to put it on the Internet it would say, "Matt, you really shouldn't share that song with your million closest friends." But I'm not God, and I can't make that happen. It isn't like there is some government mandate.

Me: No. No. But there is pressure akin to a film not complying with the MPAA standards and getting slapped with an NC-17 rating. And then a director can't distribute his film widely. You really have to play ball.

JB: Well, right. That's true. You do. What is the alternative to that? We don't get a new format? That was the whole thing with DVD. And there was a credible threat. You have to be careful with these things, I agree. But there was a credible threat. Disney and Fox, still, even with DRM held out for almost 2 years before endorsing DVD. Then they saw how much money everyone else was making. The old expression "New York money talks, bull shit walks."

[149] Burger, interview.

Mr. Burger is distinctly neo-liberal, extolling market principles, advocating a strong anti-government stance, speaking of government interventions or "tech mandates" as overall barriers to technological progress. Mr. Burger's complaints are noted, but I write in Chapter 1 of this investigation that as computer use and networking spread across North America in the late 1990s, the United States government adopted a "hands off" approach when it came to imposing restrictions on Internet content and growth, which it saw differently than FCC-regulated media like telephony and broadcast television. This marked a time when the FCC effectively lost its influence and jurisdiction to private industry with regard to the Internet's future course. As it stands, the organization is having difficulty in 2011 regaining a foothold to even pass net neutrality rules by reason of a successful conservative campaign questioning the FCC's authority to mandate such legislation.

In the technology arena, the mandates proposed by the FCC in the last decade reflect the political dispositions of the party majority, and the President appoints the FCC chair to act in accordance with the party's fundamental beliefs about the mass media. To illustrate, during George W. Bush's eight years as president, he nominated Michael Powell, Republican and former ant-trust lawyer, to serve as FCC chair from 2001-2005. For the record, Powell once ascribed the "digital divide" as being no different than a Mercedes divide that afflicted him.[150] Unfortunately, not everyone who wanted a Mercedes could have one, according to Powell. Under Powell's leadership, technological mandates such as the "analog hole" initiative (an issue that

[150] "NR Comment on NRO," May 13, 2011, http://old.nationalreview.com/nr_comment/nr_comment031601a.shtml.

Burger certainly finds fault with as it directly affected consumer hardware) forced consumer electronics companies to stop manufacturing blu-ray players with analog outputs by 2013. Powell also supported increased fines for obscenity and indecent content by the nation's broadcasters. He supported a change in media ownership rules that allowed even greater consolidation of the media industries, in this case loosening the rules that restricted companies from owning a certain number of television stations. In the case of radio, Powell supported the grandfathering in of previous legislation that permitted companies like Clear Channel to own 1200 stations, or one out of ten radio stations by 2003.[151] Arguably, Powell became the most controversial figure in the FCC's 77-year history. A 2008 study shows the consequences of Powell's decision to deregulate the television and radio industries in terms of diversity initiatives. Women comprised 51% of the entire U.S. population but owned only 67 television stations, or 4.97% of all stations.[152] Racial and ethnic minorities comprised 34% of the U.S. population but owned a total of 43 television stations, or 3.15% of all stations.[153]

Following Powell's decision to resign in 2005, Kevin Martin assumed the vacancy and continued enacting policies that favored existing media monopolies, including the telecommunications spectrum giveaway that prohibited smaller competitors from participating because spectrums were too altogether too expensive.

[151] "CorpWatch : Clear Channel Rewrites Rules of Radio Broadcasting," May 13, 2011, http://www.corpwatch.org/article.php?id=8728.

[152] "Research on Media Diversity - Common Cause," May 13, 2011, http://www.commoncause.org/site/pp.asp?c=dkLNK1MQIwG&b=4848291.

[153] Ibid.

When Martin resigned in 2009, he was in the process of deflecting a House Committee report accusing him of abusing his power and suppressing reports.[154]

In *Wired Shut*, Gillespie chooses to center a proportion of his research on the consumer electronics industry and how it operates in tandem with the MPAA, the film studios, intellectual property attorneys, and engineers to ensure the viability of the trusted system. With his investigation, the end user is the home consumer. However, the MPAA's protection of its cultural products ventures beyond home video, and *Wired Shut* does not feature content protection as it relates to the professional theater exhibition circuit, which still remains relatively important but now a secondary income source even though the National Association of Theater Owners (NATO) consistently complains that technologies like day and date VOD (Video on Demand) and the gradual tweaking of Hollywood's release patterns will gradually destroy professional theater exhibition altogether. Major shifts in release strategies, film production and distribution techniques have already occurred because of film digitization, and digitization in turn affects the post-production process and the methods that a film eventually reaches the professional theater circuit. The *Digital Cinema Initiative* program encompasses much of what I mention: the MPAA's campaign to convert movie theaters to the digital standard radically reframes Hollywood production, distribution and exhibition workflows.

[154] "Panel Accuses FCC's Martin of Abusing Power | News & Opinion | PCMag.com," May 13, 2011, http://www.pcmag.com/article2/0,2817,2336505,00.asp.

Digital Cinema Initiative, John Hurst, and Cinecert

Next, I turn to computer engineer John Hurst, Chief Technology Officer at Cinecert in Burbank, California.[155] Mr. Hurst is responsible for educating, testing, and ultimately transitioning film studios and exhibitors to a digital film standard, all the while creating various methods to improve the security for Hollywood's film properties. In the trusted system framework, Mr. Hurst helps devise the "trusted" portion of the system in which computer code is the law, acting as the necessary speed bump that prevents a majority of copyright infringing activities. From a technical standpoint, Hurst is involved in redistributing intellectual property in a digital format according to complex encryption algorithms and forensic watermarking that are designed to prevent unauthorized parties from viewing a Hollywood film. The copy protection I mention is completed in a film's post-production process. For video, whatever playback device is deemed appropriate obeys the rules established by the copyright owner when the film content first becomes available, in other words the "digital rights." [156] For now, only the NSA (National Security Agency), according to Mr. Hurst, potentially has enough resources to defeat the copyright protection scheme utilized by Hollywood to keep a film from falling into the wrong hands.[157]

Metaphorically, where the "East Coast Code" is the republic, symbolizing the policies and statutes coming from Washington, DC, the "West Coast code" is the infantry, designated by software and technical protocols that are developed in Silicon Valley. Lessig explains that he East Coast code is the code that Congress enacts, and

[155] John Hurst, interview with Matthew Cohen, March 14, 2010.
[156] Paul Goldstein, *Copyright's Highway: From Gutenberg to the Celestial Jukebox*, 1st ed. (New York: Hill and Wang, 1994).
[157] Hurst, interview, March 14, 2010.

it passes various statutes directing people, companies, and bureaucrats how to behave.[158] The West Coast code is the code embedded in the software and hardware that makes cyberspace function.[159] It is the code that engineers enact. If a copyright infringing activity is prevented by a video product's digital rights protocol, then the first tier of the trusted system is operating properly. I met with Mr. Hurst in March 2010 in Burbank, California.

In the first portion of my interview, Mr. Hurst describes the transition from analog to digital media as inevitable and uses the economy of scale argument to describe the audio industry and its highly touted digital audio workstations and tape (DAT) (early 1990s) as the "beginning of the end" for the film medium:

MC: Where do you think the future of film is going in terms of exhibition?

JH: Well, it's going to go all digital. And I tell you I have a little crystal ball called the audio industry which tells me everything that's going to happen in the motion picture industry. So-through the 90s-we started the 90s in the audio business with digital audio workstations being a real high-ticket item. Very big money, very specialized and very prone to cantankerous-ness--it took a lot of time and effort to use them. By the end of that decade, digital audio workstations were the way to do things for everybody. Everybody had moved their work over to them except for those who were still enamored by the artistic benefits of analog. So, you take away the people who like analog for artistic reasons who comprise a hundredth of a percent of the analog tape market, and you look at the major users of analog tape, which are broadcast and radio networks and governments and schools--the complete ascension of digital recording as cheap and reliable over the course of the 90s caused all those institutions to switch over to digital and they stopped playing tape. And the economy of scale that made tape possible to produce dropped out, and while you had people left that wanted to buy tape it was impossible to construct a business that could make it for the price that anyone would consider possible to pay. So the same thing is going to happen in film. As the majors continue to increase distribution digitally, they're going to be decreasing distribution on film. Institutional users, documentary shooters, small films--all of them are moving to digital formats because it's cheaper. And all you're going to be left with are people who need film for artistic reasons, and they're going to be stuck in the same place.

[158] Lessig, *Code Version 2.0*.
[159] Ibid.

> The economy of scale is going to drop out of the market because all the institutional users have gone away, and it will become financially infeasible to make film. So, I think that there's more of a demand for it, and more money involved in it than there was for analog tape, so I think there will be boutique producers of film for many decades to come. But it will be outrageously expensive. Because the number of people willing to buy it and able to buy it will be a fraction of what it is even today. Deluxe and Technicolor know this--they've been slashing and burning prices on prints. Kodak is completely freaking out because they see the loss of film as the loss of their blood. Film is completely dead: it's just a matter of time.[160]

As we talk about the future of film delivery and exhibition, I ask Mr. Hurst about the consumer electronics industry and the ways that the MPAA tries to lock down content with encryption. Hurst tells me that while he has no qualms with working with the studios to provide content encryption with Hollywood films designated for the theater circuit, he has purposefully avoided working with the consumer electronics market because of consumer rights issues such as fair use and privacy, and how the overall move to digitize media affects the end user. Hurst tells me he still loves compact discs and will not buy media via Internet outlets like Itunes because of low quality and interoperability issues, as well as the concerns I just mentioned.

The argument for digital cinema, Mr. Hurst explains, hinges on economic and security fundamentals. Film distribution now involves the major film studios delivering movies to theater chains via United Parcel Service (UPS) or Federal Express. The film's content resides on encrypted hard drives, in this case drives manufactured by Seagate, rather than 35 mm reels. A digital film that runs two hours is approximately 200 GB in size, and it costs just a few dollars to digitally transmit. In the days before digital distribution, an average film reel cost $1,300 to duplicate, with a typical 35 mm print order of 2000 prints costing $2,600,000 minus the shipping,

[160] Ibid.

insurance, and projectionist labor to assemble it on a platter and move it from theatre to theatre.[161]

Although the transition to digital cinema is a logical business proposition for Hollywood, many complain that the move brings with it profound aesthetic and historical consequences. Mr. Hurst tells me that because all of the digital playback equipment is usually leased to theaters, the studios therefore dictate the terms of what can and cannot run. This is another kind of extreme regulatory lock down where devices are wired shut through contractual licensing terms that end up raising the barriers to entry for independents and local film production. The MPAA calls the DCI program a "control lightly, audit tightly" system of content management because the multiplex exhibitors are free to move films from one theater to the next and computer systems log everything that theater employees do. In the event of a piracy disagreement, the studios have extensive logs that can be pulled from their equipment, similar to a "black box" that records every action on an airplane. The exhibitor circuit has never been as tightly regulated as it is now in the digital age, with the Digital Cinema Initiatives program.

In this next section, Mr. Hurst describes how the delivery of encrypted digital product is much cheaper, as bonded couriers are no longer needed. Additionally, security is more rigorous. Physical theft of the content is pointless in view of the fact that sophisticated code prevents a user from being able to access the drive:

JH: One of the advantages of encryption is that physical deliveries can be handled through common mode couriers such as FedEx and UPS. Whereas I'm not sure if

[161] "EVS Digital Cinema: An Overview of the Digital Cinema Future," *EVS Digital Cinema*, May 24, 2011, http://www.broadcastpapers.com/whitepapers/EVSDCinemaOverview_66.pdf?CFID=21436179&CFTOKEN=42d3a4923b79093d-28EEA95B-9389-9387-6DD7BE066E0DDB8B.

you're familiar with the delivery of 35mm film? 35mm film is delivered by a bonded carrier. Right? And the reason is you don't want that 35mm print disappearing for however long it takes to telesine it. (Telecining involves placing a video camera in a projection booth in order to bootleg a film. For precise audio, the camera records the TDD (Telecommunications Device for the Deaf) feed) So in the case of the digital master it's even more straightforward and lower cost--you don't even need specialized equipment to copy it. So there is already an increased risk, and adding encryption eliminates that risk and also makes delivery cheaper by using common carriers, allowing you to use satellite broadcast without extra encryption, for example. Lots of ways it can be moved around now because it's really inaccessible to an unauthorized party.

MC: So that brings up-with this new system of distributing the film electronically-having it play on this very secure system- who are the studios afraid of now? Is there the possibility that hackers could get control of a film?

JH: Sure. In any security system, the primary benchmark of the system is the cost of implementing this system versus the cost of exploiting the system. So our goal here is to make it so expensive--we can't make it impossible to hack, right? Any major government could crack the system, no problem. I'm sure the NSA (National Security Agency) could crack it in seconds flat. That's what they're there for. I'm a little less worried about the Russian mob. They have a lot of resources, but they don't have tens of millions of dollars to spend on the kind of software to crack this. Their alternative is, then, is to go camcord it. The goal is to make it so expensive as to drive people to a cheaper way of doing it, which has its own remedies. One of the things you might not be aware of is that each media block as it decrypts the picture and prepares it to go out to the projector puts an invisible forensic mark onto the picture which contains the time of day and the media block serial number. So camcords are now coming back, and the forensic people know the screen and the day and the time where that rip was taken. So, not only is it now fantastically expensive--I mean it's much more expensive--for example to imagine cracking a media block than it is to imagine stealing a 35mm print getting the telesine out of it. You have to develop all sorts of customized electronics, for instance. It's a brutal task. So they're pushing it back towards camcordering it. The studios are fine with that. Because the quality is low, and with the forensic marking makes it easy to find which screens are becoming popular with a particular crew.[162]

Various film studios have incorporated forensic watermarking on their products going back to the early 1900s. France's Pathe´ studio (1896), for instance, painted an individual rooster on its set pieces and the symbol, in turn, fronted the studio brand. Pathe´ periodically lost films because of theft and felt powerless trying to

[162] Hurst, interview, March 14, 2010.

protect its products from being counterfeited. Sometimes, the thefts were not discovered until a studio did its inventory. In 1917, several New York film exchanges reported high amounts of missing films, with Pathe´ reporting six of its Gold Rooster features and two complete serials missing. Universal Studios reported that it was short some 300 reels, while Mutual reported that 300 films were also seemingly missing from its stock.[163] A print of *Wild and Wooly* (1917) was actually stolen from a Brooklyn theater lobby while awaiting shipment.[164] Some of these piracy scandals included thieves who sent the stolen material out of the country once they got hold of the merchandise. Morris Cohen of Detroit was arrested in 1919 for receiving stolen prints and, after posting $5,000 bail, an investigation determined that the stolen movies were being sent to San Francisco and on to Japan and other countries in the Orient, which had sizeable traffic in stolen films.[165] As an aside, a typical practice for thieves was to erase the identifying marks on the merchandise. D.A. Barton, an assistant prosecutor from San Francisco, was later able to encourage the film studios to place serial numbers on films in order to track their means for distribution. Following the use of serial numbers, the aforementioned international piracy racket came to an abrupt end.

The arrival of the Internet brought with it a digital world where tools allowed consumers to create high-quality material, to make copies that were unrecognizable from original works, and to share and distribute the products worldwide. The tools essentially allowed consumers to become producers, and to interact personally with their media products. In many circles, the digital world prompted individual attitudes

[163] Segrave, *Piracy in the Motion Picture Industry*.
[164] Ibid.
[165] Ibid.

regarding intellectual property to shift, especially with young people who now see authorship and ownership as a shared, collaborative experience.[166] Today's generation, however, receives mixed signals from the media conglomerates when it comes to the use of their products. On the one hand, they are encouraged to wear corporate logos and brands but if they wish to cut and paste a corporate logo to their web site, they get a cease-and-desist letter.[167] Media companies are not prone naturally to understanding the borrowing and appropriation inherent in participatory culture. Copyright laws obviously need to draw the distinction between appropriation for creativity's sake and those who do it for commercial gain.

J.D. Lasica's "Darknet" and Alexander Galloway's "Networks"

The MPAA spent an extraordinary amount of time and money defining and inserting its own definition of piracy into the world lexicon. Consequently, the word has been reexamined, redefined, and redressed by authors who promote more favorable perspectives of the word and tend to illustrate the piracy issue as stemming from a battle over distribution control rather than intellectual property. In Chapter One, I addressed how "piracy" comes pre-loaded with a variety of political, social, and economic overtones. At one point, the Recording Industry Association of America actually fused the word with a means: piracy was actually uploading and downloading unauthorized materials using p2p file sharing. This was not the first time that a media organization called out a certain technology as being used explicitly for illegal activities. In the late 1970s, that MPAA warned that sexual deviants used VCR

[166] Lasica, *Darknet*, 308.
[167] Ibid.

technology when they checked into motels and recorded oodles of pay per view X-rated films. With the massive rhetorical campaign put in place by the RIAA and MPAA to fight piracy, more research was needed that addressed the individual activities and motivations of the criminalized. In Shujen Wang's *Framing Piracy*, Globalization and Film Distribution in Greater China, the author describes several case studies where individuals throughout Greater China buy or distribute counterfeit product, and their motivations are documented. One couple in their late forties are former peasants turned physical laborers who barely earn enough money to watch their beloved Taiwanese and Hong Kong television shows on video compact disc (VCD). Another man in his early thirties is part of the "floating population" in Beijing, earning approximately $120 a month selling pirated merchandise, which is a better income than many other jobs in his caste. The people here are not glamorous by any means and are consciously making decisions to improve their tough living conditions in Asia.[168]

When J.D. Lasica's *Darknet: Hollywood's War Against the Digital Generation* was published in 2005, Lasica shifted the focus of media piracy onto America and its illegal piracy networks. In the book, the author spends a considerable effort defining a "darknet," which he explains is a world that exists outside the limelight of Big Media where people trade files and communicate anonymously in underground or private networks.[169] The author tells readers that darknets forewarn where the digital marketplace is headed, a place where media is locked down and where the telecommunications industry and its networks serve the interests of

[168] Wang, *Framing Piracy*.
[169] Lasica, *Darknet*,

Hollywood and the recording industry. Lasica pins the cause of darknets squarely on the shoulders of Washington DC and a political system that favors the publishing industries over the rights of individuals. He argues that more and more activity on the "open" Internet will be pushed to the underground if current anti-innovation trends continue, which was the concern voiced by a majority of individuals after the Grokster case where creators of software were judged for users' actions. As a matter of fact, Lasica published Darknet in 2005, the same year that the courts decided that Grokster was guilty of copyright infringement.

In the introduction to *Darknet*, Lasica states that his interest in digital copyright issues takes him beyond the conventional role of detached journalist. He tells readers that as a writer covering both the entertainment and technology sectors for newspapers and magazines, he himself has been implicated in the enormous culture war between media people and techies.[170] Lasica's book is an illustration of the culture wars developed between Big Media and consumers, too, although Lasica terms the opponents of Big Media as the technologists, or "techies" who have a much different view of digital culture. While big media is exclusive, controlling, and top-down, the "techies" are inclusive, participatory, and bottom-up.[171] By offering case studies of individuals throughout the book who are regularly involved with technology and ultimately shifting the balance of power away from the media industries into the "regular" people's hands, the author intends also to debunk the rhetoric employed by big media. Readers should reconceive of these "pirates" as victims of a situation where resistance is played out through the construction of secret digital repositories or

[170] Ibid.
[171] ibid.

societies where members use and interact with their media according to their own terms. The author frames the darknet as a populist movement in which breaking the law is a natural byproduct where the major entertainment companies and their political allies exert control over existing technologies. Hence, users do everything within and sometimes outside the law to escape these constraints.[172]

In *Darknet*, the case study of Bruce Forest is especially captivating and illustrates the point of how difficult it is find a unified ideology among pirates. Forest is an active member of six major piracy groups, and a channel operator on Internet Relay Chat (IRC) for forty piracy channels. But Forest is actually a stooge for big media: He is paid to commit piracy by a major media company and works both sides of the fence in return for permission to swap movie and music files without punishment and to run his own private two terabyte private server filled with thousands of songs, music videos, movie files, television shows and computer games. In exchange for this privilege, Forest writes a two hundred-page report for his corporate client every two weeks where he outlines his most recent findings, that is what his "friends" are doing and saying in these networks. He then recommends strategies to protect the company's properties.[173] The case study that features Forest exemplifies how the media industry collaborates with the opposition. We are not privy to the arrangement between the anonymous employer and Forest and what convinced Forest to backstab his fellow members. Readers gain access to these criminalized people through the traitorous Forest, who now serves authority.

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[172] Ibid.
[173] Ibid.

One of the darknet members explains the existence of the darknets this way: people from every social class or budget are able to connect and work for a common purpose, with some individuals actively contributing to the network, and others simply taking from it. The point is that each darknet member gets equal access to great movies and entertainment, according to the anonymous source. This is obviously a Utopian world, where people can move freely without restrictions.

What we learn from Lasica is that the subjects in *Darknet* have multiple motivations as they live out some of their existence in these networks. And by demonstrating the variance between the individual case studies in terms of economic and social class, he validates his own romantic notions of the darknet being a populist movement, nothing more and nothing less. In the end, we see that this "movement" is similar to an anti-tax caucus or Tea Party movement where the individuals hold multiple grievances against authority, but there is no unifying principle except that resistance is *de rigeur*. Lasica's interview subjects violate the DMCA for multiple reasons: the current high market prices of media products, the anonymity and convenience afforded through Internet access, or an ideology of resistance to corporatism. The motivations elude any particular label except resist, resist, resist.

The techies who reside in the darknet in Lasica's book are similar to the hackers described in Alexander Galloways's *Protocol*. Galloway's thesis is that the founding principle of the Internet is control, not freedom, and that controlling power is found within the architecture of the Internet, or the technical protocols that make network connections and disconnections possible.[174] Hackers reject situations where access to

[174] Alexander Galloway, *Protocol: How Control Exists After Decentralization* (Cambridge: Massachusetts Institute of Technology, 2004.)

technology is limited. The purveyors of proprietary technologies simply want to dictate the how, when, and where of an individual's access to content. The hackers in Galloway's book are almost identical to the techies in Lasica's. The unifying principle, again, is resistance, this time against proprietary technologies and large corporations. For the hacker, the unifying goal is to defeat a proprietary code. For the pirate, the goal is to circumvent the code and access the underlying property. The individuals I present in the section are distrustful of authority, they are educated, and they value their autonomy. The motivations to pirate or to hack a proprietary code elude any particular label, however.

Interview with Simon Petersen

Next, I interview two individuals who counter conventional practices of media production, distribution and exhibition. Simon Petersen (pseudonym) is a thirty-year-old painter by trade who resides in metropolitan Denver, Colorado. We spoke on the telephone in March 2010 for one hour. Mr. Petersen describes himself as a "consultant" who assists individuals, mainly friends and friends of friends who are interested in startup businesses that sell bootleg digital videodiscs (DVDs). In terms of the production-distribution-exhibition supply chain of bootleg DVDs, Simon describes himself in the "end user" market, selling physical media to individuals. [175] When I first meet with Simon, he lets me know up front that his role in bootlegging is "unromantic" and dispels notions that his job is particularly interesting. In breakneck speed, he also rejects any moral or ethical arguments against piracy when it comes to public service announcements crafted by the MPAA. Simon's answer to this is: "All

[175] "Simon Petersen," telephone interview by Matthew Cohen, June 30, 2010.

right, and so they create this hoopla about how this is so bad blah blah blah because somebody's pockets are being dug into. Somebody's losing pennies on the dollar or whatever."[176]

SP: This is all hand-to-hand stuff, Street. You might be in a barbershop; you might be at a gas station, a popular gas station. That's where this stuff ends up being distributed. And if you have, if you're known to have the latest movies and the best copies of movies, then sometimes people call you. They get used to buying stuff from you, so they call you. So, like I said, that's the end user; that's probably the lowest level of piracy. I don't have access or privy to experiences on the higher-end.[177]

Simon describes his skill set as highly marketable and rare: He has the ability to independently acquire, produce and distribute discs without assistance.

SP: Let me give you an idea of what my experience is in this industry is. It's very simple. Everybody knows you can get bootleg DVDs and bootleg CDs. Bootleg CDs are kind of a thing of the past, I mean antiquated. Bootleg DVDs are more popular. The price point is excellent--five dollars a DVD. Basically, you have people that sell bootleg DVDs anywhere from thugs to people that are trying to make a living--very conservative about how they do it. You have bums out on the street just trying to make it. You know--just make a couple of bucks to eat. All right? But those DVDs have to come from somewhere. Either they're producing it themselves with a burner, or they're getting it from somebody else making a dollar or two dollars off the DVDs. Now I've come in contact with both, you know? People that hustle-I'm just gonna put it to you like a hustler-they can hustle anything whether it's clothing, whether it's music, whether it's DVDs, whether its electronics. They buy low, sell high. That's what a hustler does. Okay? And these are lucrative. But these hustlers might not have the technical knowledge to actually produce the DVDs themselves. Okay? All right. A gentleman that I know of through another contact, he was very conservative about his business. He makes a lot of money doing it. And he has the technical expertise to produce the DVDs himself, and he deals with the clientele directly. You know, he's built up a clientele of people, and he calls them and says, "Hey! These are some of the movies I have this week. What can I get you?" And he delivers them all. And that's all he does all day is deliver DVDs. He might just put out a little list of all the DVDs he has. A very simple, crude, printed up list and you know his lifeline is in stone. It's only via phone at that level rather than sending an e-mail and having to answer "Do you have this?" or, "Do you have that?" So, I'm kind of letting you know the environment I'm in. The end product, basically, is somebody calling you, you know, who has the DVDs and you call them up and you say, "Do you have this?" Or the person who has the DVDs approaches you at a gas station, a barbershop, or because

[176] Ibid.
[177] Ibid.

you've bought from them before that person calls you up and says, "Hey, this is what I have this week." Okay? That's the sale process. Now, I dealt with individuals that want to understand more about the technical side of creating the DVDs. They're like, "Well, I can get access to the content-how do I produce my own DVDs?" They want to actually do the burning themselves. There's one or two ways you can have access to the media itself. You need to find it on the Internet yourself, produce it yourself, i.e. a crude method of producing media yourself is taking a video camera into a movie theater and recording the movie. But that's, like I said, crude and there are more sophisticated techniques of acquiring the media. Now, the other way you can do it if you know the person who has--who's selling DVDs, and they have access to the media, you buy the DVDs from them, and then you sell them as your own. If you're bootlegging DVDs and I feel like you always have the current movie and you have the best selection, I'm just gonna buy from you. I'm gonna say, "Okay, I want these DVDs this week. I'm going to buy it from you, and I'm going to burn these DVDs. I'm going to duplicate them. I'm not going to let you know that I'm buying them and duplicating them and selling them because that would be crossing you.[178]

Simon's discussion of besting his competition is not particularly unique here. Rather,

it is the peculiar concept that bootleggers actually copyright their own products, which

Simon speaks of in the next excerpt:

SP: The best bootleggers try to copyright their DVDs!

MC: How can you enforce copyright if, you know you're in a business that already is considered illegal? How does that work?

SP: Technically, it's technical knowledge. First of all the most basic copyright is you don't know how to produce what I'm producing. Okay? So another way to do it is if, for example, there's software out there that I can author to make a home movie and put it on a DVD. Right? Some of the software allows you to create a copyright. A very crude copyright. It's nothing like the technology that the DVD producers are using. But it is a way. It's an added way to say that so that a person like me is going to have a little bit of trouble duplicating a DVD.

MC: Does that just involve invoking some sort of symbol on the disc packaging, or the menu showing a copyright symbol?

SP: No. It's just not being able to copy it. Just like it's difficult to copy a DVD.

MC: Oh. You're talking about some sort of preventative encryption.

[178] Ibid.

The notable irony one can take away from this passage is that my subject conflates notions of copyright with the technical copy protection schemes designed to safeguard intellectual property. While it is true that both copyright and code are part of a general regulatory framework—I have spent some time discussing that copyright was initially designed to provide a limited amount of time to protect a work before it became part of the public domain-- a copy protection scheme determines which people can access which digital objects. The programming actually regulates human interactions and depends on the values it is designed to protect.[179] Copyright gives a copyright holder the exclusive rights over the work, including the exclusive right to copy the work. Another person may not copy the piece without obtaining the author's permission. The right, as Lessig argues, is protected to the extent that the laws support it, and is threatened to the extent that technology makes it easy to copy.[180] If the law is strengthened while the technology remains constant, the right is stronger. At the same time, if the copying technology becomes better and more accessible yet the law remains constant, the right becomes weaker. In this sense, copyright has always been at war with technology.[181] While Simon resists Hollywood and its system of control as he distributes his own products, he actively fights his competitors by using Hollywood's copy protection code to create a limited monopoly on information, which he encourages, in the name of making information widely available. While Simon may be employing economic resistance by diverting a modicum of profit from Hollywood, he is in fact integrating a business model that mirrors his opposition. Therefore, as I maintain in Chapter One, Simon is managing and operating a parallel

[179] Lessig, *Code Version 2.0*.
[180] Ibid.
[181] Ibid.

or co-existing trusted system: Mr. Petersen rips the feature films from DVD's and burns the properties to brand new writable discs, and takes the digital rights management schemes, in this case the Content Scrambling System (CSS) code, and writes it to newly minted media. The CSS code is employed on the majority of commercially produced DVD's.

The 1995 White Paper, which I discuss in Chapter Four, originated from a gathering of government officials and people from the content, technology and legal industries to discuss the future of the Internet with respect to protecting intellectual property in cyberspace. Two of the recommendations that came from the meetings involved mixing technology and the market; in this case, recommending the provision of legal support through financial subsidies and special legal protection for copyright management schemes.[182] Using indirect regulation, the market subsidized the development of the software tools, and the law was designed to regulate the properties of other software tools. The copyright management schemes would be supported by government funds, with the imminent legal threat that criminal sanctions would be applied to anyone who attempted to crack the schemes.[183]

As I speak with Simon, I learn that "copyrighting" a bootleg DVD involves several steps. First, an individual acquires the software that allows editing the disc's contents. The software permits the user to invoke some form of branding, and finally, he can construct a technological barrier by encrypting the disc's contents. By putting a technological "stop sign" on the disc's contents, the producer intends to be the preferred supplier to his patrons, and the patrons in turn will be dissuaded from

[182] Ibid.
[183] Ibid.

copying material that has been appropriated time and time again. This is a method of branding bootleg products, according to Simon:

> You can create that stuff. You can create that yourself. Okay? But if I can break the codes of a DVD from a store, I can break the code from a would-be pirater trying to copyright their own, the copyright of their bootlegs. You see? And somebody that may not have as much technical expertise as I do wouldn't be able to. You see what I'm saying? So I think it's pointless, but in a way it's not. You're protecting your territory. So, there's the basic--there's the barrier by a lack of technical knowledge. You can also create another temporary barrier by creating some type of encryption yourself, all right? You can also--you can do stuff like put a little preview that might have like a logo, like branding the bootlegs so that somebody--if you just copy the DVD straightforward the customer sees the original maker. Okay?"These are my bootlegs!" You know? And then the person sees that says, "You're not making these! I want to go to the person making this firsthand." So, little stuff like that. And that's just basic. That's just basic business. You're protecting yours.[184]

Although this investigation is about film piracy and the ways that the MPAA is trying to curb unauthorized actions on the Internet, it is important to look at some of the sophisticated distribution methods that the pirate underground uses to distribute and exhibit copyrighted product. In this particular case, mobile platforms such as *iPhones* and tablet computers have become popular platforms to watch films and television shows. By simply unlocking a phone's operating system through a hack that is acquired online, consumers all of a sudden can perform new functions that the mobile phone manufacturer strictly prohibited when the product was designed. In the case of the *iPhone*, various engineers that were not affiliated with Apple but nevertheless were Apple enthusiasts, designed software through the *Cydia* repository permitting the phone to multitask at least a year before Apple finally updated its firmware to perform the very same function. Some of the hacks that are available either test or clearly violate the law—a GPS location spoofer, for instance, permits

[184] Ibid.

users to watch Major League baseball games despite the broadcast blackouts imposed by television broadcasters. In another example, users can download copyrighted content via software that has a file-sharing platform imbedded within the product. The content comes directly from the seemingly buoyant Pirate Bay and is downloaded to an individual's mobile phone.

Dan Mickell and *Movie Land*

In this next section, I turn to Dan Mickell (pseudonym), a high school student living in the Ottawa province in Canada.[185] Dan would not talk with me on the phone despite my assurances that his confidentiality would be preserved, but he was easily accessible via his business e-mail address, which was listed with Paypal and the Cydia repository where his television and film streaming application is available for purchase. Dan is a senior, and anticipates going to college and earning an engineering degree. Currently, he creates and sells television and film software applications on the Cydia network. The Cydia network is a software distribution movement that offers free and paid programs that are meant to extend the capabilities of Apple's various *iPhone* models. Mr. Mickell created an application, Movie Land, which permits consumers to stream and download unauthorized films to mobile phones. Currently, there are over 32,000 registered users of this application.[186] Recently, federal regulators ruled that it was lawful to hack or "jailbreak" an *iPhone*, declaring that there was "no basis for copyright law to assist Apple in protecting its restrictive

[185] "Dan Mickell," e-mail message to author, April 9, 2010.
[186] Ibid.

business model."[187] Jailbreaking allows an individual to hack into a phone's operating system, extending the capabilities of the mobile handset through running applications not authorized by Apple. This important ruling was added to a list of Digital Millennium Copyright Act exceptions with regard to anti-circumvention provisions. Apple maintains that its closed marketplace or "walled garden" is what has created the success for the *iPhone* to flourish. Before the decisive ruling, Apple warned that the nation's cell phone networks might suffer "potentially catastrophic" attacks by computer hackers both domestically and abroad if *iPhone* owners jailbroke their devices.

My conversations with Dan consisted of e-mail dialogue maintained over a series of months (April-July 2010):

DM: Well, I'm 18, finishing grade 12, then going on to college for who knows what. I started out myself making small applications like my Free Flix App, which is nothing like Movie Land in the sense that all it does is link to other websites, and movies etc. I put together Movie Land myself, and still today, it is only run by me. I host the movies myself on my servers offshore in the Netherlands where they don't care about the US laws. That way it is not illegal, and I can't be hunted down for copyright etcetera. I am nothing big, really. I just download movies for personal use, which is not illegal here in Canada. I convert them, etc, then upload them to my server in The Netherlands where they are then posted on Movie Land for others to enjoy. Just a side note, that all the money I get through this application goes towards the off shore server, which cost $100+ a month. I mean, I'm only 18, and next year I will be going off to college or university for computer studies, to which someday I will own my own company like Netflix or something along those lines. I'm yet to get any kind of warning or threat from anyone including the movie companies or the government, but if I do, no biggie.[188]

Dan tells me that Canada's rules centered on IP as they are written in April, 2010 allow him to download movies for personal use. Dan's knowledge or lack thereof

[187] "U.S. Declares iPhone Jailbreaking Legal, Over Apple's Objections," *Wired.com*, May 13, 2011, http://www.wired.com/threatlevel/2010/07/feds-ok-iphone-jailbreaking.

[188] "Dan Mickell," e-mail message to author, April 3, 2010.

regarding Canadian copyright law provoked me to further research current Canadian statutes with regard to ripping and burning, including file sharing. I learned that in June 2010, Canadian copyright regulators ruled that the downloading of copyrighted music from peer-to-peer networks was legal in Canada, although uploading material was not. Additionally, while the DMCA prohibits the circumvention of anti-encryption measures on physical media, this only governs U.S. citizens. Canada, on the other hand, has been reluctant to enforce measures that expand digital copyright protection. However, while the June 2010 law allows Canadians to make personal copies of their music, the law makes no room allowing individuals to make personal DVD copies. I do not expect Dan, at eighteen years old, to have legal expertise on file sharing, although it could be argued that he has a vested interest. I note from our conversation in April that Dan is wide of the mark describing Canadian file sharing laws:

DM: Well, in Canada, the law states that as long as you download movies or music for personal use, it is not illegal, so then when I upload them to the server overseas, it becomes public and not personal, but since the movies are overseas, Canada can't do anything about it. I used to run a warez forum (warez-ghost.com) that was hosted offshore, so I knew about offshore hosting. After a search on Google, I came across OpenVServers, and decided to contact the owner and set up a dedicated server for anything I need. If it is illegal here or not, I host everything there anyways. As to where I get my movies, I simply get them through torrents, like piratebay.org then convert then to mp4 myself. Nothing too special really.[189]

The .mp4 is a file format known for its interoperability and superior quality, even when compressed. The file is therefore advantageous because it "travels" well, meaning that its small size/high quality combination make it a preferred standard among file sharers.

[189] Ibid.

After three months, I return in July 2010 to the Cydia site where consumers can purchase *Movie Land*. I see that Dan no longer accepts PayPal for transactions, so I contact him. Recently, the U.S. Government has terminated the operations of thousands of servers and web sites based on suspicions of various activities such as terrorism, the distribution of child pornography, sales of pirated goods, and other illegal acts. PayPal received occasional criticism in previous years for allegedly operating as a sanctuary for these sorts of illegal activities. When I spoke to Dan, he told me that PayPal initially suspended, and then banned him from future participation.[190]

MC: Can you explain more specifically about the suspensions and limitations placed on you with PayPal? On what grounds were you suspended or limited, as you say? I have to be able to explain it clearly in the dissertation. Why were you asked to show ID, as well?

DM: I was banned on grounds of "highly suspicious" activity. I called them, they said they have removed my account because they can't protect me, or some stupid statement like that. It was the most ridiculous thing ever. I did some research awhile back, and I'm not the only one getting randomly suspended for suspicious activity. When I was limited from transacting, they asked me to supply 3 pieces of photo ID, a bank statement, and a utility bill, as well as prove my address and phone number was correct. I did, so they unlimited me. About a week later, the exact same thing happened, so I said "Screw it. PayPal is such bullshit" and moved on to something new and less irritating.

MC: Did you ask them to define "suspicious activity?" Did they ever say what they thought you were doing? Any idea who notified them in the first place, or do they have a way of tracking unauthorized activities?

DM: Yes I asked them. All they kept telling me was "suspicious activity." I asked them to break it down for me, and they wouldn't. They had no clue I was selling movies. They tell me it is just a "random security check" and my account was chosen, which is complete bullshit. They see that I'm making money, and just want to steal it by limiting my account so many times I just leave. Which is what happened. PayPal is a joke.[191]

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[190] "Dan Mickell," e-mail message to author, July 6, 2010.
[191] Ibid.

Cut from the same cloth as my previous interviewee, Mr. Petersen builds his own software, *Movieland*, which takes advantage of previously hacked *iPhone* handsets. An individual can acquire a hack through an underground repository that alters the iPhone's baseband, or cellular modem firmware, extending and providing new capabilities to the *iPhone* OS. Mr. Petersen's *Movieland* enables the phone to download and stream films and television shows from a dedicated server housed in the Netherlands. This is all highly illegal, of course. Mr. Petersen used to distribute his software via *Paypal,* but his business was shut down because the well-known vendor became suspicious of illegal activity. Following the inconvenience, Petersen began offering his program through another secure checkout site. *Movieland* customers are required to pay a subscription fee in order to access Hollywood content that pirates have either tele-synced or culled from industry insiders. Petersen's service tries to model itself after established Hollywood subscription services like *Netflix* or *Hulu,* and customer payments are made with a credit card. Although both of my featured individuals operate in their own individual piracy networks and employ DIY (do it yourself) modes of engagement to counter conventional media making practices, they manage their own trusted systems that co-exist with Hollywood's.

In cyberspace, the Internet naturally harnesses the power of decentralization and defies central control but in the face of a determined power, the architecture alone is not enough of an adequate defense to hold off what individuals find most dear about it, which is its openness.[192] In the history of other information empires, there have always been classic battles positioning a succession of optimistic and open media that in turn became closed and controlled industries. In the early twentieth century, new

[192] Ibid.

information industries including telephony, radio broadcast, and film all evolved from someone's innovation. By the 1940s, these technologies were firmly entrenched in an established, seemingly permanent form, and the industries purposefully excluded competitors. Telephony became the sole domain of the Bell System. NBC and CBS were the dominant radio broadcasters and used the FCC to launch a natural progression into television. Hollywood, by the 1940s, was a vertically integrated institution and had control over every inch of the film business, from the actors to exhibition.

But these centralized industries became targets for assault by other entities.[193] The weapon for the assault may have been a certain invention or technology that broke through the defenses and became the foundation for an insurgent industry, like p2p file sharing and Internet piracy. But the invention is not necessarily the sole impetus of an insurgence. The federal government can also decide to intervene and stop information cartels and monopolies, and the pieces that are broken up eventually configure into other monopolies. In 1921, the Federal Trade Commission announced an investigation into the trade practices of Adolph Zukor's Paramount Pictures for monopolizing the motion picture industry and restraining, restricting and suppressing competitors in the distribution of motion picture films. For those individuals who may not necessarily be interested in film, the film industry is very similar to other information empires that go from being open to tightly controlled industries and back.

[193] Ibid.

Conclusion

I argued in Chapter One that after reading *Wired Shut,* readers may come away thinking that the MPAA is monolithic and immutable, but that is not the case. In this dissertation, it was my intention to interview individuals that live their professional lives endorsing the goals of the MPAA and the copyright industries because while the MPAA plays a prominent role creating the backdrop for the trusted system, its relationships with its affiliates are more difficult to pinpoint. The individuals working within this regulatory framework have largely been ignored in the research, and I present interviews from Garfield, Hurst, and Burger to illustrate their perspectives as legal and technical experts. In addition to coordinating the legal activities of the organization, Mr. Garfield was largely involved with public relations and helped to craft the MPAA's rhetorical operation. Specifically, Garfield talks with me about the *Who Makes Movies?* campaign and how it was largely seen by the MPAA as a failure. During his tenure, Garfield was especially interested in using technology to attract jaded consumers whom the MPAA historically equated as thieves. John Hurst, who continues working as an engineer in Hollywood protecting the film studios' properties, intentionally veers from working with the home electronics market because from a personal standpoint, he does not support digital e-commerce and believes that it represents negative consequences for the consumer because fair use is devalued. He sees the shift that favors digital media in economic terms and is deterministic as he explains the inevitability of the analog medium passing on.

As for the individuals who operate in the parallel trusted systems, Simon and Dan distrust media executives and the tired methods arising from conventional media

distribution models. They divert a modicum of the corporate profits to their own pockets for sustainability, all the while bringing available and affordable media to consumers. That is not to say that my subjects' motives are based strictly on ideological grounds. Simon revealed that a bootlegger has the earning potential of $50,000 USD or more annually. What is clear is that overregulated markets provide assurances to the underground markets. In this chapter, the seemingly contradictory forces of legitimate selling versus bootlegging are shown to be interdependent, providing a source of checks and balances. As an example, the motion picture industry has been known to partner with people formerly engaged in piracy. The partnership allows bootleggers to have access to media via legitimate channels on the assurance they will act lawfully. Correspondingly, the motion picture industry takes advantage of their bootleggers' skill sets, including the specific technological knowledge related to computing as well as their information on other people engaged in illegitimate media sharing activities. In this contest over digital information, each party covets the other's power, and the activities of one group often intersect with the other as they engage in homologous goals.

In reality, Hollywood cannot stop piracy by using a strong regulatory regime to prevent copyright infringement. Instead, a technology created by industry may actually provide legal alternatives to peer-to-peer file sharing to the point where it is no longer seen as a threat. A recent research report indicated that film rental company Netflix's movies and television shows accounted for more than 30% of Internet bandwidth traffic in homes during peak evening hours, compared with 17% for web

browsing activities.[194] As late as last year, surfing and peer-to-peer file sharing had accounted for more bandwidth than Netflix's streaming subscription service, so interpretations of the study may conclude that illegal file sharing activities are declining due to better options being offered from Hollywood. At the same time the report comes out, Internet providers are following the lead of wireless telephony and will soon place limits on consumer bandwidth usage, charging penalties to those who surpass the maximum allotted amount. The course of the Internet will continue moving from open to closed paradigms based on the information empires that dictate the rules. The one certainty is that for now, the media industries have determined that their properties will not be associated with an individual's hard drive, and American consumers will come to accept the decision that the majority of their information flow will be IP-based.[195]

In the following chapter, I discuss some of the key lawsuits involving the DMCA brought forth by the Electronic Frontier Foundation with regard to film and media products. This chapter also discusses several landmark cases involving general digital goods where companies were sued and put out of business for manufacturing DVD ripping products deemed to be violating the DMCA. These cases are significant because defendants claimed that use of their products fell under the category of fair use, a defense that is not wholly recognized by the courts. The DMCA, brought forth from copyright lobbyists representing the computer and music recording industries, is the cornerstone from which the MPAA's trusted system

[194] Peter Svensson, "Study: Netflix Is Biggest Source For Internet Traffic," *USA Today*, May 17, 2011.

[195] "Netflix Beats BitTorrent's Bandwidth," *Conde´ Nast*, May 17, 2011, May 31, 2011 <http://www.wired.com/epicenter/2011/05/netflix-traffic/>.

functions. The copyright legislation threatens to prosecute individuals who violate digital copyright statutes, it prohibits the tools and networks that share and facilitate copying, and it authorizes the use of DRM. All of these arrangements must be in place for the media industries to regulate unauthorized copying.

Chapter Four: The Significance of the Digital Millennium Copyright Act and its Deliberations, Ramifications, and Exemptions

Introduction

Unaccompanied by any particular fanfare, public scrutiny or civic debate, President Bill Clinton signed legislation S.2037, otherwise known as the Digital Millennium Copyright Act, into law on October 28, 1998. The bill was the final product of a series of negotiations occurring over a five-year period. The negotiations were rooted in legislation derived from preliminary "Green Paper" draft recommendations put forth in July 1994 by the Lehman Working Group, a committee consisting of copyright lobbyists for the computer and music recording industries.[196] Bruce Lehman, who was then Assistant Secretary of Commerce and Commissioner of Patents and Trademarks, was at one time a lobbyist for the software industry. The recommendations from Lehman's group were a preliminary analysis of copyright issues impacting the Internet as well as suggestions for copyright revisions in the future.

As Clinton signed his signature to the body of regulations, the president offered his remarks to the press on the DMCA: the act would offer strong protection to creators of published works against piracy in the digital age. Pointing to technology as the reason for instituting the rigid series of regulations centered on copyright protection, Clinton offered an unembellished statement to the press after the DMCA's passage: "Through enactment of the Digital Millennium Copyright Act, we have done our best to protect from digital piracy the copyright industries that comprise the

[196] Litman, *Digital Copyright*.

leading export of the United States." [197] I have argued throughout this dissertation that the copyright industries have always been a powerful special interest group wielding tremendous influence over the public interest. The DMCA negotiations mirror previous historical points when the entities involved in arbitration did not represent the public interest, or for that matter the end user. Made plain, American copyright legislation involves an assembly of lawyers sitting around a bargaining table settling disagreements, and many critical questions pertaining to the consumer are simply not investigated. The negotiation process concludes when some parties are deemed the "haves" while others become the rather unfortunate, quintessential excluded parties.

The DMCA was not the first body of legislation to deal with the growth of digital technologies and the resulting concerns over intellectual property theft. In 1991, copyright owners filed a suit contending that digital audio tape recorders (DAT) encouraged individual consumers to copy digital products without permission, and consumer electronics manufacturers agreed to implement copy-protection technology and to pay royalties to compensate copyright owners for forgone sales under the 1992 Audio Home Recording Act (AHRA).[198] Additionally, in 1998, before the implementation of the DMCA, the RIAA filed an unsuccessful lawsuit to enjoin the very first MP3 player, the Rio, but the 1998 DMCA incorporated two requirements that compensated for the RIAA's lack of success. The DMCA mandated that consumer electronics makers implement the use of copy-protection schemes, and broadly banned the making, selling, and trafficking in of the tools that facilitated infringing acts of copy protection circumvention.

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[197] "Statement By The President," *Digital Future Coalition*, December 9, 2011, December 9, 2010, http://www.dfc.org/dfc1/Archives/wipo/presidn.html.

[198] Ibid.

Following the enactment of the DMCA, a full two years passed before the law began colliding with citizens and their civil liberties. This chapter presents some of the key lawsuits involving the DMCA brought forth by the Electronic Frontier Foundation with regard to film and media products. Additionally, this chapter discusses several landmark cases involving general digital goods where companies were sued and unceremoniously brought to an end for producing DVD ripping products that were deemed to be violating the DMCA. The cases are important in that the defendants claimed that use of their products fell under the category of fair use, a defense that is not wholly recognized by the courts. As a result, the DMCA is repeatedly challenged and only amended in apparently mystifying circumstances. By mystifying, I mean to say that it is still unclear what prerequisites would have to exist and be convincing enough for the Copyright Office to amend the inflexible legislation.

Of course, the DMCA is an essential ordinance that needs to be in place for the trusted system framework to function. It allowed industry to impose new controls on consumers that were never available under previous copyright laws until the legislation passed in 1998. By simply circumventing technical protections, persons found guilty now faced potential monetary fines of $500,000 and/or a 5-year jail term.[199] The enactment of the DMCA brought with it stronger technical self-enforcements, and the content industries gradually felt more confident that the much-ballyhooed "Valenti logic" would promote beliefs about the perilousness of the Internet and cause enough of a moral panic that a majority of consumers would obey the law. The Valenti logic is persuasive (read: propaganda) and claims that the safety and market economy of the Internet ecosystem is constantly threatened by plundering

[199] Ibid.

pirates.[200] The resultant underlying anxieties about the Internet reinforces consumer perceptions of righteousness among big business, or in this context the content industries and Hollywood.

Linux Protests

After the passage of the law, a series of small protests followed along with some comparatively bizarre legal entanglements that reflected the DMCA's potential harm. First, a group of "affable" Linux operating system users from New York City and the Washington D.C. area converged on Capitol Hill on March 28, 2000 to protest the DMCA, which they said was unfairly restricting the development of DVD software for the Linux OS. [201] Explaining to passers-by that the DMCA was a serious setback for consumers while at the same time trying to generate attention from the Library of Congress, members of the New York Linux Users Group (NYLUG), the Washington DC Linux Users Group (DCLUG) and the Northern Virginia Linux Users Group (NOVALUG) staged a three-hour rally on the steps of the Library of Congress.[202] Essentially, the protesters argued that the Linux operating system prohibited users from accessing the contents of DVD discs, insisting that individual ownership of the product permitted the user to engage in fair use activities. In terms of premonitions, this rather unassuming group of Linux enthusiasts had every reason to be concerned about the DMCA and were acting on well established suspicions that the new legislation could permit a few organizations who held copyrights and also

[200] Patry, *Moral Panics*.

[201] "Technology Linux users to protest Copyright Act," *CNN*, March 28, 2000, December 4, 2010 <http://articles.cnn.com/2000-03-28/tech/copyright.protest.idg_1_encryption-linux-developers-linux-user-group?_s=PM:TECH>.

[202] "LinuxWorld: Protest Draws Attention to DMCA," March 30, 2000, <http://www.linuxtoday.com/news_story.php3?ltsn=2000-03-30-009-04-NW>.

controlled distribution technologies (such as the MPAA with DVD video standards) to gain an unassailable stranglehold over their respective markets, to the detriment of independent content producers as well as consumers.[203] The protesters wanted the DMCA to be revised so the legislation was more balanced, in this case so it was strictly confined to protection against copyright infringement rather than the technological access controls.[204] The MPAA had already fought against the distribution and use of DeCSS code in 2000, which was de-encryption software that permitted users to unscramble DVD discs protected by CSS, or content scrambling system code. The film association eventually won a preliminary injunction that required several men from Norway to remove Internet postings that leaked the code for cracking the DVD encryption.[205]

Speaking about the Linux protesters was Mark Litvack, the MPAA's legal director for worldwide piracy, who argued that the group was complaining about "our ability to protect our members' products."[206] The DVD-CCA is mentioned at length later in this chapter because it filed numerous copyright lawsuits against businesses it deemed to be breaching the DMCA provisions. The memberships among Hollywood's technical, legal, hardware and content producers like the Copy Protection Technical Working Group and DVD Copy Control Association created a strong alliance against preliminary protests like this one. Both organizations began in the late 1990s as Hollywood began producing and distributing digital video content.

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[203] Gillespie, *Wired Shut*.
[204] Ibid.
[205] Jack McCarthy, "Linux Users to Protest Copyright Act," *PC World*, March 27, 2000, February 10, 2011, <http://www.pcworld.idg.com.au/article/93352/linux_users_protest_copyright_act/>.
[206] Ibid.

EFF's Preliminary Lobbying Efforts with DVD Encryption Scheme

To extend the protests initiated by the various Linux groups, the Electronic Frontier Foundation wrote letters to the Copyright Office as part of a comment period on the exemption to prohibition on the circumvention of copyright protection systems for access control technologies.[207] Generally, as the representative of several of the nation's very first defendants charged with violating the access control restrictions under the DMCA, the EFF was concerned with attempts to make copying of all audio and visual works illegal.[208] In this case, the EFF protested the various technological measures incorporated on DVDs, namely the CSS code that the Linux protesters were concerned about. According to the EFF, the CSS did not prevent the unauthorized copying of DVDs, but instead controlled the devices on which movies may be viewed, requiring the manufacturers of the authorized devices to restrict functionality so that it prevented any copying, including copying for fair use purposes.[209] The technological protections applied to DVDs, according to the EFF, were harmful to individuals' abilities to make non-infringing uses and ultimately tipped copyright's delicate balance significantly in favor of the copyright industries at the expense of free speech, innovation and competition.[210]

The EFF also argued that first sale doctrine was completely forgotten by the DMCA. Essentially, the first sale rule, which governs intellectual property in the brick and mortar world, terminates the author's rights to control a work after its first sale. By imbedding code in DVDs and the mechanisms for play back, CSS effectively

[207] Electronic Frontier Foundation, *EFF Comments to Copyright Office*, ed. David O. Carson (Electronic Frontier Foundation, 2000).
[208] Ibid.
[209] Ibid.
[210] Ibid.

asserted its control over a DVD forever.[211] The EFF also objected to the establishment of associations such as the SDMI and DVD-CCA. Coalitions that follow DMCA mandates, imposing broad proprietary and technical standards and specifications, prevent competitors from making open source devices that compete with and interoperate with closed, proprietary ones.[212] The EFF argued that any systems that are designed to prevent users from making fair use of their property should be exempted under the DMCA's anti-circumvention ban.

Additionally, the EFF took issue with DVD region codes, the broadcast flags embedded within a DVD to control the geographic area where the content is played. There are multiple reasons for incorporating regions, officially as an effort to support Hollywood's ongoing use of its release windows. Region coding prevents piracy by allowing the copyright holder to block individuals from purchasing film content in places where the title has not been released. More importantly, a manufacturer can demand a higher or lower cost according to location and the specific market. Thirdly, region coding prevents consumers from purchasing the same title from a region where a different company may own the copyright.

The EFF's efforts to amend the DMCA in the year 2000 failed. Realizing that the odds were stacked against the organization because of the extensive exemption requirements, it promptly renounced the DMCA lobbying process in 2006 and declined to participate. In 2009, the EFF finally claimed several victories, and the concluding portion of this paper addresses these triumphs along with the DMCA's ramifications and ongoing consequences over the fourteen-year period of its existence.

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[211] Ibid.
[212] Ibid.

During discussions to make film content available via legitimate online consumer platforms, lawyers for the MPAA maintained that content producers would not make their digital content available if they had no assurances it could be protected.[213] "The new technology presents dangers to copyright owners," said MPAA attorney Charles S. Sims. "Seeing what happened with the music industry, it requires no great feat of imagination to see what would happen with motion pictures."[214] All along, free speech advocates claimed that the DMCA violated fair use and free speech rights and, although the DMCA now grants exceptions to educators when it comes to ripping DVDs, the exceptions mean that under the DMCA, "not all personal uses are fair use."[215] Therefore, the rules that applied before the Internet regarding personal property are no longer valid. This is the paradigm shift over property that I speak of repeatedly throughout my dissertation.

The first section of this chapter features two of the preliminary cases illustrating the DMCA's collision with academic free speech and innovation. Russian doctoral student Dmitry Skylarov became embroiled with the U.S. government over a digital product he designed that allowed consumers to make copies of their electronic books. Both he and Edward Felten, a Princeton professor that is featured in the second case study, became primary defendants in the DMCA's attempt to enforce ownership claims on their scientific investigations.

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[213] "DVD Copy Case Appealed," *EWeek* (2001).
[214] Ibid.
[215] Litman, *Digital Copyright*.

U.S. vs. ElcomSoftSylarov

Dmitry Skylarov, then a young Russian computer scientist, stood up and approached a lectern in order to give a technical paper at a Las Vegas conference in 2001 and was arrested by the FBI for breaching the DMCA shortly after he finished.[216] Skylarov, who was visiting the United States to make a short presentation about a program that he designed for consumers to make backup copies of their e-books, was baffled by the public attention that ensued following his detainment and arrest.[217] Mr. Skylarov worked for the Moscow-based ElcomSoft,, who was eventually sued for selling the program, which bypassed the copy protection features of Adobe's popular e-book software.[218] The trial is notable because it was the first criminal prosecution brought forth under the DMCA.

The ElcomSoft program was developed as part of Skylarov's Ph.D. research, and the court indictment accused him and his employer of creating software for purposes of both commercial advantage and private gain. ElcomSoft, which sold assorted software utilities over the Internet, stated that it never intended to break the law, and while individual charges were eventually dismissed against Mr. Skylarov, the case against his employer proceeded to unfold in a San Jose, California courtroom. Mr. Skylarov agreed to testify in exchange for a pardon.[219] In all actuality, Adobe's software permitted e-book publishers to set their own individualized level of protection that resulted in users being able to make copies for private use on different

[216] "Overkill," *Economist*, December 7, 2002.
[217] Ibid.
[218] Ibid.
[219] May Wong, "Judge Considers Dismissal in Case of E-copyrights- Russian Firm Says Digital Copyright Act Is Too Broad," *San Mateo County Times* (San Mateo, CA): April 2, 2002.

computers and lend copies to friends.[220] It would seem that Adobe's decision to sue was based on the unsanctioned and public dissemination of company intellectual property. Adobe later recanted and asked that all charges be dropped in the ElcomSoft matter, yet the FBI appeared determined to prosecute. Meanwhile, some of the international reporters writing about politics deemed Skylarov to be an unlikely poster boy for American freedom.[221]

The ElcomSoft case represented many things to many people closely following the proceedings. First, it carried the potential for setting future court precedents regarding the then fledgling e-book market, which was undeveloped and untested. The case was also the latest in a long line of controversies regarding how information should be circulated to researchers and the public. Finally, the legal matter also touched on whether the publication of a computer program could be protected as free speech, which had been a sanctioned position held by previous courts. Freedom of expression issues seemed especially legitimate in the ElcomSoft case, with scores of "fair use" claims causing the DMCA to be revised in Europe, particularly in Ireland with the passage of The Copyright Act 2000 that contains dozens of exceptions to "fair use."[222] However, as one writer argued, an exception or "odd feature" to the U.S. authored DMCA is that it protects copyright protection systems more rigidly than the copyrighted work itself.

A federal jury in San Jose eventually rejected the government's initial attempts to enforce criminal sanctions against ElcomSoft, and it subsequently acquitted the

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[220] Ibid.
[221] "Overkill," *Economist*, December 7, 2002.
[222] Office of the Attorney General, "Copyright and Related Rights Act 2000," *Irish Statute Book*, (2000), March 8, 2011, <http://www.irishstatutebook.ie/2000/en/act/pub/0028/index.html>.

small Russian software company. At the acquittal, the jury maintained that the government failed to prove that ElcomSoft willfully intended to violate U.S. Copyright law, which was the standard required to convict under the DMCA provisions.[223]

I mention the Skylarov case for a variety of reasons. First, as I discussed earlier, it represented the first high profile situation that the federal government deemed worthy enough to pursue in the name of the newly imposed DMCA.[224] I also illustrate the Skylarov matter because the DMCA delivered severe repercussions to the defendant prior to the court ever reaching a verdict. Skylarov, who had no prior legal record, spent six months in an American jail before he was released and was able to reunite with his family in Russia.[225] And in Russia, Skylarov's product was considered perfectly legal, which illustrates the beginnings of a cultural schism brought on by the law. The DMCA's harsh legislation quickly gained notoriety among the international community, and many researchers began voicing their concerns about travelling to and from the United States to present academic works that may be interpreted as violating intellectual property laws. I mentioned in jest that Skylarov was depicted as being an unlikely poster boy for American freedom, but at the same time if his arrest and detainment are placed in historical context, it occurred just prior to the World Trade Center tragedy when over 5,000 people were killed in the

[223] Matt Berger, "Verdict Delivers Blow to the DMCA: Judge Finds Elcomsoft Not Guilty, a Ruling Seen as a Setback for Enforcing the Controversial Digital Copyright Law," *PC World*, December 17, 2002, January 15, 2011, <http://www.pcworld.com/article/108040/verdict_delivers_blow_to_the_dmca.html>.

[224] The DVD-CCA had already taken advantage of the DMCA's passage and began suing individuals and websites for posting information about how to crack the CSS code on DVDs two years before, in 1999.

[225] Berger, "Verdict Delivers."

Twin Towers. After the Skylarov arrest, Attorney General John Ashcroft announced the creation of nine Computer Hacking and Intellectual Property Prosecutorial units and proceeded to mount a campaign to loosen restrictions over government telephone and web surveillance, and Ashcroft pushed for legislation that went on to violate the civil liberties of Americans, tightening the rules around travelling to and from the United States and making the situation especially arduous for people in the international community. The combination of the fallout from the September 11 2001 attack along with the ramping up of the DMCA made the web out to be an especially contested environment during this period.

The Elcomsoft lawsuit also prompted a cascade of bogus legal activity to follow shortly thereafter, illustrating the DMCA's broad yet cryptic jurisdiction. When the lawsuit concluded, a sundry of illegitimate claims were filed claiming the DMCA had been breached, including a Canadian remote control company (Skylink), who was sued on behalf of a patent holder of a garage door system (the Chamberlain Group). The Chamberlain Group alleged that garage door controls manufactured by Skylink were unfairly circumventing the patented Chamberlain access controls. Skylink contended that customers had the right to buy replacement garage remotes from other companies besides the Chamberlain group when they lost their original remotes.[226] Another egregious scenario involved a small Charleston-area Internet company, crazycooldealz.com, who received a cease and desist order from retail giant Walmart because the web site posted inside information just before the Thanksgiving holiday

[226]Lessig, *Code Version 2.0*.

regarding which Black Friday merchandise would be heavily discounted.[227] It was apparent to the courts, amidst the bullying and threatening from Global Capital Inc. that, in this context, Black Friday sales prices were not a form of intellectual property. Nevertheless, the holiday season ensures that Walmart and its global competitors like Target, Best Buy, Staples and OfficeMax will continue sending cease and desist letters over leaked "proprietary" information, although not on the DMCA's behalf. Another small web retailer, bfads.net, keeps a cease and desist tally of the letters it receives on an annual basis and notes overall that the takedown letters have a much friendlier tone these days, coming from what it calls the "repeat offenders."[228]

RIAA vs. Felten

While the ElcomSoft case slowly drew to a conclusion, in a case bearing close resemblance came yet another lawsuit situating Princeton University computer science professor Edward Felten against the Recording Industry Association of America (RIAA). Professor Felten, a tenured faculty member, had originally volunteered to participate in a competition run by the Secure Digital Music Initiative (SDMI) to investigate the rigorousness of certain copyright protection systems.[229] The competition was not sanctioned by the official SDMI group but rather from SDMI's leader, Leonardo Chiarglione. The SDMI initially came together on December 1998 when the RIAA announced it would work with major players in the electronics, hardware, networking, and digital content industries, including AOL, Matsushita,

[227] Chase Martyn, "Sale Fight no Fright for Area Web Site," *Charleston Gazette*, November 26, 2002.

[228] "Black Friday 2010: Cease and Desist Tally So Far-5," November 5 2008, March 21 2011, <http://bfads.net/Cease-Desist-Tally-SoFar-5>.

[229] Scarlett Pruitt, "Silenced Professor Sues SDMI, RIAA," *PC World*, June 6, 2001, February 1, 2011, <http://www.pcworld.com/article/52006/silenced_professor_sues_sdmi_riaa.html>.

IBM, and AT&T to produce an all-encompassing framework that would protect copyrighted music in existing and emerging digital formats.[230] In September 2000 the SDMI coalition narrowed their findings down to four kinds of watermarks and two non-watermark supplements they contended could serve to identify and analyze both regular and compressed files and operate in an environment that was supposed to not call attention to itself, in this case**,** not interfere with the overall consumer experience.[231] Leonardo Chiariglione, the individual known for destroying the music industry's physical media business by creating the mp3, agreed to head the SDMI and eventually issued a challenge to anyone who could successfully attack and crack the proposed technologies.

The challenge became known later as the "Hack SDMI" contest. Ironically, Mr. Chiarglione had partnered with a consortium of panicked record labels who were trying to salvage their old business models amidst the new age of file sharing and downloadable music, for which Chiarglione was responsible.[232]

Meanwhile, Edward Felten and his students attempted to use the "Hack SDMI" challenge as a class project and eventually broke all the watermarks and subsequently produced an academic paper containing the results. Felten chose to present the paper at an academic conference rather than compete for the official $10,000 prize money.[233] A member of the SDMI who failed to communicate his intentions to other coalition members sent Felten a letter warning him that if he revealed his results publically he risked breaking the law. Felten then asked the courts to intervene. Yet in a peculiar

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[230] Gillespie, *Wired Shut*.
[231] Ibid.
[232]Time Media Kit, "Time Digital 50," *Time Magazine*, 1999.
[233]Gillespie, *Wired Shut*.

change of position the SDMI consortium claimed they had no objection to his paper and asked the courts to dismiss the case.[234] James Burger talks about the SDMI's tactical errors when it warned Felten:

> That whole incident with Felten was really dumb: writing that letter, threatening, the thing that Oppenheim did.[235] And unfortunately Carey Sherman was out of town at the time. And eventually, they (SDMI) sent a more conciliatory note. But look, it makes it a constitutional issue and that's part of the reason why the research exception is there. It gives it a First Amendment safety valve. Things like fair use and the whole kind of copyright issue revolves around two constitutional provisions. It revolves the patent and copyright clause. But it also revolves around the First Amendment, freedom of speech. The government can't restrict speech. Copyright is a government law. Fair use, for example, is a safety valve. Right? It allows a lot of expression. As an author, you don't get a monopoly on your expression. You get a limited set of rights. And, for example, literary criticism, parody, speech-like things are fair use. You can't cut that off. The government has no ability because of the First Amendment. So here you have another provision, which has a safety valve for research and it's the worst case you could present, attempting to sue a professor who has done research and wants to publish a paper. I mean, that's really not a good case.[236]

Gillespie explains that the SDMI's tactical changes were largely due to Dr. Felten making arrangements with the Electronic Frontier Foundation to provide a legal defense, and consequently the case generated more negative publicity for the already maligned record industry. The EFF stated that it challenged the constitutionality of the DMCA's anti-distribution provisions and asked a federal court to give Felten and his research team the right to present their research at a USENIX Security Conference in August 2001. The USENIX Association represented approximately 10,000 computer

[234]Pamela Samuelson, "Anti-circumvention Rules: Threats to Science," *Science*, 293, no. 5537 (2001): 2028.

[235]Matthew Oppenheim, an RIAA lawyer associated with SDMI, sent Edward Felten a letter on April 9, 2001 stating that Felten could face legal action under a 1998 law if his research was published.

[236] James Burger, interview with Matthew Cohen, March 14, 2011.

research scientists and actually became a co-plaintiff in the Felten case.[237] Felten contended throughout his ordeal that the paper was not any sort of blueprint for cracking SDMI's technologies and the research would be unintelligible to a lay person.[238] Instead, Felten said his academic investigation was meant to not only benefit the scientific community, but also the record companies because, as it stood, the technology was weak and would be widely defeated. Felten argued that if the record industry intended to support the technology, it had a right to know if the copy protection actually worked.

The Felten matter never materialized into formal court proceedings. The Justice Department eventually dismissed the claims by Felten's defense team all the while giving assurances that the DMCA could never stifle its future academic research. The Justice Department also insisted that legal threats made from the SDMI prior to Felten's publicity barrage were invalid.[239]

The SDMI eventually came to an abrupt halt because of the publicity nightmare provoked by the Felten case along with members of the coalition who were unable to meet specific deadlines, which ultimately made it difficult for the coalition to keep pace with technological innovation.[240] Uncovering the truth about the SDMI's various personalities and specific activities that transpired over a two-year period is difficult because there is no paper trail or documentation made available to the public. Gillespie notes that members of the consortium were not bound by specific contract obligations and could walk away if they felt their interests were not adequately being

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[237]Fred Von Lohmann, *Unintended Consequences: 12 Years Under the DMCA* (San Francisco, California: Electronic Frontier Foundation, 2010).

[238] Ibid.

[239] Ibid.

[240] Ibid.

served.[241] Shared economic interests were not enough of a compelling incentive to create cohesion, especially when the market was unclear and the potential for profits was unsure. Strong possibilities existed that anyone could walk away from the coalition and sell their own proprietary encryption to outside interests; therefore incentives and outside oversight were sorely needed. The SDMI was eventually put on official hiatus, never to meet again.

James Burger represented a large portion of the computer industry at the SDMI discussions, and complains about the RIAA's inability to work with the coalition and incorporate a business model that embraced online music sales as the recording industry's primary income source rather than simply supplementing compact disc revenue, which remained substantial but decreased significantly in the mid- 1990s:

JB: We all walked in a little naïve. I was representing most of the computer industry. A lot of online companies like America Online, some online music companies and some cellular phone companies. And we all thought: "Wow! This is cool. Secure Digital Music Initiative. They (the recording industry) want to get online. And we understand they want to protect the stuff online but we could really do a great business. In fact, IBM invested something like $20 million in a program called Project Madison which had all the backend software, the client software, the server software for distributing music.[242] That wasn't what they were there for. They were there to see how they could protect their existing CD business, not to establish a new online business. I mean, you have to understand that the music industry in 1998**,** '99**,** 2000 had never made more money on CDs. It's a little irony, you know. I don't argue with that because they kept saying, "We can't make as much as on CDs." I mean, they were making a fortune on CDs! They pump out a CD and probably the cost of getting it on a truck was $.25 a CD. Then, magically when the trucks got to the store and the backdoors opened, they were worth $15-$20. I'm looking for those trucks for my clients! It's magic! I'm trying to be sympathetic, which is always hard for me because I was there, but, look, telling somebody who's never done better and looks at the projection for the next couple of years that their business is going to be through the

[241] Ibid.

[242] Project Madison was IBM 's piracy protected Internet music delivery system. It was completely independent of SDMI and never advanced beyond consumer trials in San Diego, California in 1999. Facilitated by Time Warner and Road Runner Cable, consumers were given a CD writer, color printer and network access which allowed them to purchase music through various authorized web sites, and then download and burn material to a compact disc. The album cover art and liner notes were included in the transaction.

roof and I'm telling them they have to destroy that business is a very tough message to give and a very tough message to hear. But it was true. And what I kept trying to say to them was, look-- people are excited about music. There are a few people who always rip people off, but let's put them aside. They're not the majority. People are doing this because they're excited about music! They love music.[243]

There were assorted motivations at play as the 447 participants took part in the Hack SDMI Challenge, but it is compelling that the SDMI incorporated an equivocal, highly-disputed word to advertise its competition. The specific term "hacking" resonates with society in seemingly contradictory ways in that some associate the meaning with terrorism, while others view it as a kind of freewheeling intellectual exploration at the highest and deepest potential of computer systems.[244] Hackers are supposed to be anti-commercial, not loyal supporters of the popular culture industries. They hate the commercial ownership of software because the code is limited by intellectual property laws, where profit is the primary motive of the code. What hacking reveals then, according to Galloway, is not that systems are secure or insecure or that data is free or proprietary, but that with protocol comes an exciting ability to leverage possibility and action through code. The hackers in the SDMI contest did not think about the long-term ramifications of offering their help to the coalition. For them, the priority was to defeat the code.[245]

The next section looks at a well-known legal case, DVD X Copy against Hollywood, which touches on the legality of making digital personal backup copies, fair use, and free speech. During the lawsuit, 321 Studios, creators of the software,

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[243] James Burger, telephone interview with Matthew Cohen, March 14, 2011.
[244] Ibid.
[245] Alexander Galloway, *Protocol: How Control Exists After Decentralization* (Cambridge, Massachusetts: MIT Press, 2004).

argued that they tried to comply with Hollywood's stipulations but in retrospect asserted that studios were too afraid consumers would break the law.

DVD XCopy vs. Hollywood

In 1999, 321 Studios, a company that was widely known for manufacturing DVD video rip and burning products, anticipated that it would face litigation brought forth by MGM Studios, Tristar Pictures, Columbia Pictures, Time Warner, Disney, Universal City Studios, Pixar Studios and the Saul Zaentz Company and, therefore, filed a pre-emptive complaint, or action for declaratory relief, claiming that the DMCA was an infringement on consumers fair use rights. [246] The maneuver may have been a way for 321 Studios to ensure that a court of 321 Studios' choosing would handle any suit involving DVD Copy Plus.[247] Before filing the measure, the company made its product DVD Copy Plus, a software application that copied DVDs onto CD-R discs, available via its own web site as well as through major consumer retail chains such as CompUSA and Fry's Electronics.[248] The company eventually amended the suit and asked that a court also rule on a similar product it was producing, DVD X Copy, which allowed DVDs to be copied onto DVD-Rs and DVD-RWs.

321 Studios had taken a strong position all along that it did not condone the illegal copying of DVDs and that its product was to be used for personal backup copies only. It is quite clear that the company expended efforts to follow the law. The company's founder, Robert Moore, was an avid DVD collector and understood that

[246] Cade Metz, "The Uncertain Future of DVD X Copy," *PCMag.Com*, February 6, 2003, <http://www.pcmag.com/article2/0,2817,870495,00.asp>.

[247] Robin Gross, "Consumer Rights Under Fire: 321 Studios and the Demise of Fair Use," *San Francisco Copyright Lawyer* (San Francisco, CA): 2004.

[248] Metz, "The Uncertain Future."

making personal backup copies of a DVD was not illegal as he was not distributing the backup or reselling for profit.[249] 321 Studios also incorporated a mechanism that placed an invisible watermark embedded in the disc's contents that indicated what computer made the backup.[250] Every year, Academy Award members receive DVD screeners, which incorporate similar kinds of watermarks so if DVD material is burned and subsequently uploaded to a server, the digital material can be identified and matched to an individual's IP address.

DVD XCopy's Inability to Decipher Rental Discs

Before DVD Xcopy came to market, decrypting the CSS code and then ripping a DVD to a hard drive was a difficult process, but 321 Studios incorporated the technology to decode DVDs, transfer, compress and burn a recordable DVD disc within a simple point and click interface. The UI may have been helpful, but the software could not identify a rented movie from a legally owned DVD, although the company professed that it was ready and would "love" to work with a Netflix or Blockbuster to render rental discs as incapable of being copied.[251] There were certainly enough red flags on the product to remind consumers that DVD X Copy had not reached compliance, and therefore was not endorsed by Hollywood. Besides watermarking, the product carried a label made by 321 Studios on its exterior that asked consumers to respect the rights of artists. Also, a disclaimer, also from 321,

[249]Gross, "Consumer Rights."

[250]Edward C. Baig, "May the DVD X Copy Lead Me Not into Temptation," *USA Today*, sec. Personal Tech, February 4, 2004, March 2, 2011, <http://www.usatoday.com/tech/columnist/edwardbaig/2003-02-04-baig_x.htm/>.

[251] Ibid.

appeared for 8-10 seconds before launching into the featured film indicating that the DVD should be used solely for backup and personal use.

In May 2003, seven of the Hollywood studios countersued 321 Studios claiming that DVD XCopy violated the DMCA. The case eventually went to court, and a judge issued a verdict on February 23, 2004, deciding that 321 Studios' product was indeed a violation and that the company must stop all sales of DVD XCopy in the United States. The company permanently closed its doors in August 2004.

Despite the injunction and eventual shut down of the company, many DVD burner offshoots similar to DVD X Copy gradually came to the market and are still available to purchase online. No entity has interfered with the continued operation of the DVD XCopy website, which actually ranks and recommends alternative software for users who wish to rip and burn their media products.[252]

The DMCA's treatment of DVD copying and fair use is constantly debated because it is a knotty topic that affects untold numbers of people, and the legislation broadly skims over paramount issues. Confusing and contradictory in its interpretation, on the one hand the copyright office appeared to mollify certain constituents and granted fair use exceptions to the DMCA for film professors, but on the other, did not bother explaining how teachers could lawfully acquire the circumvention software in order to break the code. To suggest that one may copy, in order to appease those who argue for the undeniable right to ideas and facts, while at the same time denying access via encryption to the sought after material is akin to stating that one may speak in public to exercise free speech rights and then deny the

[252] "DVD Movie Copying and Burning: DVD X Copy," 2010, March 1, 2011 <http://www.dvdxcopy.com>.

speaker an audience.[253] Utilizing DRM on digital materials in order to combat piracy is inappropriate at any time because the technology is too restrictive to consumers. Besides protecting copyrighted materials, DRM also blocks materials that should be free for the taking (commentary, facts, ideas, quotes) and when it is challenged, the DMCA trumps DRM technology in terms of its legal force. If the material is not copyrighted in the first place, how does the law seemingly approve the product receiving DRM protection? At this point, the DMCA does not make room for non-copyrightable works in the legislation. Therefore, if the cultural works are digitized, the publisher may claim that they are copyrighted despite proof that they already exist in the public domain. This kind of fraudulent activity happens all of the time.

Copyright Fraud

There are countless examples of copyright fraud occurring in the marketplace all of the time, although not every example is explicit. A *Barnes and Noble* e-book version of *Alice in Wonderland* (public domain material) contains a warning that the electronic book may not be read out-loud, making it impossible to enforce. A library at a public school avoids purchasing Shakespeare's *Macbeth* after seeing a notice that the play cannot be copied, which is only partially true, which means it is mostly false because the publisher did not indicate what portions of the added text or illustrations were forbidden. Or perhaps the most clear-cut case of copyright fraud is where the U.S. Government's *9/11 Report* is available for $1.99 per copy via an electronic bookseller. There are too many kinds of fraudulent activities occurring here, and appropriate consumer protections are non-existent. In instances of clear copyright

[253]Litman, *Digital Copyright*.

fraud, users unknowingly seek licenses and pay fees to reproduce works that are actually free for the taking. Trumped up notices of copyright can be found on modern reprints of Shakespeare's plays, Beethoven's piano scores, greeting cards that front Monet's *Water Lilies* and even the U.S. Constitution.[254]

For the victim, there is no recourse against acts of fraud. The Copyright Act offers no civil penalty for falsely claiming ownership over materials in the public domain, nor is there compensation for those who make payments for permission to copy materials that they are actually entitled to use for free. Strong copyright regimes create a permissible environment for copyright fraud, and while falsely claiming copyright is technically criminal under the Copyright Act, prosecutions almost never happen.[255] There are no "legal protectors" of the Public Domain, or a Public Domain Infringement Force that works with the FBI. The government is supposed to protect the public domain, but no person has been assigned the responsibility.

Before I continue, let me make some distinctions about materials with an official copyright demarcation versus public domain materials. Copyright gives the copyright holder exclusive rights over the work, including the right to copy it.[256] The protection does not grant complete control over all uses of the work, however, and those rights are subject to important limitations such as fair use, limited terms, and the first sale doctrine.

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[254]Jason Mazzone, "CopyFraud," *New York University Law Review* 10, no. 13 (2006).
[255] Ibid.
[256]Lessig, *Code Version 2.0*.

The public domain is a vast and undifferentiated set of contents; a blob of unnamed size and dimension.[257] It is not what many think, a gigantic vault of valuable materials readily available for perusal. The value of its contents is debatable, with some believing it to be the font of all creation while others contending it to be a virtual wasteland of undeserving detritus.[258] It is, for the most part, unchartered research terrain. The domain is ephemeral, in that it is different sizes at different times and in different countries. It grows when patents and copyrights expire, and shrinks through government directives, for example, when the U.S. courts determined that business methods could be patented.[259] The boundaries of the public domain are obscure, which is my point. Some intellectual creations that courts have treated as if they resided in the public domain actually do not exist there. Some content is widely available to use and appears as if it is in the public domain, even though it is technically copyrighted, for instance when a company decides to post material on a web site with no restrictions or cost. Some artifacts have a variety of public domain classifications. A scientific article may comprise of three to four categories of public domain contents.

Although many of the public domain materials are available for individuals to use, they could come with a financial cost. A hypothetical scenario involving a filmmaker who wants to use WWII combat footage that is housed in the public domain must first seek permission from the original studio where the movie was produced, and the director is then subject to pay a licensing fee. The owner of the work, regardless

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[257]Pamela Samuelson, *Mapping The Digital Public Domain: Threats and Opportunities* (Chapel Hill, North Carolina: Duke University School of Law, 2003).

[258] Ibid.

[259] Ibid.

of whether the material exists in the public domain, also has the option to refuse access, especially if the item in question is the only existing copy.[260] It is here where the distinction between copyrights versus access blurs, with the distinctions coming off as insignificant to free speech advocates when it comes to creativity and freedom of expression.

In the world of digital goods, the technological controls that determine access and use of products aid and abet incidences of copyright fraud. Although not everything that is digital is copyrightable (*Pro-CD Inc. vs.Zeidenberg*, for instance, prevented the copyright protection of CDs containing white page listings from thousands of telephone directories in digital form), the vendors of digital information like *Amazon* and *Itunes* tend to give themselves vast protections that intellectual property laws would normally disallow.[261] When coming up against the copyright notices and technical encryption schemes, a large number of people simply stop dead in their tracks rather than try challenging the law. The White Paper dismissed any call for a fair use exception to anti-circumvention legislation with the comment that "the fair use doctrine does not require a copyright owner to allow or to facilitate unauthorized access or use of a work." [262] Copyright owners extended this idea, indicating that fair use might allow some use of an unauthorized copy of a work in exceptional circumstances, but it did not permit theft of the copy. If an individual purchased a book, or checked it out from a library that purchased it, he could claim fair use but at the same time, fair use did not permit him to break into the author's

[260]Mazzone, "CopyFraud."
[261] Ibid.
[262]Litman, *Digital Copyright*.

house to steal his own personal copy.[263] Circumventing technical protections schemes, the copyright owners argued, was akin to breaking into an author's home or stealing a book, and fair use never permitted this. Although the housebreaking metaphor was apt in some cases, it was inappropriate as an ordinance. Property laws give homeowners legal control over who comes in, which permits the further use of protective devices like locks and burglar alarms. But, without property, the metaphor is no longer valid. Jessica Litman describes it this way: If a well-trained attack dog prevented strangers from seeing a painting that had no owner (the Mona Lisa in the Louvre, for instance) the museum guards would conceivably kill the dog.[264] As Litman argues, the housebreaking metaphor allowed the supporters of unconditional protection against circumvention to glide over the issue of what was behind the lock or to examine whether people were entitled to see it.

The digitization of information does not categorically pose a threat to the public domain. The initiative to digitize government information supposedly creates more transparency and accountability in Washington. Sharing digitized scientific data from around the world leads to innovation, and an overall enhancement of the public domain. As for the digitization process in the world of commodities and cultural works, the scenario is not as rosy. Firms can gain control over information already residing in the domain and then apply technical controls and licenses. As an example, the LEXIS and Westlaw databases contain hundreds of thousands of public domain judicial opinions and legal texts that the database owners control through licenses and

[263] Ibid.
[264] Ibid.

digital access controls.[265] Those who counter the availability of a free and open database argue that if the U.S. government exercised its eminent domain power and made the information available without restrictions, who would ultimately pay for the database's upkeep, improving the tools? In this context, the argument for privatization gains traction although it is appalling and bodes badly for a free and open information society.

Pamela Samuelson suggests that the competition between government and private enterprise over the public domain may have a positive impact because the public domain could offer key information to those who cannot afford to pay, holding in check the monopolistic tendencies of the market players. But I do not think competition is at all possible here. My dissertation illustrates that with the role of copyright, especially, the ruling coalition sold off big government to private enterprise and created a government-by-entrepreneurship model, a "less government in business and more business in government" scenario where government is secondary to big business and is therefore fallow and ineffective.[266] Is the Federal Trade Commission successfully holding off the monopolistic tendencies of the market now? Monopolies, by the way, are perfectly legal in this country. It is the ways that monopolies are acquired or abused that gains the attention of a U.S. regulatory commission.

In the following section, I examine several cases where the Electronic Frontier Foundation came to the aid of companies and/or individuals being sued by the MPAA or its consortium.

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[265]Samuelson, *Mapping The Digital Public Domain*.

[266]Thomas Frank, *The Wrecking Crew: How Conservatives Rule* (New York, NY: Metropolitan Books, Henry Holt and Company, 2008).

MPAA vs. The People

In 2003, the MPAA announced that the six major Hollywood film studios would seek joint legal action against hundreds of different individuals involved in using peer-to-peer (P2P) file-sharing platforms to acquire films online. At the time, the MPAA turned a blind eye to the recording industry and its various missteps with fans, including the more than 6,000 lawsuits the RIAA filed against individuals using P2P technology since September 2003. If they were inclined to study the past, film executives would have thought twice about their decision to litigate because the recording industry's album sales decreased about 16% since 2000, according to Nielsen SoundScan.[267]

In Chapter 3, Dean Garfield mentioned that litigation was one of the assorted tools the MPAA used to defend Hollywood against film piracy. The film organization displayed certain impudence by going after individual downloaders for breaching the DMCA. Calling something a crime in the context of the Copyright Wars is not meant to describe acts that violate statutes but instead is a political strategy to redefine social norms in a way that will lead the state to intervene and criminalize behavior that is not, in fact, criminal.[268] Hollywood was the ideal organization to develop, shape, and market the social and political campaign against piracy and illegal downloading, and litigation was used as a means to gain control over p2p technology in order to perpetuate existing business models.[269] The incorporation of the DMCA access provisions is not so much about a concern over the copying of works but maintaining

[267] Jeff Leeds, "Decline in Album Sales Slows in 2003," *Los Angeles Times* (Los Angeles, CA): January 1, 2004.
[268] Patry, *Moral Panics*.
[269] Ibid.

Hollywood release patterns. We saw this litigation war over technology happen already with the Betamax case, where Jack Valenti deemed VCRs as a threat to large corporations and more broadly, to the American public. American society, in fact, did not have to be saved from VCRs. The studios were more concerned about eliminating a competing format because the film studio MCA had already committed itself fully to the videodisc. MCA owned all the patents for a video laser disc player called DiscoVision and took the lead with Universal Pictures in 1976 by filing a lawsuit against Sony. MCA previously considered using Sony as a partner to manufacture their laserdisc player.[270]

The EFF intervened in the lawsuit to defend the privacy and due process rights of the individuals included in the lawsuit and argued that Hollywood could not claim that file sharing was about to make Hollywood go out of business since DVD sales increased 33 percent and box office receipts had also increased from the year before.[271] A judge in Northern California dismissed the case based on an earlier lawsuit involving satellite provider DirecTV in which the plaintiffs could not establish a link between the various defendants or prove that they acted in concert. The plaintiff's only evidence was judged to be circumstantial because all the defendants allegedly used the same Internet Service Protocol (ISP) but did not engage in distinct and related conduct, which was insufficient evidence for the United States District Court.

In yet another massive lawsuit, the music and film industries went after *Grokster* and initially suffered a tremendous defeat as I wrote in Chapter Three, but

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[270] Ibid.

[271] Chris Taylor, "Invasion of the Movie Snatchers," *Time Magazine*, October 4, 2004, February 5, 2011, <http://www.time.com/time/insidebiz/article/0,9171,1101041011-709042,00.html>.

the legal counsel representing the MPAA incorporated a distinctly different legal strategy when it appealed the decision in district court, and the Supreme Court eventually overruled the previous verdict and decided that software creators were liable for what users did with their software.

MGM vs. Grokster

In the *MGM vs. Grokster* case, the Electronic Frontier Foundation defended StreamCast Networks, the company that created the Morpheus peer-to-peer file-sharing platform. Twenty-eight of the biggest global entertainment giants brought lawsuits against the creators of *Morpheus*, *Grokster*, and *KaZaa* products, attempting to trigger a colossal precedent when it came to individuals using technologies to engage in copyright infringement.[272] As was mentioned previously, the Supreme Court ruled according to a previous landmark trial, *Sony Corporation of America vs. Universal Studios* (otherwise called the Sony Betamax ruling), arguing that a distributor could not be held responsible for a user's behavior so long as the technology is also capable of substantial non-infringing uses.[273] As a result, the Ninth Circuit determined that both *Grokster* and Morpheus distributors could not be held responsible for any individual's copyright violations.

The court case received an extensive amount of publicity, which was aided with additional financial support from billionaire Mark Cuban against MGM. Cuban, owner of the Dallas Mavericks, Landmark Theaters, and HDTV cable network HDNET, insisted, like many of his supporters in both the academic and corporate

[272]Electronic Frontier Foundation, *MGM v. Grokster,* ed. Electronic Frontier Foundation (San Francisco, California: EFF, 2007).

[273] Ibid.

world that the case was situating the big content companies against the little ones, cautioning that courts could stifle or shut down future innovations.[274] The Electronic Frontier Foundation noted that it needed clarification over the rules for technology innovators, arguing that the Supreme Court simply overlooked these important questions and, as a replacement, crafted a new doctrine of copyright infringement called "inducement." [275] Using inducement to craft its decision, the Supreme Court agreed that *Grokster* should be held responsible for facilitating copyright infringement, and steadfastly urged that the companies be held accountable for actively encouraging individuals to violate copyright.[276] This decision was a major departure from previous legal precedents and set an agenda where even if the technologies are capable of non-infringing uses, it is besides the point if the defendants are found to be actively encouraging piracy. A classic case of inducement, according to Judge Souter, would be advertising an infringing capability or providing instructions how to engage in infringement.[277] The court's rhetoric, overall, suggested that the intent to commit inducement needed to be blatant rather than the court presuming or imputing the fault. But it was apparent despite the court's decision that the author of a software program who claims its use to be fair use could still be held liable without the proper software filters put in place. In this hypothetical scenario, even after the sufficient discovery phase where the internal evidence illustrated no intent to infringe, a court of appeals would find the defendant innocent, but if he was

[274] "Mark Cuban to fund MGM vs. Grokster," March 27, 2005, February 7, 2011, <http://www.bionicdan.net/journal/?p=2>.

[275] Fred von Lohmann, "Remedying 'Grokster'," *Law.com* (2005) February 1, 2011, <http://www.law.com/jsp/article.jsp?id=1122023112436&slreturn=1&hbxlogin=1>.

[276] Ibid.

[277] Jonathan Band, "So What Does Inducement Mean?" *Computer and Internet Lawyer*, 22, no.11 (2005).

thinly capitalized, or, in other words, broke, the damage would be fatal to his career. For creators of software, the threat of liability after the *Grokster* case made their professions especially precarious.

In the *MGM vs. Grokster* case, what made legal uncertainty particularly distressing to innovators was having to operate under the glaring eye of the copyright statutory damages regime where plaintiffs did not have to prove actual harm and could instead collect statutory damages, which in a court could amount to $750-$30,000 per allegedly infringed work. Statutory damages, von Lohmann argues, become a corporate death penalty because insurance is unavailable for risks of that magnitude, and a claim against one product could potentially sink an entire company.

Copyright Statutory Damages

Aside from the exorbitant expenses of copyright claims, plaintiffs can also pursue employees' personal assets because the corporate "veil" that normally shields corporate officers, directors, and investors, is pushed aside in copyright cases. Copyright owners can and do bring secondary liability claims against individual company members, arguing that each personally played a part or should be held responsible for the acts of the corporation he or she controls.[278] To illustrate, the music industry continued pursuing secondary copyright infringement claims against the officers, directors, and primary investors responsible for Napster despite the fact that the company had already been liquidated.[279]

[278] Ibid.
[279] Ibid.

Besides the heretofore discussions about liability, what was missing in the retrospective analyses was a discussion about the ways in which p2p technologies would be beneficial to the content industries. How did the courts become so involved in deciding the market entry policies for new technologies?[280] If Congress formulated a "joint care" policy that allowed the music industry to incorporate forensic watermarking on their products, software producers would be excused from liability if they successfully blocked the sharing of the marked files. The courts might then allow the software producers to use the Safe Harbor Rule but would still be in the business of setting policy, but only provisionally by refusing to find contributory liability in these cases.[281] After the *Grokster* case, the lack of any oversight from Congress in which it brokered a fair agreement caused many to wonder why the media industry's lobbying forces prompted judicial mandates rather than congressional legislation. Unfortunately, the judicial decision-making from the *Grokster* case did not touch upon policy and went on to pardon the content industries from exorbitant financial burden, with the courts shifting the costs to the fledgling software producers and their consumers.

As I discussed earlier, the legal battles over DVD copying, fair use, and the first sale doctrine were just beginning by virtue of the DMCA's passage, but even as late as 2008, the motion picture industry was still very much engaged with using litigation against consumer hardware manufacturers who failed to follow the MPAA's specific protocols designed for video playback devices. I recently watched an episode from the CBS television series *The Untouchables* (1959-1963) where "B" movie tough

[280] Patry, *Moral Panics*.
[280] Ibid.
[281] Ibid.

guy icon Charles Mcgraw, who plays a mob syndicate boss, tells a cowering member of his consortium, "So long as you do what you're told, keep your mouth shut, come up with the dough on time, we'll get along fine." The RealNetworks vs. DVD-CCA legal battle emphasizes the role that the powerful DVD-CCA consortium plays as it supports the MPAA trusted system framework and its cartel.

RealNetworks vs. DVD-CCA (aka RealDVD Case)

In September, 2008 the motion picture industry brought suit against RealNetworks, which designed a product that permitted customers to make copies of their DVDs, storing them on the hard drives on their computers for later playback. The company was also planning to debut a line of consumer products that featured a DVD player with a hard drive contained inside the device. RealNetworks thought it had engaged in due diligence and applied and received a license from DVD-CCA for its new product line, and it assumed the earlier court rulings from the DVD-CCA vs. Kaleidescape case would serve as ample legal support for the company.[282] In 2007, the DVD Copy Control Association (DVD-CCA), the organization responsible for creating the CSS encryption code for scrambling DVD video content, sued Kaleidescape, a Southern California company. According to the company who manufactured the device, the Kaleidescape movie server was more like an Ipod in that it allowed the consumer to make a secure private copy of every DVD and CD owned, and permitted play back in any room within the consumer's home.[283] Besides

[282] "Judge Rules Against RealDVD," *Electronic Frontier Foundation*, August 11, 2009, February 7, 2011, https://www.eff.org/deeplinks/2009/08/judge-rules-against-realdvd.

[283] Jon Healey, "Kaleidascape Escapes," *Los Angeles Times*, March 30, 2007, February 14, 2011, <http://opinion.latimes.com/bitplayer/2007/03/kaleidescape_es.html>.

indexing, the Kaleidescape system created a sophisticated database of information about the movies, including cover art and reviews, and allowed customers to search the movies they owned using different criteria. Kaleidescape claimed that consumers could not upload or transfer movies to the Internet via its device because the system was a completely closed mechanism, and it was impossible for individuals who owned the device to burn copies of DVDs. The company made it clear that it worked tirelessly so that the system complied with the CSS License agreement, and that it obeyed the intellectual property rights of others.[284] The Superior Court of California eventually ruled in favor of the company and allowed the Kaleidescape System to continue being manufactured.

The following year, on September 30, 2008, the motion picture studios filed a lawsuit in Los Angeles seeking a temporary restraining order (TRO) to block the launch of RealNetworks Real DVD Software. The lawsuit was purposefully filed on the exact day the product was to debut.[285] The case was immediately transferred to a San Francisco court that granted a provisional order halting the distribution of the Real DVD product.[286] District Judge Marilyn Hall Patel decided that the Real Company broke the DMCA's ban on trafficking in circumvention technologies when it decided to distribute the RealDVD products, and that RealDVD products were not authorized by the DVD-CCA license agreements.[287]

In early March2010, RealNetworks settled its litigation with the movie industry over RealDVD and, besides agreeing to keep the product off the market, also

[284]Ibid.

[285] "Why MPAA Should Lose Against RealDVD," *Electronic Frontier Foundation*, October 2, 2008, January 31, 2011 <http://www.eff.org/deeplinks/2008/10/why-mpaa-should-lose-against-realdvd>.

[286] Ibid.

[287] Ibid.

conceded to pay the MPAA and the DVD-CCA litigation costs totaling $4.5 million.[288] The settlement was disappointing to many people because the judge was unable to rule on interpretation, that is, to decide between the DMCA's strict anti-circumvention law or examine consumer rights under copyright law.[289] The first sale doctrine, which was codified in the Copyright Act of 1976, allows the purchase or transfer of a legitimately made copy, bound by copyright without permission once it has been acquired. In the case of purchasing DVDs, buyers in the United States have the right to sell or exchange them, and even rent them to third parties.[290] The Lehman Group's interpretation of copyright law dramatically altered the concept of property in the digital domain and deemed all uses to be public "transmissions," regardless of user intent. The Green Paper changed the first sale doctrine so that it did not apply to digital works, and the DMCA essentially nullified the provisions availed to individuals through the first sale doctrine when copyright owners demanded the legal tools to restrict the owner/consumer of legitimate copies of works from gaining access to them, and Congress consented. Copyright owners insisted that in the digital age, anyone could commit massive copyright infringement with the press of a button. In order for their rights to mean anything, copyright owners argued that they were entitled to have control over the access to the works, not merely initial access, but ongoing control over every subsequent act of gaining access to the content.[291] Seeking protection over their property, copyright owners received permission to place legally

[288] "RealNetworks Agrees To Pay $4.5 Million In Legal Fees To Hollywood Over RealDVD; Gives Up," *Techdirt*, March 4, 2010, March 9, 2011, http://www.techdirt.com/articles/20100303/1638438400.shtml.

[289] Judge Rules Against RealDVD, August 11 2009, Electronic Frontier Foundation, February 7, 2011 2011 <https://www.eff.org/deeplinks/2009/08/judge-rules-against-realdvd>.

[290] Litman, *Digital Copyright*.

[291] Ibid.

enforceable access control technologies on their products, which completely annulled the first sale doctrine. At that juncture, authors received permission to exercise downstream control over who used their products, and The Lehman Group suggested that the first sale doctrine not apply to any transmission of protected copies or works, private or public, while endorsing the use of DRM technology.[292]

End User License Agreements (EULAs), Terms of Service (TOS), Internet Click-Wrap Agreements

Irrespective of goods sold on the Internet, some copyright owners have placed warning labels on packaged DVDs that do not accurately reflect buyers' legal rights even where the first sale doctrine is pertinent. As I mentioned, copyright owners eliminated the first sale doctrine on Internet digital goods with the help of the Lehman Group, and various online software vendors now enhance their authority and supply supplementary End User License Agreements (EULA) that claim that their products are licensed rather than sold, and are therefore not subject to the first sale doctrine. EULAs were created in the 1980s as a way for companies to limit warranties on goods and disclaim liability.[293] These agreements or disclaimers became prolific in the mid-1980s because of the popularity of software programs and companies' concerns that individuals would try to copy their products. Thus, vendors instituted another method of limiting the use of a digital product. It has been a practice for some, not all, vendors to prohibit consumers from viewing the EULA agreement before the product

[292] Ibid.

[293] "Dangerous Terms: A User's Guide to EULA's," *Electronic Frontier Foundation*, February 2005, February 15, 2011, https://www.eff.org/wp/dangerous-terms-users-guide-eulas.

purchase, or agreements lie in difficult to view locations that put individuals in the position of being uninformed and at risk for exploitation.

Keeping in mind that this is still an area of extreme legal confusion, previous federal courts issued decisions agreeing that the first sale doctrine runs concurrently rather than separate from the EULA. Other courts argue that the shrink-wrap or various Internet click wrap agreements where a consumer scrolls through multiple screens of dense legalese, finally clicking the "I agree" statement, are legitimate and forever binding.[294] Additionally, the Terms of Service (TOS) agreements also attempt to bind users without their signature and govern the ways in which consumers use online services like e-mail, chat software and wireless hotspots. When a product has the ability to operate both on and offline, it is shocking that the TOS agreements are still valid, irrespective of consumer activity.[295]

I present both the EULA and TOS clauses to make the case that the copyright laws governing digital properties enhanced the authority of the publishing industries and went on to systematically corrode the rights of individual consumers. In the case of fair use and the first sale doctrine, Kaleidascape and RealNetworks drew attention to themselves because the products they manufactured allowed individuals to make personal backup copies of their legally owned merchandise. While it was true that these products permitted individuals to also copy rented or borrowed discs, those who were so inclined could already do so with tools that were cheaper and less restrictive.[296] Indeed, these technologies had the potential to stimulate DVD sales by

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[294] Ibid.
[295] Ibid.
[296] "Why Hollywood Hates RealDVD," *Electronic Frontier Foundation*, October 10, 2008, February 15, 2011, https://www.eff.org/deeplinks/2008/10/why-hollywood-hates-realdvd.

granting individuals the means to archive and manage their digital collections, which increases a cinema collector's overall love and appreciation for the art. The irony of this particularly sad story about lost innovation and Hollywood's lack of vision is that in 2011, Hollywood is doing its best to salvage what it previously destroyed in the courts by creating even more copy protection while locking the individual consumer to a set of registered devices that relies on authorizations from a server-in-the-sky. When consumers are supposed to rejoice that Hollywood permitted them to play their own media on their own, lawfully acquired hardware, it is sadly anti-climatic in the DMCA age. How is this a victory for consumers? As the movie industry is exploiting the profit margins between physical and streaming media, it behaves like the RIAA by desperately clutching to physical media sales as an antidote to slipping profits. It is only a matter of time before consumers will pass over DVD**s** altogether.

Digital Entertainment Content Ecosystem, or DECE, has yet to debut, but the industry promises that it will allow consumers with a purchased DVD or Blu-ray disc to make one drm-embedded digital copy that will play on different devices. The hardware industry is still working through hurdles with the authorization and transmission process, but a former technology expert with the MPAA tells me that the industry pins all of its hopes on the new delivery system. After all, the innovation hedges the fence in several ways: Hollywood knows that physical media sales are decreasing, in this case the sale of DVD content. As more people look to either legitimate streaming sites or piracy, the move to DECE could re-stimulate DVD sales because of the particular burn, transmission, and portability factor.

The legal cases discussed to this point highlight scenarios in which technology is the starting point for struggles over distribution and exhibition control, and the DMCA is marginally or directly defending consumer rights violations. The Replay case involved at least two legal arguments that had already been heard and adjudged; the plaintiff's claims were essentially recycled and resurrected for the digital age. From the Betamax case came the Audio Home Recording Act (AHRA), which mandated that digital devices be fitted with copy protection technologies. But the AHRA was essentially out of date for the Internet Age. For now, media companies do not condone file-sharing technologies nor do they see them as being legal, and the courts do not recognize p2p technology as a starting point for sharing and learning, which is a cultural custom.

DMCA 12-Year Retrospective: Exemptions

The EFF recently published a DMCA retrospective in which it criticizes cases where the anti-circumvention provisions of the DMCA were invoked against consumers, scientists, and legitimate competitors.[297] By legitimate competitors, the EFF authors argue that the DMCA blocks the aftermarket from producing generics, in this case items such as laser toner cartridges, garage door openers, and computer maintenance services. The EFF also criticizes Apple for using the DMCA to tie its iPhone and iPod devices to Apple's software, although a judge later ruled that jailbreaking an Iphone or Ipod was legal and that underground software vendors like Cydia could continue to operate.

[297] "Unintended Consequences: Twelve Years under the DMCA," *Electronic Frontier Foundation*, March 2010, February 28 2011, https://www.eff.org/wp/unintended-consequences-under-dmca.

The EFF specifically discusses how the DMCA stifles free speech, noting that web site providers and bulletin boards concerned about the DMCA's repercussions now prohibit members from discussing copyright protection systems, and scientists and security experts no longer publish details about their research.[298] The EFF notes the irony in the DMCA fallout, asserting that security has actually been weakened for copyright owners who depend on security research to protect their works.[299]

Every three years, the U.S. Copyright Office allows an appeals process that grants exemptions to the DMCA and its ban on the circumvention of antipiracy encryptions on cultural works. In 2003, the EFF lobbied the Copyright Office to revise the DMCA's stance towards four scenarios involving technological protections. The EFF tried to convince Congress to remove the copyright protection technology that permitted audio CDs to only play back on some devices, preventing access to consumers who have legitimately acquired the compact discs.[300] The EFF noted how the technology was overreaching in their letter, indicating that the CDs worked on some personal computers but not on other operating systems and that the technological measures were not designed to prevent the playback of music as much as prohibit individuals from making unauthorized copies.[301] Therefore, consumers had the right to circumvent the copy protection technology on products they owned, the EFF argued, since the playback was considered a private performance, which did not fall under the category of copyright infringement. Additionally, the organization sought exemptions on the use of copy protection technology on DVDs featuring

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[298] Ibid.
[299] Ibid.
[300] "2003 DMCA Rulemaking," *Electronic Frontier Foundation*, June 20, 2003, March 3 2011 https://www.eff.org/cases/2003-dmca-rulemaking.
[301] Ibid.

works already in the public domain permitting exemptions on audiovisual works and movies not released on region 1 DVD formats, and an exemption on DVDs where the copy protection technology disables the fast-forward functionality of a user's DVD during playback, forcing the consumer to view supplementary, promotional materials issued by the studios. The incorporation of a user operation-blocking (UOP) component is part of the overall mandatory licensing requirements set by the DVD-CCA as well as the DVD Format/Logo Licensing Corporation. The DVD-CCA requires that DVD players and discs include the blocking command framework within their architecture.[302]

The Copyright Office denied all of the EFF's exemption requests for 2000 and 2003; therefore, the organization decided to abstain from the lobbying process in 2006, explaining that the rulemaking process was simply too broken for them to participate.[303] In a letter from 2005 that the organization addressed to its supporters, EFF identified three fallacies in the DMCA's exemption process, namely that (1) an exemption can be granted for *acts* of circumvention but the Copyright Office lacks the authority to legalize circumvention tools,[304] (2) the exemption process is too complicated, and the sheer complexity of the rulemaking process requires a sophisticated, graduate degree level of understanding regarding legalese and copyright law; and (3) evidence has to be gathered that the proposed activity for

[302] Ibid.

[303] "DMCA Triennial Rulemaking: Failing Consumers Completely," *Electronic Frontier Foundation*, November 30, 2005, March 3, 2011, <http://www.eff.org/deeplinks/2005/11/dmca-triennial-rulemaking-failing-consumers-completely>.

[304] Ibid.

exemption is indeed non-infringing, demonstrating how people are being hurt by the copy protection tools, beyond simply being inconvenienced.[305]

In 2009, the EFF claimed three victories in these lobbying efforts. For the purposes of this project, the exemptions involving film and video are mentioned here. The Copyright Office ruled that amateur creators who believe that circumvention is necessary are not in violation of the DMCA when they use short clips from DVDs in order to create new, noncommercial works for reasons such as cultural criticism and comment.[306] Previously mentioned was Hollywood's consistent viewpoint, historically, that the ripping of DVDS was, without fail, violating the DMCA no matter the purpose. The Copyright Office also granted exemptions to college and university professors affiliated with film and media studies departments, allowing circumvention for the purposes of making compilations of portions of works for educational use in the classroom.[307]Sadly, the exemption did not allow individuals falling within this category to use an entire work as the Copyright Office indicated that high quality resolution film clips were not necessary to engage in cultural criticism. The Copyright Office instead argued that "other means" were available to educators at colleges and universities, such as screen capture software, and therefore circumvention was not necessary. The exemption also did not cover educators employed in elementary and secondary schools.[308] For now, the Copyright Office refuses to yield in every respect to those designated within the fair use caucus.

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[305] Ibid.

[306] "EFF Wins New Legal Protections for Video Artists, Cell Phone Jailbreakers, and Unlockers: Rulemaking Fixes Critical DMCA Wrongs," *EFF*, July 26, 2010, March 3, 2011 <http://www.eff.org/press/archives/2010/07/26>.

[307]*Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies*, ed. James H. Billington, (Washington, D.C: Library of Congress).

[308] Ibid.

Conclusion

In this chapter, I illustrated some of the key court cases that involved the DMCA brought forth by the Electronic Frontier Foundation with regard to film and media products. This chapter also highlights several landmark cases involving general digital products where companies were sued and put out of business for manufacturing DVD ripping products deemed to be violating the DMCA. The DMCA is an essential ordinance that needs to be in place for the trusted system framework to function. It allowed industry to impose new controls on consumers that were never available under previous copyright laws until the legislation passed in 1998. With the gradual shift of cultural products from the physical to digital universe, consumers experienced a paradigm shift that challenged the concept of property ownership altogether when the DMCA and its use of digital rights managements schemes was authorized by Congress. But copyright, as I mention, has never been about the end user. In the history of copyright, protocol involves an assembly of lawyers sitting around a bargaining table settling disagreements, and many critical questions pertaining to the consumer are simply not investigated. During the negotiations, a set of standards advocated by designated "interested parties" are codified and eventually enacted into law when representatives of certain affected interests come to an agreement over commercial and institutional uses of the copyrighted works being discussed. In her seminal work about the DMCA, *Digital Copyright*, Jessica Litman explains that the efforts of negotiating copyright bills are built on a network of compromises.[309]

The Copyright Office, a government institution that ideally has responsibility to function as the public's copyright lawyer, is, in reality, a flawed institution because

[309]Litman, *Digital Copyright*.

of a limited budget and perpetual turnover as policy staffs often come from and return to law firms. The law firms, it should be noted, frequently represent the copyright owners and habitually endorse the positions of the content industry. Similarly, while the Copyright Office has the expertise and institutional memory to function as both Congress's attorney and the premier authority on copyright for over a century, it also places the values of the copyright owners above citizens.[310] In the often-inhospitable environment of politics, political survival dictates that the participating actors quickly establish who their loyal constituency is, and private industry plays a significant role in the democratic process. The Supreme Court's recent reversal on the function of private industry and political advertisements illustrates the tenuous influence of money on politics in the political process.[311] Public interest has always been secondary to the concerns of industry in matters of copyright legislation, too. Individual end user concerns, or the private use of copyrighted works in an individual capacity, are not debated as representatives negotiate the arrangements of commercial and institutional applications.

In the DMCA's thirteen-year history, the movie industry's comments have typically addressed its battles against piracy rather than frankly discussing the ramifications of Hollywood's distribution control, and the consequences coming to those who challenge it. Generally speaking, selling a pirated work is "nothing" to the industry, but telling the public how the copy protection technology functions is the real threat.[312] I certainly witnessed this when I attended a CPTWG meeting and

[310] Ibid.

[311] Greg Sandoval, "MPAA, RIAA: Lawsuits won't protect content," *Cnet.com*, December 10, 2010, March 6, 2011, <http://news.cnet.com/8301-31001_3-20025357-261.html>.

[312] Ibid.

accidentally stepped into a DVD-CCA breakfast where discussions were exclusively centered on IP and computer code. For industry, the value of proprietary information cannot be overstated. The strong alliances that make up the trusted system's enforcement against intellectual property theft allow copyright owners to impose their own preferences on consumers, and industry control over its business models.

The trade groups representing the film, television and music industries know that the DMCA is not an effective option that provides a long-term solution for copyright protection. They tend to worry that the long-term litigation costs of high profile cases results in an enormous resource drain.[313] "The role of lawsuits in solving the online theft problem is clearly limited," writes the coalition that represents the MPAA, RIAA, and AFTRA (American Federation of Television and Radio Artists). The coalition looks back to the massive civil case against the file sharing service Limewire, which finally culminated in 2010 after four years of litigation.[314] Although the four largest record companies prevailed in the case when a federal court ruled that Limewire shut down their network, it was not a scalable solution to the problem.[315] To illustrate, in 2008 the RIAA's general legal bills totaled $17 million for which they recouped a meager sum of $391,348 in what is called "antipiracy" restitution.[316] The money recouped is the restitution paid by individual downloaders. Unfortunately, the coalition's solution to the economic drain was to seek even more copyright protection from the government.

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[313] Ibid.
[314] Ibid.
[315] Ibid.
[316] "RIAA on Suing File-Sharers, Appealing Tenenbaum Ruling," *Digital Journal*, July 10, 2010, March 6, 2011, <http://www.digitaljournal.com/article/294871>.

The following, concluding chapter looks at the future role that advocacy should play with regard to e-commerce and on the whole, summarizes the findings from this dissertation. Primarily, the chapter argues that the important relationships between copyright law, technology, and digital property will continue affecting citizens in numerous ways, and that consumer advocacy must reshape and reset the intransigent parameters of the DMCA legislation.

Chapter Five: Towards a Better Understanding of the Trusted System Framework and Copyright Control

Summary

This dissertation illustrates how the Motion Picture Association of America radically revised their methods of patrolling and fighting film piracy because of the digitization of media, digitization that was marshaled in by two prevailing developments. The invention of the digital videodisc quickly became an extremely profitable media for the studios. Similarly, in 1996 neo-liberalism policies based on deregulation helped the Internet expand to thousands of customers because telecoms began offering bundled services that were previously prohibited by Federal Communications Commission (FCC) rules. Both of these innovations allowed Hollywood to begin planning how it would bring digital content from the studios online.

At the same time, the MPAA was aware of the Recording Industry Association of America's missteps as it tried to protect music, and it needed a regulatory framework in place that assured the studios that their content would not be pirated. Although the content industries officially began distributing their music online almost a decade ago, much of the research regarding digital copyright still tends to center on the technological fences erected by the content industries without asking critical questions pertaining to government legislation, copyright law, intellectual property, and the various industry consortia supporting Hollywood's production, distribution, and exhibition efforts. Therefore, in this dissertation, I argue that it is essential to recognize the content industry's power as determined by the political-economic

framework of what Tarleton Gillespie calls the "trusted system," the relationships between the technological, legal, economic and cultural arrangements that make all the elements of a regulatory regime work together.[317] These exclusive arrangements are important because the MPAA relies on the strength of this "regime of alignment" to distribute video products. The trusted system is the interlinking of the technological, the legal, the institutional and the rhetorical in order to carefully direct consumer activity according to particular agendas. The system creates a scenario in which legislators and courts of law also consent to play a supportive role with privately organized arrangements that profess to be serving the public interest, but the arrangements are not designed for those ends.[318]

In a comprehensive four-pronged strategy that sought to limit the control of their products, the recording and film industries' use of digital rights management (drm) only played a minor role. Also supporting the regime of control is the passage of DMCA legislation that prohibited any content user from circumventing copyright encryption schemes. The DMCA, combined with legal efforts to prosecute users sharing and downloading content, along with prohibiting the production of tools and networks that facilitate sharing and copying, are similarly prohibited. The contractual arrangements between the content industries ensure that the guidelines imposed through law and technology are followed, and the special interests representing the content industries convince legislators that such systems are compulsory.[319]

In order to answer some of the questions about the MPAA's campaign against piracy between 1996-2008, in Chapter Two I looked at the history of the organization

[317] Gillespie, *Wired Shut*.
[318] Ibid.
[319] Ibid.

and chronicle its rise and establishment to become the world's most powerful lobbying group that promotes American cultural exports. The U.S. government's ties with the film organization run deep: Besides frequently recruiting high-level government officials to helm the association, Hollywood has ties to the U.S. government as far back as 1916 when it encountered international trade resistance and sought help from Washington to advocate on its behalf. Although film piracy is historically documented back to 1900 and the silent film era, Hollywood did not earnestly pursue it until it formed the Copyright Protection Bureau (CPB), an umbrella organization of the Motion Pictures Producers Distributors Association (MPPDA, 1922-1045) that officially began its piracy prevention campaign in 1940, and operated on contributions from Hollywood's eight film producers totaling $200,000 a year.[320]

After establishing the history of the MPAA, in Chapter Three I interview three central figures that currently or used to operate within the MPAA's regulatory regime, performing the legal, political, technical, or rhetorical functions necessary to protect Hollywood's film products. Dean Garfield worked first as an intellectual property attorney for the Recording Industry Association of America, and was recruited by the MPAA to become Executive Vice President and Chief Strategic Officer for the MPAA's piracy campaign from 2003-2007. In the interview, I ask him about his experiences functioning as a public personality representing the MPAA's piracy campaign. We also discuss the concept of the "trusted system" and how the MPAA worked with its partners as a seemingly collaborative unit. Garfield also talks with me about the "Who Makes Movies?" commercial where the MPAA created an advertising

[320]Segrave, *Piracy in the Motion Picture Industry*.

campaign that showcased employees who talk about the economic harm from piracy affecting ordinary people who work on Hollywood production crews. Mr. Garfield's comments regarding his tenure with the MPAA reflect a certain chaos that is not made plain in other interviews, specifically his reflections pursuing anti-piracy operations when the Digital Millennium Copyright Act had not been legally tested.

Also interviewed for this chapter is James Burger, founding member of the Copy Protection Technical Working Group (CPTWG), one of two organizations responsible for holding discussions centered on content protection technologies for film. The CPTWG originally came together when the film industry began discussions with the Consumer Electronics industry in 1996 regarding the technical specifications for Digital Video Discs (DVDs) and commenced out of initiatives put forth by the MPAA.[321] Mr. Burger discusses his background with both the CPTWG as well as the Secure Digital Music Initiative (or SDMI, which was a failed attempt by the Recording Industry Association of America to construct a secure digital music standard via the SDMI consortium), and offers his insight about the role that consortia play in the media industry's attempts to protect its digital content.

The MPAA's campaign to stop piracy ventures beyond the home video market; therefore, it was important to illustrate content protection as it relates to the professional cinema exhibition circuit. In this chapter, I also interview John Hurst, whose Burbank, California-based company, *Cinecert*, was selected by the six Hollywood film studios to convert Hollywood to a digital standard, which Hollywood argues is a higher quality, safer, and more economical alternative to film stock.

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[321]Gillespie, *Wired Shut*.

Cinecert is part of the Digital Cinema Initiative (DCI), which is the global name for this massive venture.[322]In this project, Mr. Hurst discusses the future of digital film distribution and exhibition, and the ways that film distribution now involves the major film studios delivering movies to theater chains on encrypted hard drives via United Parcel Service (UPS) or Federal Express, which is cheaper than placing content on film platters and subsequently using bonded couriers for delivery. Besides talking to me in detail about the ways that Hollywood secures its films for the exhibition circuit, Mr. Hurst describes his professional experience going from a studio-recording engineer to working as Chief Technical Officer at a major film postproduction house and the ways that digital product uprooted and transformed both the music and film business.

The notion of the consumer-producer and the reverse conforms to traditional interpretations of political economy because the audience is framed as "monetizing" the media industries. But in the world of illegal file sharing and bootlegging, file-sharers, peers, and other equivalents are not necessarily serving the media empires.[323] For this project, I provide a counterweight to the trusted system and interview two individuals who demonstrate economic and political resistance to conventional media production and distribution practices. I speak to Simon Petersen (pseudonym) who calls himself a "piracy consultant" and professional media bootlegger as well as Dan Mickell (also pseudonym), creator of *Movieland*, which is a software program that illegally downloads and streams film and television programs to Apple's mobile *Iphone* devices. Both of these individuals operate in their own individual piracy

[322]Holson, "Film Studios Reportedly Agree on Digital Standards."
[323]Napoli, *Revisiting "Mass Communication."*

networks and employ DIY (do it yourself) modes of engagement to counter conventional media making practices.

During the interview, Mr. Petersen describes a certain ethical barometer among bootleggers that tends to stray left of center when competition becomes fierce. As we discussed his professional responsibilities, Mr. Petersen conflated notions of copyright with code, and I extended this into a discussion about the ways that the DMCA protects the technological encryption scheme more than the copyrighted work itself. By simply circumventing the digital rights management code, individuals face potential monetary fines of $500,000 and a 5-year jail sentence under the rigid legislation.[324]

In my fifth and final interview, Dan Mickell, all of 18 years old, discusses his experiences as a computer engineer who sells unauthorized software via e-commerce vendors like Paypal and other sites. Besides discussing Canadian copyright as it pertains to his business, Mr. Mickell talks about the ways he uses offshore servers to house and distribute films and television shows to the *Movieland* program, a piece of software that is available for $7 USD and is compatible with Iphone mobile phones. Recently, federal regulators ruled that it was lawful to hack or "jailbreak" an *Iphone,* declaring that there was "no basis for copyright law to assist Apple in protecting its restrictive business model."[325] By jailbreaking the *IPhone*, it allows an individual to hack into a phone's operating system and extends the capabilities of the mobile handset by running applications not authorized by Apple. This important ruling was

[324] Patry, *Moral Panics*.
[325] "U.S. Declares iPhone Jailbreaking Legal."

added to a list of Digital Millennium Copyright Act exceptions with regard to anti-circumvention provisions. Mr. Mickell hopes to run a company like *Netflix* one day,

> In chapter four, I incorporate an historical investigation of the Digital Millennium Copyright Act (DMCA) and discuss some of the important legal cases that involve the MPAA and its lawsuits against businesses and individuals. More specifically, the chapter centers on the DMCA's treatment of DVD copying and fair use, which is constantly debated because the legislation glides over paramount issues through confusing and contradictory language. The chapter also looks at the technological controls that determine access and use of products and how the digital rights management schemes aid and abet incidences of copyright fraud.

Interpretation of Findings

My investigation has not just been about a private regulatory framework put in place to protect cultural producers from widespread piracy and lost profits, but instead is an illustration of 1) how a powerful regulatory regime protects its existing business models from outside influence and change, 2) how this regulatory framework tightly controls digital film production, distribution and exhibition so that content is under the constant custody of the copyright industries, and 3) how this scenario creates strong barriers to entry for external competition, as when an independent film festival is refused the option to rent cinema space under the license control of the Digital Cinema Initiative (DCI) group, or a DVD Copy Control Association(DVD-CCA) contracted hardware manufacturer opposes a copyright broadcast scheme that the MPAA deems as necessary to manufacture within a video

playback device, or a consumer advocate group opposes the restrictions placed on the DVD contents of purchased discs and the Supreme Court denies the group a hearing. In all of these examples, the MPAA's regulatory structure is solving social problems with legal and technical mechanisms that intervene in human activity while disappearing beneath business as usual.[326] The MPAA's trusted system is so covert, and yet so profoundly thorough that the DMCA goes so far as to prohibit an individual from prying off the lid of a DVD player and tampering with its mechanical parts. The interlocking of the legal, technological, institutional, and discursive thrives in part because individual scrutiny so often only sees each component functioning in isolation.[327] When Congress gave its authority to the copyright industries to determine the rules regarding cultural expression, the copyright industries could only envision the value of culture in terms of their own commercial survival and success.[328] With an act as far reaching as the DMCA put in place, concerns for the public interest and fair use can now only be heard every three years as part of the DMCA exemption process.

When I began to research the MPAA and its campaign against piracy, I entered the project with several pre-existing assumptions that turned out to be false. First, that the MPAA's already established dominance over the film market suggested that it had easily bullied its way through copyright infringement litigation over the 13 years of the DMCA's existence. I was also convinced that the MPAA's relationships with the other members of the trusted system were stable, and that its campaign to control content was based on mutually agreed upon objectives, but I was only

[326] Gillespie, *Wired Shut*.
[327] Ibid.
[328] Ibid.

partially correct. According to Dean Garfield, there were no established legal precedents to assist the MPAA in the digital world of file sharing and electronic theft, and the lack of any guiding legal paradigm perplexed the film organization because the law was constantly being rewritten in order to mediate market, institutional, and individual needs. And while the music and movie industry received extensive press coverage at the time they filed various lawsuits, in the end the money spent to litigate outweighed the actual money recouped from one case to the next.[329]

It is both baffling and amusing how the music and film associations actually overlooked their own economic interests to support the anti-piracy lawsuits, how the powerful media institutions on the one hand vehemently pursued a costly legal effort in the name of copyright infringement, but could not adequately control their spending. I am suggesting that the media associations are entirely ignorant about media piracy based on economics, their dearest subject: the coalition representing the MPAA, RIAA, and the American Federation of Television and Radio Artists (AFTRA) made their pronouncement that "the role of lawsuits is clearly limited" roughly 12 years after the DMCA's enactment; therefore, it was time to stop the money drain with the clearly overdue announcement.

Intellectual property attorney James Burger revealed that before the introduction of the DMCA and digital rights management use, many of his colleagues in the consumer electronics industry openly questioned the music and film industries' seemingly endless approach regarding the standards and codifications necessary to protect digital content. Burger's concern was not about individual end-user concerns,

[329] "RIAA on Suing File-Sharers, Appealing Tenenbaum Ruling," *Digital Journal*, July 10, 2010, March 6, 2011, <http://www.digitaljournal.com/article/294871>.

but the 49 pages of technical documents crafted by the MPAA that determined when a DVD device could record and copy content. And at a meeting with MPAA President Jack Valenti, Burger told the MPAA that the Consumer Electronics Industry would not adhere to such rigid legislation.[330] Now, after the passage of the DMCA and the incorporation of the MPAA regulatory framework, the hardware manufacturers who disapprove of the content restrictions sought by the copyright owners must accept the terms of the contract signed with the DVD-CCA and the Blu-Ray Disc Association (BDA) or get out of the game altogether.[331] This kind of contractual servitude is evident with all the moving cylinders of the trusted system: Gillespie notes that the methods that the media industries incorporate to intervene into the practices of their consumers to regulate copying, as well as to extract payment, requires the systematic alignment of resources around the use of digital content.[332] To focus on the technical encryption schemes, or the legislation, or the economic arrangements is not enough to understand how the MPAA protects its properties. Gillespie argues that the set of associations must be examined.

The studios' campaign to stop piracy relied heavily on the DMCA, which had not been legally tested and ultimately placed the MPAA in the uncomfortable position of finding firm legal footing as it battled a myriad of opposition. The uncertainty of how to proceed with certain elements of the piracy campaign is made plain in my talk with Mr. Garfield, from litigation to advertising campaigns. Although the MPAA pursued and ultimately shut down *Napster* for copyright infringement, the organization's legal team was clearly unprepared to handle a case of

[330]James Burger, telephone interview with Matthew Cohen, January 24, 2011.
[331]Gillespie, *Wired Shut*.
[332]Ibid.

the magnitude of *Grokster*, where 8 million unauthorized files were available via its p2p networks versus *Napster*, and the courts deemed only 12,000 infringing files were being shared.[333] The MPAA found the Supreme Court to be extremely supportive of the DMCA and the publishing industries and determined that *Grokster's* creators were liable for inducement, and the court stated that it was not altering the law and yet proceeded to change it by moving the line established by the Sony doctrine.[334]

The MPAA's trusted system framework mirrors other industries where deregulation, conglomeration, and consolidation created monopolies, erecting enormous barriers to competitors. In Los Angeles, by the 1940s, Hollywood was a vertically integrated institution and had control over every inch of the film business, from the actors to exhibition. But what does this tightly controlled framework mean for the future of copyright and consumer rights? Historically, I am comforted by the fact that other information empires have gone from being open to tightly controlled industries and back to being less regulated. The Paramount Case, which was tried twice in 1948 and in 1962, finally ended when the Supreme Court agreed with independent exhibitors that block booking violated anti-trust laws.[335] Following the decision, Paramount scaled back its company and went into serious financial decline, eventually making deals with independent filmmakers to stay financially afloat. After its various subsidiaries split, the company was a shadow of its former self because the courts forced the studio to sell its theater circuit, the company released its

[333]Bridges and Kendall, *MGM et al*.

[334] Jonathan Band, "So What Does Inducement Mean?" *Computer and Internet Lawyer* 22, no. 11 (2005).

[335] Tim Wu, *The Master Switch: The Rise and Fall of Information Empires* (New York, New York: Alfred A. Knopf, 2010).

contract players, and it scaled back on its studio releases. When Gulf and Western's Charles Bluhdorn bought the company in 1966, Paramount suddenly grew and expanded again, and the studio produced some of the most critically acclaimed films of the time under the supervision of Robert Evans, who was appointed by Bludhorn to become head of production.[336] In the case of Paramount, it was the government, or Federal Trade Commission, who intervened on suspicions that Paramount's business model accorded the studio a monopoly and unfairly restrained trade. In the case of digital rights and copyright control, the weapon for an assault may be a certain invention or technology that breaks through the defenses and becomes the foundation for an insurgent industry, like p2p file sharing and Internet piracy. But the invention itself is not necessarily the sole impetus of this insurgence either, as I have argued. At the same time, consumer advocacy and political action can provide the necessary impetus for political change. Theoretically, the ability for the MPAA to enable the trusted system over consumers requires public consent because consent cannot be taken by force.[337] The trusted system's ability to evade scrutiny has been called a form of "heterogeneous engineering" where the trusted system designers are system builders, designing both the material artifacts as well as the economic, political, social, and cultural arrangements that will best help the system function properly.[338]For example, the speed bump on a street cannot function alone, although it seems to. Instead, it requires the combination of imposing speed limits and financial penalties, of shifting cultural attitudes about speeding, and taxing the sale of

[336]Ibid.
[337]Gillespie, *Wired Shut*.
[338] John Law, "Technology and Heterogeneous Engineering: The Case of the Portuguese Expansion," *The Social Construction of Technical Systems: New Directions in the Sociology and History of Technology*, ed. WielbeBijker, Thomas Hughes, and Trevor Pinch (Cambridge, Massachusetts: MIT Press, 1987).

sports cars to reinforce the preferred behavior.[339] The public "consents" to the MPAA's arrangement to lock down digital content because it lacks enough economic and political power to frame the digital copyright debate on its own terms. While looking to the natural progression of open and controlled fluctuations in industrial information empires, I can take solace knowing that increasing public knowledge about the MPAA and its liaisons will bring political action and eventually defeat the monopoly. There is no arrangement, political or otherwise, that can function successfully over time in the face of broad public dissent. In the summer of 2003, the House was deciding to overturn one portion of the FCC's decision to relax the rules regarding media ownership, and the non-profit organization Free Press e-mailed hundreds of thousands of people, organized by their congressional district.[340] The e-mails urged citizens to contact their representative in Washington to express how urgent overturning the decision was, and an estimated 40,000 callers expressed their dissent, and the bill was eventually returned to its previous state. During the years that Michael Powell ran the FCC, especially, digital activism came to the forefront. I am not naïve, and realize that it takes more effort now to reach people about critical issues more than ever. We need individuals who are not afraid of being independent to push the boundaries of debate in the future. And if they are scholars doing media research at Universities, I can only hope that their stated positions are respected and that dissent does not lead to any negative political ramifications.

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[339] Tarleton Gillespie, *Wired Shut*.

[340] Robert W. McChesney, *Communication Revolution: Critical Junctures and the Future of Media* (New York, New York: The New Press, 2007).

Study Limitations

There are several limitations to this investigation. In *Wired Shut*, Tarleton Gillespie discusses the political relationships that form a portion of the trusted system, and I was unable to interview a current or past president of the MPAA, although I certainly tried. As a matter of principle, the MPAA president leads the rhetorical charge against piracy in the trusted system, and also helps identify proponents on Capitol Hill to promote anti-piracy legislation. An official interview would have strengthened this investigation.

Further, much of my investigation discusses copyright law where I address many of the important legal cases that set precedents regarding file sharing, DVD copying, fair use, and the first sale doctrine. Although I feature two well-known attorneys in my interviews whose work centers on entertainment law and intellectual property, I am not a legal expert. For this investigation, I conducted an extensive literature review and studied a broad range of legal research and press documents regarding the Digital Millennium Copyright Act, as well as the MPAA and its 13-year history with litigation. Additionally, I frequently spoke with my attorney consultants when the various intellectual property legalese ventured beyond my understanding.

There was limited literature available that addressed the industry consortia and working groups like the Copy Protection Technical Working Group (CPTWG), an association that helps to design the standards and codifications for software and hardware that give the members special interest in the overall outcome and encourages an environment for anti-competitive activity. Additionally, I attended one

CPTWG meeting; therefore, my information regarding this organization is limited to the one visit.

Suggestions For Future Research

The results of this investigation have several implications for future research. This section will address recommendations in the following areas: 1) The relationship between the president of the MPAA and Capitol Hill with regard to copyright protection and trade, 2) The relationships between working groups and consortia and their influence on proprietary standards that prevent other hardware and software businesses from successfully competing, 3) The relationships among licensing groups like the DVD-Copy Control Association or the Blu-ray Disc Association (BDA) and the institutional power given to the organizations by the MPAA so they become the dominant disc format.

Despite the literature that has been written about the MPAA and Washington D.C., the size and scope of the MPAA's influence on lobbying with regard to trade and copyright issues is not clear. Although there are books about the intimate connections between Hollywood and Washington in terms of star personalities (*The Power and the Glitter* by Ronald Brownstein talks about the Hollywood-Washington connection in terms of studio heads, actors, and politicians) it is unclear how the MPAA, as an organization, identifies a politician who can advocate legislation on its behalf.[341] When Senator Fritz Hollings (D-SC) endorsed the Consumer Broadband and Digital Television Promotion Act (CBDTPA), otherwise known as the "Hollings

[341]Ronald Brownstein, *The Power and the Glitter: The Hollywood-Washington Connection* (New York, New York: Pantheon Books, 1990).

Bill" in August 2001, it was the most ambitious legislation that imposed copy protection on manufacturers of all digital media technologies and was widely criticized as a draconian effort to cloak every digital device with DRM trusted system surveillance technologies.[342]Fortunately, the bill never passed the committee stage, as consumers and hardware manufacturers alike criticized the broad range of the bill, specifically the cryptic language that defined "digital device." Nevertheless, the MPAA wholeheartedly endorsed the Hollings Bill and, despite the bill's failure to pass, the film organization went on to draft the Digital Transition Content Security Act (DTCSA), which required manufacturers of devices that were capable of converting analog to digital content to insert a mechanism that identified all copyrighted content.[343]The MPAA, with the help of President Dan Glickman, eventually introduced the DTCSA legislation to the House in 2005, and efforts to close off the "analog hole" in consumer electronics devices officially began. Future research should investigate the ways in which the MPAA enlists the state to enforce its content protection agenda. There is much to be learned about the effect of the media industries' lobbying on legislation, just as more information is needed with regard to how the MPAA arranges the discussions with its various consortia to discuss new video standards.

The technical working groups mentioned throughout the chapter that meet to discuss technical formats, groups like the Secure Digital Music Initiative (SDMI) and the Copy Protection Technical Working Group (CPTWG), are thought to be a more effective way to coordinate and resolve technical decisions rather than official

[342] Gillespie, *Wired Shut*.
[343] Ibid.

standards-setting organizations (SSOs) such as the National Institute of Standards and Technology (NIST) or the Internet Engineering Task Force (IETF), which, although they value openness and participation in the process, tend to work at a snail's pace.[344] Gillespie notes that standards are now being negotiated by a wide array of trade associations and intra- and cross-industry consortia that, while they are careful not to pass themselves off as standards organizations, proceed to develop technical working groups within which to pursue shared technical arrangements. It is not clear how the members of the consortia manage to work cooperatively when they are actual competitors in the marketplace, nor is it clear how these groups are considered legal bodies when it appears that their efforts to set standards and arrange inter-operability between devices and content appears collusive and has the appearance of violating anti-trust laws. When I brought my concerns regarding collusion and exclusion to the attention of Mr. Burger, the founding member of the CPTWG, his response was "Then what is the alternative? Not have a DVD disc format at all?"[345] When I attended the CPTWG meeting in January 2011, a memorandum of understanding that was read out loud to participants stated that no member could discuss their employer's business plans, nor could members speak with the press. The combination of being neutral and non-disclosing is a curious position for a working group to adapt as it discusses critical matters pertaining to the public interest. It is clear that more research is needed in this area, although it is very hard to gain access to these kinds of consortiums. As I mentioned, the CPTWG opened its meetings to the public because of external advocacy group pressures, and at least for the time

[344]Gillespie, *Wired Shut*.
[345] James Burger, telephone interview by Matthew Cohen, March 14, 2011, transcript.

being only a two-hour window exists at each meeting for citizens to attend the event. Obviously, the CPTWG does not admit any individuals affiliated with the press.

Finally, the DVD-Copy Control Association and the Bluray Disc Association are the primary licensing authorities that impose the specifications on consumer electronics hardware so media behaves according to guidelines established by the MPAA. Companies with deep pockets tend to battle their opponents in a kind of warfare called "standards competitions" where the goal for market dominance is not good for the consumer. When a company loses the competition, like a Sony with the Betamax recorder or a Toshiba with the High Definition-DVD (HD-DVD), it generally proclaims after defeat that its standard is superior (but the market missed it) and avoids plugging the new format as it begrudgingly cedes to the winning group. Although Toshiba actually chaired the DVD Forum, it eventually lost out to the Bluray standard in 2008 after a prolonged 2-year battle where both technologies came to market within a 2- month span in 2006 (April for HD-DVD, June for Bluray), and consumers were supposed to decide which format would survive. Toshiba spent a cool 1 billion dollars over the 11-month campaign to be the winner, but its competition included industry heavyweights like Panasonic, Pioneer, Sony, and Mitsubishi who managed to convince its team that its technology was superior.[346]Toshiba finally announced that it would exit the HD-DVD business altogether in March 2007.[347] When I attended the Copy Protection Technical Working Group (CPTWG) meeting in Los Angeles, I was conferring with a Sony

[346] Hewlett Packard was an early endorser of Bluray technology but threatened to shift its support to HD-DVD if the engineers failed to include mandatory managed copy in the Bluray specs. Mandatory manmanaged copy is a copy protection system that permits consumers to make limited copies of their purchased Bluray discs.

[347] "Toshiba: 1 Billion Dollars in Losses," March 13, 2008, July 11, 2011 http://www.tvpredictions.com/toshibaloss031308.htm.

engineer about the HD-DVD vs. Bluray video format wars, and the gentleman from Sony leaned over to his Toshiba colleague and whispered, "HD-DVD," and the Toshiba engineer smiled sheepishly, perhaps still reeling from the embarrassment of losing. When a company's format is proclaimed by the market to be the preferred standard, as Bluray did when Toshiba conceded, the winner can flourish in a home video market that earns at least $30 billion a year.[348] Home video profits actually surpassed Hollywood box office receipts in 2005, and the market is extremely competitive. What is the relationship between a licensing authority such as the Bluray Disc Group (BDG) to the MPAA and the rest of the consumer electronics market, and what are the standard operating procedures? How do these various political, legal, and technical institutions conduct business and confer authority upon the licensing groups, making them exclusive? This is unchartered research terrain that needs to be investigated.

Conclusion

As I talk about the areas of copyright research that have yet to be discovered, I look back at what I set out to do in Chapter One and encourage readers to not be pessimistic about the findings. My investigation looked at the ways the MPAA radically altered how it managed its film properties between 1997-2008, a period of history where the concept of property radically shifted in the transition from the physical to digital world. The MPAA used a system of copyright control that relied on trusted systems, interlinking a legal, technical, institutional, rhetorical, and economic approach to controlling product in the production, distribution, and

[348] Ibid.

exhibition phase. Just as the MPAA carefully manages content in its partnerships with computer engineers and consumer electronics companies for the home theater market, it incorporates a sophisticated "control lightly, audit tightly" approach with its theater exhibitors where systems log everything that theater employees do. In the event of a piracy dispute, the studios have logs that can be pulled from their equipment, similar to a "black box" that records every action on an airplane. The exhibitor circuit has never been as tightly supervised as it is now in the digital age, with the Digital Cinema Initiatives (DCI) program.

Three years ago, former MPAA president Dan Glickman went as far as calling digital rights management schemes a consumer "enabler," because the locks on content allowed individuals to watch media anywhere, anytime, seemingly in a high definition pipedream. Regardless of what the technology is called, behind the clever veneer of copyright control is a rapid corrosion of consumer rights that, in the end, results in an unfair exchange between the content producers and consumers.

The Electronic Frontier Foundation played a major role in shifting attention away from the copyright industries and championing the role of fair use codes and DMCA activism. Asserting and defending fair use rights is part of the development of a more balanced copyright policy that helps to build, aggregate and share knowledge.[349] Tomorrow's generation will depend on advocacy groups that defend and bring lawsuits against individuals and companies in order to protect their digital rights. Besides the EFF organization, a system of copyright entitled Creative Commons licenses allows the individual owner of a work to use a license that

[349] Patricia Aufderheide and Peter Jaszi, *Reclaiming Fair Use: How to Put Balance Back in Copyright* (Chicago, Illinois: The University of Chicago Press, 2011).

enables a generous or a restrictive approach when it comes to the use of a work, allowing copyright owners who want to be generous with the distribution. Creative Commons does not forgo copyright, however. All Creative Commons licenses include some conditions, varying from one work to the next. DRM code is banned from Creative Commons licenses altogether, reinforcing that copyright control does not require technology to intercede in any way, shape or form. This is the sort of future for copyright reform that I envision, one that Patricia Aufderheide describes where copyright policies one again encourage new creations, providing ways to get unlicensed access to copyrighted works in order to encourage new creators. The scenario I describe will involve an orchestrated campaign to reform copyright. For now, the strongest way to intervene in DMCA legislation is to be involved with the advocacy groups who have successfully intervened at the Copyright Office every three years. The DMCA margins are being tested, and shifting gradually towards the side of fair use.

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No. C 04-04862 WHA
ORDER DENYING PLAINTIFFS' RENEWED MISCELLANEOUS ADMINISTRATIVE REQUEST PURSUANT TO LOCAL RULE 7-10(b) FOR LEAVE TO TAKE DISCOVERY PRIOR TO RULE 26 CONFERENCE
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Appendix 1: Transcription of Dean Garfield Phone Interview

July 15, 2010

Me: You've talked previously in interviews about the mistakes the Recording Industry Association of America made when it came to fighting piracy and how these were mistakes you didn't wish to duplicate when you came over to the Motion Picture Association of America. Can you talk more about this?

Dean Garfield: One of the things we tried to do at the Motion Picture Association was to learn lessons from the experiences of other industries and certainly the recording industry because they were one of the first to be significantly impacted certainly on the revenue side by the digital transition and the ability for people to, on a mass basis, to rip content. Uhh, and some of those lessons were you know, one making sure our communication with consumers was clear and making sure they recognize that the industry wanted to provide a wide range of consumer choices and meet consumer demand. Two was to be as clear as possible about the repercussions of engaging in piracy both for the long-term health of the content they were interested in but the kinds of people that piracy generally supported because there was a lot of evidence and still a lot of evidence that those who are heavily engaged in piracy are involved with organized crime. There's actually a report out published by the RAND Corporation making this particular connection. And so those were some of the lessons that we learned. The one other important lesson was that technology was going to be an important part of the solution set but not the only solution. So recognize that whether it be technology or litigation which were two tools that were used by the recording industry, it had to be broader than that.

ME: Besides technology and litigation, what were some of the avenues discussed in terms of dealing with piracy and working with consumers?

Dean Garfield: First and foremost working as quickly as the industry could to create digital alternatives. You know, a wide range of platforms consumers wanted to experience it on. So, people wanted- we were transitioning into a mobile society with multiple devices and multiple screens so people wanted to enjoy motion pictures on all of those platforms. So recognizing that we were working aggressively to come up with technological solutions to be able to provide and supplement that desire and encourage that desire. And then two is a lot of education so even where litigation was being used on the motion picture side the metric for success wasn't the number of people we sued what the size of the litigation settlement it was are we having an impact on educating people on the repercussions of engaging in piracy.

ME: Going back to when you first joined the MPAA, I'm curious were you approached by the MPAA to join the organization?

Dean Garfield: Correct. Yes.

Me: For many years I know certainly when Jack Valenti was helping the organization it seemed to me that he was the very public face of piracy and then when he retired and then Dan Glickman came on, it seemed and correct me if I'm wrong but it seemed that Dan Glickman played a very different role and was more in the background and I've been reading a lot of interviews that you've done and it seems you became more of the public face of the campaign against piracy. Is that fair to say?

Dean Garfield: Ahh... I guess partially. You know, Dan placed a lot of emphasis on the issue as well but also when he came in the industry was experiencing fairly significant downturn in revenue and so he spent a lot more time on trying to come up with various solutions for driving and understanding what was going on on the revenue side so I took on more of that role with some of the content protection issues.

Me: Was there a discussion that he had with you or other folks with the MPAA where they said that they wanted you to actually be this public face?

Dean Garfield: You know, I don't recall whether it was that well calibrated (he chuckles) I think it was-you know, we had many a strategy session and at the time I was also transitioning between running our litigation efforts on a global basis and also running our strategy (laughs again) and so I think because of the dual role I played with the organization it just happened almost by default. Played out that way.

Me: Okay. Yeah. Again, because I'm looking at the various publicity campaigns that the MPAA put forth and the way the consumers reacted and so those power dynamics are really interesting in terms of who's controlling the shots, who's calling the shots so I was just curious if there was any sort of internal discussion about you-

Dean Garfield: I mean one of the discussion points internally was making sure that whatever we did since much of our focus was on education would resonate with the folks we thought that were engaging in piracy and so the fact that I was the fact that I was in my early or mid-I was still in my early 30s I guess you know, it made sense for me to be out front on all these issues. The other thing was that I developed a relationship as it turns out (he laughs) with a lot of the developers of the

sites that were most problematic for us. And so I just developed a deep understanding of what they were doing some personal relationships some of those guys are people that I keep in touch with and so I think because it was easier to play that role.

Me: You were involved with the whole issue with Bram Cohen and BitTorrent, weren't you?

Dean Garfield: Yeah... I still keep in touch with the folks at Bittorrent. And Kazaa,
as it turns out.

Me: Yeah. Because I know there was a concentrated effort for the MPAA to convert BitTorrent into a for-profit venture. And I'm wondering after many years later do you think your goals were met in terms of… I mean the goal was to lower the occurrences of piracy, to take something that was losing revenue for the movie studios and make it profitable. Were goals met in terms of lowering piracy?

Dean Garfield: The honest answer is I don't know. I'm no longer privy to the data that they get on rates and incidences of piracy. That was certainly one of the goals to reduce the rate of piracy. The other was a proof of concept, which is would people flock to and take advantage of legitimate alternatives that were being developed by the studios? And so that BitTorrent relationship was an early attempt to figure out could you convince people to take advantage of legitimate offerings and I would say that was a complete success one because it resulted in a move towards the adoption integration of content recognition technologies and created a whole new space in technology. And then two there are now a whole range of legitimate sites that are working to get licensed content from the studios. At the time that deal and relationship with BitTorrent was struck, neither was the case.

Me: The MPAA actually approached Bram Cohen, isn't that correct?

Dean Garfield: Yeah. Both Bram and Ashwin, who was his business partner. Ashwin Navin.

Me: What were Mr. Cohen’s initial responses when you discussed this relationship?

Dean Garfield: I don't remember. I suspect my recollection is there was some trepidation but the other thing you know we built trust in a relationship of trust over time. So it wasn't like hey Bram and Ashwin, let's get this done. You know it was, “Let's talk this through. Let’s figure it out about how this can work for you and how it can work for the

industry. You know, it took convincing on both sides. The studios didn't buy into it immediately either. And so, part of the work and leadership involved was bringing Ashwin and Bram to the table, but also bringing the studios as well.

Me: So the studios had some trepidation then. What were some of the concerns of the studios in working with BitTorrent?

Dean Garfield: The same. They're not trustworthy. And that their sole commitment was stealing content and making it available on mass scale for their sole benefit.

Me: Right. Because you had talked about how the new publicity campaign for the MPAA was to embrace technology and it sounds like that took a while for the MPAA to realize that technology could help move them forward and move their content outward. That old paranoia was still there.

Dean Garfield: Yeah. I think there was the recognition-that part required less work although it required some work. The more challenging part was are these trustworthy people who will use that technology for meaningful, positive mutually beneficial purposes? There was some concern that that was not the case. There was also-we ended up doing something similar with a whole host of other sites including... I'm forgetting. They're in the Netherlands. Spy...?

Me: Torrentspy?
Dean Garfield: No. It wasn't just Torrentspy. Maybe it was. It was a really big one at the time. Because I remember going to the Netherlands and negotiating with the guys who owned it. (He laughs). And it was very similar-a lot of distrust and concern.

Me: Sure. What was the best way to gain trust and to show that the MPAA was very serious and wanting to have a collaborative relationship?

Dean Garfield: A couple of things. One, staying true to commitments we made on our side of the MPAA and then two, was trying to show that there was over the long term real upside from a partnership of the studios and so that work was less about the MPAA and more about the studios. And so the thing that we could do was get them connected with the right people-host that introduction, and then the studios would make their own independent decisions that made sense for their own best interests. But at the very least, we could try to get them connected to the right people.

Me: So the studios needed to give them content because "content is king" as they say. And I know that the MPAA, through the years when trying to negotiate contracts with various folks, have always used content as their leverage. Either they will give content to whomever they're working with, or they will withhold it. That's a pretty effective tool to work with people. (Laughs)

Dean Garfield: (laughs) It was less us than the studios. You know, our role was more of as a "convener" which sometimes can be an impactful role. The real influences are the creators and those they work with at the studios. And sadly… and this remains the case today… there are even instances where the studio may want to do something but where the folks who are producing or otherwise creating the content would have to be persuaded in making their content available on new modes of delivery was a good idea.

Me: Yeah. It's very interesting about the various personalities you were dealing with at the MPAA, but you also had the six film studios and their input in terms of how to deal with the piracy phenomenon. Can you talk about some of these personalities that you were dealing with? Maybe talk about either in a specific or general way some of the agreements or disagreements you may have had with some of these folks.

Dean Garfield: Yeah. You know I think they ran the gamut and I don't think any of the Studios behaved consistently throughout the process. So David Kendall from Williams-Conolly was one of the lawyers was heavily involved in this stuff, and he and I were at lunch the other day and we don't normally talk about this stuff but it turned out that we did. And you know, just noting some of the personalities that were at play. (Laughs) It was-the one thing, the one lesson that I learned about California was that everyone has talent there. So no matter whether you're in front of the screen or not so there were lots of big personalities that you just have to work through and manage. And when you-when it involves the law and litigation, it becomes even more difficult because you're not always dealing just with the legal issue. You're also dealing with-there's the legal issues that were complex enough at the time because they were all very new. There were the people and personality issues where everyone thought their idea was eminently important and deserved to be one that won the day. There were also the business issues which is these six companies... at one point, seven-were are all major competitors. And so at times, their competitive spirit would play out as you were trying to advance a common goal. There are layers and layers of complexity trying to get everyone on the same page.

Me: You're a true diplomat. I appreciate that. It takes real talent to work with folks like that where everyone believes their right, and through my discussions with other folks in the industry dealing with content protection it seems like that there is some unanimity that-a lot of these folks felt that Fox specifically had very different ways, or very different views in terms of how to manage content and that sometimes, there were stances taken by that particular studio that may have prevented things from moving forward.

Dean Garfield: Hmm. I don't know. No. I mean, I was the person managing the litigation. Look, we all approached it from different perspectives and came away different. The one -- the unique thing about where we were is that we heard from everyone because at the time I was coordinating a lot of this litigation and so unlike some of the other studios or people they saw it from their perspective. I would say that sure, each of the studios had their own personality and their personality probably stood out. At least, Fox to the extent that a studio can have a personality, but certainly a culture. They probably stood out because they were more aggressive in advancing their perspective at certain points in the litigation. But I don't think that necessarily resulted in delay and prevented us from doing anything. I think more than anything they just wanted to be really aggressive (laughs). And there were other studios, perhaps, more and that's not to suggest that Fox wasn't cerebral, but more cerebral. Warner Bros., for example, had a litigation team that included folks who spent hours and a lot of time grouping over these issues and were very cerebral about it and so you know, you've got those sorts of dichotomies where groups of folks who have thought about it think here's a particular road and it may end up because they thought about it for so long it may it end up being a little more conservative and others like Fox who think we've got to be as aggressive as possible and take this approach in advancing our agenda. I think it worked because the issues were so new and so complex that schism and diversity in perspective actually helped us to navigate it all in a way that made sense because we weren't pulled to any one extreme at least on a consistent basis. The reality was there was no law or guiding principles so we were all figuring it out.

Me: Wow. Is there one particular disagreement that you can talk about that you remember? Anything in particular with the studios?

Dean Garfield: There were tons. (Laughs).

Me: Is there one where you can actually articulate to me where there was a problem and a solution that was implemented?

Dean Garfield: A big one was that each stage in the Grokster litigation for example, we lost twice before we ultimately one at the Supreme Court. So, there were divisive agreements on one, what legal theories to advance? And then two, who should be our lawyer? At the District Court, (and this is all part of the public record) the person who argued the case at the District Court was David Kendall. The person who argued the case at the Court of Appeals was Russ Frackman. What happened to David? (Laughs) And the person who argued the case at the Supreme Court was Don Virelli. So what happened to Russ? So, you know I think some of the smaller disagreements ultimately rolled up into choice of counsel at each stage we were unsuccessful. Those were really challenging because each of those counsels had long-term relationships with particular studios and particular record companies because that case, in particular, was one in which both the entire industry was aligned. So is the motion picture industry, the publishers, and the record companies and so were a lot of strong personalities that had to be managed and what was due after each loss became the tension.

Me: And because that's a matter of public record, these legal issues, these legal battles, it sounds to me like I would be able to figure out personalities just by going through some of these court documents. Would that be a fair thing to say?

Dean Garfield: Some of it. (Laughs) We tried not to have that reflected in the pleadings, but you know just the public record of who argued the case was the point I was making. And something prominent was that no one was volunteering to step aside. And so where I'm sure David would love to have argued at the Court of Appeals, and I'm sure Russ would've loved to have taken the case to the Supreme Court…

Me: The whole idea that I'm advancing in my dissertation and I want to run this by you to get your opinion about this and see if you can add a little bit of your own input here is that my dissertation looks at the idea... are you familiar with the idea of a "trusted system? Basically, the whole idea of a trusted system which I think can really be applied to managing content with Hollywood and the recording industry and media industries in general is that generally there is a collaborative effort to manage content through political relationships, through technology, through legal frameworks that have been put into place, certainly through contractual agreements and arrangements with studios and with content producers and hardware manufacturers and all of that. And that all of these elements have to work together for this regime-for this trusted system to be a cohesive unit and to be effective. So for example, the DMCA is the legal portion of the trusted system. With the DMCA, a person can't circumvent any sort of protection, you can't produce any tools to tamper with the antipiracy mechanisms, you can't create

networks that facilitate sharing, then you've got the whole DRM, the incorporation of DRM which is certainly a technological barrier and then there's also legal ramifications for messing with the DRM. Then you also have the contractual agreements between companies to ensure that there are guidelines imposed through law and technology to make sure that they are all followed, and then there are special interests who are representing the content industries which convince the legislators that these systems need to be in place.

Dean Garfield: And how does trust factor into that?

Me: Well, the trusted system basically speaks to all of that. That all of these sorts of elements have to be in place, and they all have to be working together in order for content to be controlled. In order for it to be managed. And if one particular element isn't functioning properly, then there is a leak in the system and I'm wondering if you can speak to that? Looking back on your time with the MPAA, and the RIAA between these different elements that I'm talking about: the legal, the technological, where did you see leaks occur while you were working there?

Dean Garfield: When you say leaks, what do you mean?

Me: I mean, looking at these elements as collaborative units in terms of all working together, the legal, the technological, you have the contractual agreements between the different players-looking back on your efforts with the MPAA, did you see any particular problems either from a legal, a technological standpoint from some of the individuals you were trying to work with, to produce content with, did you see the leaks in the system at times? Or are you fairly comfortable with all of these elements working together and the strength of those partnerships?

Dean Garfield: Good question. It probably requires more thought than I'm giving it. But here's my initial impression: There were many problems (laughs) and I'm intrigued by-I'm not familiar with the idea of the trusted system but I'm intrigued by it because it all suggests that these are integrated systems that work well together and presumably would work better over time together as they become more integrated and trust is built. My sense is, in hindsight is you had these pillars and some sort of system in place and that you had institutions, well-established institutions, you had a legal regime and all of these people and personalities and technology but the relationships were, and the integration of all of those systems were fairly new. And so we were figuring out what kind of system we wanted to create in a time that was pretty chaotic and disruptive. And so there were many occasions in which it worked fairly well, but perhaps more occasions where it just

didn't work well at all. I would say that it worked better at the MPAA than it did at the RIAA but that may have been just a factor of time in that we had more time for cohesiveness and integration and trust to develop among the various systems. The law was exceptionally unclear, you had legislation in the DMCA that was untested, particularly as it related to the challenges of the time, so we were all trying to figure out in grappling with some solid foundation while all the while realizing that whatever solutions we were coming up with at the time were intermediate because the real long-term solutions were ones that we could not immediately deliver, which is allowing people to enjoy and appreciate the content wherever, whenever they wanted to.

Me: I appreciate your input there. It's a somewhat sophisticated concept to have you think about in 10 seconds.

Dean Garfield: I'm willing to do it. I mean, it's intriguing. I'll actually have to read your dissertation to see how it all fits together.

Me: You know, the whole idea of a trusted system doesn't presuppose that these systems are inherently in place. That is to say, it suggests that the relationships build over time because of particular efforts coming from somebody who spearheads them. And the suggestion in my dissertation is that it's really sort of the MPAA that wanted to create it, and that was based on what the RIAA had to deal with. That the MPAA was interested in producing more of a industrial-strength situation where they have the law on their side, but also they had technology on their side as well to enforce the system.

Dean Garfield: Yeah. I agree with that. I think it was-the one thing that I would say is when I transitioned from the RIAA to the MPAA, I took a lot of brain power with me in the sense that we'd just started to build a relationship with a group of outside technologists. I took all of them to the MPAA. Kelly Truelove, who was really the brains behind a lot of this stuff, and Kelly, and Steve Fabrizio and I would spend hours and hours trying to figure this stuff out. You know, and so early on the RIAA had this heavy emphasis on going after individuals, and one of the things that Kelly and I realized in the early years of the motion picture industry is that there were all these central servers involved. So we developed a strategy around why sue the people if you can go after the servers and collapse these networks? And so we had that strategy, and it worked like magic. (He laughs) And then Gnutella came on board, and it became decentralized and so that strategy-it became like that worked for the moment. And so, part of it was yes, we had, we wanted to have the law on our side, we wanted the technology on our side, but I think the other element that we wanted on our side was the people. And, you know, that took place over time. But I think me and Kelly realized that

that was an essential part of this, so, hence the heavy emphasis on education, on the motion picture side as opposed to the RIAA, which they got to as well. The heavy emphasis on building relationships with developers, from these software companies-so, you know, we just realized there was no silver bullet and that we had to engage in a strategic campaign that had multiple layers to it. But we did, and I think, overall, it proved to be fairly effective. And now, there are legitimate alternatives which we had in mind all along-they just had to be-you had to have legitimate alternatives so you could drive people to something-not just drive them away.

Me: One more question. There was one particular campaign that the MPAA put forth and I'm not sure if were you still there when the MPAA started to put faces on the folks that were dealing with piracy losses? I'm speaking specifically about the commercials that featured gaffers, and lighters and scenic designers-

Dean Garfield: Yes. (Laughs) No, no-I was there.

Me: Okay. Because it seemed to me… that I have to ask you this because as someone who actually saw the commercial- and it's my understanding the folks that were being featured were being hurt by piracy- that- at least from an economic standpoint -and it was certainly being argued that these folks were losing- I'm not sure what they were losing. They were losing something in the commercial. But it seemed, when looking at it from an economic perspective, it was always my understanding that that the folks being featured were being paid on a per job or per day basis so I wasn't really understanding how they were losing money due to consumer piracy. And maybe that's something you can explain and help me understand or to clarify.

Dean Garfield: (laughs) Yeah. I think the idea is- I can always try- I don't know how good it will be because I didn't look at the book-(laughs). I think the idea is that everyone loses-you know so if there are less dollars coming in and your costs are remaining fairly constant, or going up, then you have to make cuts somewhere and you may make those cuts not in saying I'm going to not work with this particular gaveler or grip, but you'll say which is played out to be true, is, I will produce-and I think all the studios have done this- I will produce 12 movies each year rather than 20. And so even though that grip may be working on a contractual per film basis, it just means that there are 8 less movies he or she can compete to work on. So that's the economic argument.

Me: And the argument is less output is due strictly to piracy, or are there other factors?

Dean Garfield: Oh sure there are. I mean, come on. You have a minute to tell a story and that story is about piracy, so that's the story you tell. It's a lot more complicated than that cuz if you look at also public-what's the MPAA put out every year which the research group reported to me so I know this to be true that the cost of production was increasing, At the same time that the sector was being challenged so it wasn't just that we were losing money because fewer people were going to the theater-that was true-but we were compounding it by paying actresses and actors otherwise spending more money to make each movie. We told a simple story, recognizing that was a lot more complex than that. But commercials are also partial truth.

Me: I had to ask.

Dean Garfield: No. No. It's reasonable, it's reasonable. Truth be told, internally a lot of folks (laughs) thought those commercials were kind of hokey and whenever you went to the theater and you saw it the reactions suggested that the general public thought they were a bit hokey, too.

Appendix Two: Transcription of Phone Interview with John Hurst

June 2, 2010

Me: Can you tell me what you were doing in Vegas at the convention?

John Hurst: You know, our company develops software products and we also have this testing service for digital cinema equipment. Any of our customers are at the show because either booths at the tradeshow are part of the convention.

Explains Showest: It's a film market. Are you familiar with this convention?
So it's basically where the studios trot out their new releases in the theaters, get to see them, and get treated to some perks, and have some fun and ultimately decide which films they are going to have on their circuits.

They do one show in Europe a year. IBC takes place in Amsterdam. It is the European version of the NAB.

Me: So, is this an international digital standard that we're talking about?

John Hurst: Well, the parts that were published through the SMPTE and other standards bodies like ISO and the IETF (Internet Engineering Task Force)-those are all considered international-those are recognizable international national standards bodies. So to that extent, no standards are international standards. So the standard for, for example a digital cinema package which is what we called the movie in its distributable form, the standard for the key delivery message, those are international standards. But certain behaviors of equipment are simply specifications and requirements set forth by DCI and the way that those come into play is that if you want to be able to show a major studio a picture on your equipment, you have to use equipment that they accept. You can't just played back on any old piece of gear. There are quality and security requirements. In order to be able to meet that requirement, the equipment has to be able to do more than what is published in the international standards. The dividing line is really about behavior. The international standards cover what signal is going between machines or would cover how a machine would do a particular process, for instance color conversion. But when it comes to its business behavior, those kinds of bodies don't get into those issues at all and in fact they try to squeeze all sorts of business requirements out of the standard when they publish. So it's really DCI standing alone that's stating these business requirements.

Me: Can you explain (business behavior) to me a little bit more, please?

John Hurst: So, for example I mentioned in the last call this policy of "control lightly, audit tightly" which was adopted by DCI in response to exhibitor concern that a digital rights management system gave the studios too much control over the operational aspects of the theater such as moving a picture to a different screen, for example. So, DCI adopted this policy where except under very serious circumstances, the theaters are pretty much free to do whatever they want. So, that's the control lightly part. The audit tightly part is that the systems log everything but theater employees do in a secure and tamper proof way so that in the event that there's a dispute and a truck load of lawyers comes in, they have these logs that can be pulled from the equipment which because they are resistant to tamper and generally useful in figuring out precisely what happened.

Me: So the auditing is technology independent-this is not someone manually doing this?

John Hurst: Think of it like a black box. A flight recorder. Nobody looks into the flight recorder unless something bad happens. Forensically, retrospectively. So there is no use of the logs to deal with daily actuals and things like that. It is strictly a flight recorder.

Me: John, you had mentioned this idea that when you were rolling out this program the studios wanted to control heavily. For instance, they want to control in which particular theaters or screens a film would play on. And owners couldn't-

John: Well, there was a fear of exhibitors that they would do that. But I don't know the studios were publicly stated to do that. The exhibitors feared even if they didn't say it that the technological means of doing it should be removed. That they couldn't come up later. So, the road we're down right now is examples of conditions that can't be allowed-where studios do want to exert control. So, in the realm of control lightly audit tightly, we have this list called "dark screen conditions" and these are conditions under which the movie should not play, or must not play. These are essentially business rules. DCI is saying that when conditions are present, you can't play the movie. It's not a matter of technology, or standards, or interface. That's just a business decision. So one of them is if the projector has filled up with logs and hasn't been emptied by the player, then the projector signals that it's not ready to play and the movie can't play until the player has cleaned the logs out of the projector. Another example is a key delivery message outside of its validity carrier. So if it's not valid or has expired. They're about 10 or 11 of these things. Other examples of situations are when the content has obviously been

tampered with-you know, the studios don't want a perversion of the movie playing.

Me: You know, you bring up an interesting idea here. We're talking about security concerns and I'm wondering who are the studios afraid of in terms of hacking, etc.?

John: Well, let's say there was no encryption. In the case where there is no encryption the movie shows up on a standard hard disk. What's to prevent you from making a copy and taking it home?

Me: Sure. So the projectionists, perhaps.
John: Sure. Projectionists, delivery carriers. One of the advantages of encryption is that physical deliveries can be handled through common mode couriers such as FedEx and UPS. Whereas, I'm not sure if you're familiar with the delivery of 35mm film? 35mm film is delivered by a bonded carrier. Right? And the reason is you don't want that 35mm print disappearing for however long it takes to telecine it. So in the case of the digital master, it's even more straightforward and lower cost-you don't even need specialized equipment to copy it. So there is already an increased risk and adding encryption eliminates that risk and also makes delivery cheaper by using common carriers, allowing you to use satellite broadcast without extra encryption, for example. Lots of ways it can be moved around now because it's really inaccessible to an unauthorized party.

Me: Yeah. So that brings up-with this new system of distributing the film electronically-having it play on this very secure system- who are the studios afraid of now? Is there the possibility hackers getting into the film?

John: Sure. In any security system, the primary benchmark of the system is the cost of implementing this system versus the cost of exploiting the system. So our goal here is to make it so expensive-we can’t make it impossible to hack, right? Any major government could crack the system, no problem. I'm sure the NSA could crack it in seconds flat. That's what they're there for. I'm a little less worried about the Russian mob. They have a lot of resources but they don't have tens of millions of dollars to spend on the kind of software to crack this. Their alternative is is to go camcord it.

Me: Right. That's so much cheaper.

John: The goal is to make it so expensive as to drive people to a cheaper way of doing it, which has its own remedies. One of the things you might not be aware of is that each media block as it decrypts the picture

and prepares it to go out to the projector puts an invisible forensic mark onto the picture which contains the time of day and the media block serial number. So camcords are now coming back, and the forensic people know the screen and the day and the time where that rip was taken. So, not only is it now fantastically expensive-I mean it's much more expensive-for example to imagine cracking a media block than it is to imagine stealing a 35mm print and getting the telecine out of it. You have to develop all sorts of customized electronics, for instance. It's a brutal task. So they're pushing it back towards camcordering it. The studios are fine with that. Because the quality is low and with the forensic marking it's easy to find screens are becoming popular with a particular crew.

Me: So the only supposed-possible people who can crack into this are entities-could be large-scale governments-is that what you're saying?

John: Very coarsely and crudely speaking, we can divide exploiting the system into two chunks: The first one is defeating the actual encryption algorithms, which is the part that's only within the domain of large governments. The second one is exploiting some operational aspect of the key management. So, for example I have a little subsection of an article but I'm writing for the SMPTE Journal entitled “How to Steal a Movie." The way you steal a movie is you convince someone who makes keys that you are the holder of a legitimate player, when in fact you are the holder of a software player in which you control the cryptography. If you can convince that body that you have a legitimate player, and you deserve to have keys then they'll merrily make keys and send them to you. And, so what you would do, for example-let's say that you discover a google plex around the corner from you and you're able to compromise an employee in there and so you generate the necessary cryptographic materials to pretend that you're a player. You figure out how that facility submits their cryptographic material to the upstream provider like Deluxe and Technicolor to make their keys, you slip your information in with the load-you remember when I talked about open keying last time? So, you slip your materials in there such that so that whenever Technicolor, for example, keys that site, they make a key for you. Then, all you have to do is be around when the disc shows up, make a copy, go home with it, you can pry it open on your software player, reencode it as DIVX and put it online as a pristine, unwatermarked copy. So the vetting of the cryptographic materials that comes from the theaters is obviously a really critical part. The business model, the business operations aspects of some of my Technicolor and Deluxe as far as making these keys? They don’t want to be fooled into giving you a key for your software player. That would be bad. That would be a liability situation. So, one of the products my company sells is a KDM management server which is used by all these companies to

make the KDM's that are sent to all these theaters. And our KDM server has cryptographic materials inside of it that represent all of the individual manufacturers, and so when we see materials coming in from theaters, we benchmark them against what we receive from the manufacturers, and if anything doesn't match them we won't make the KDM. So, as long as they are using those systems as advised by us, they're not really susceptible to the attack I just described. And on the other hand, if someone gets lazy or doesn't implement all the procedures that we advise, they can very easily be compromised by that attack.

Me: John, you had mentioned you were writing an article currently? Who are you doing educational outreach for?

John Hurst: I did a lot of consulting for one of the studios to explain to their executives, for example, every studio has an information processing system that they use to manage their releases. They know it's the theaters it's going to, and they have all this information that they use to get the right print to the right theater at the right time. So, when they were looking at expanding their system to handle digital cinema, they needed to understand the IT artifacts of the Digital Cinema system, how it works, so I spent probably close to two years with one of the IT groups off and on explaining to them all the different pieces, and helping them bootstrap their own process for dealing with that. So, the theaters, rather the studios for example they need to know –when they do a big 3-D release? You need to know what kind of 3-D system is on the screen. The standards for 3-D are still evolving and so, in order to get the right print, you have to know what kind of glasses, and what kind of screen are being used because there are multiple prints available. And they have that in their database- otherwise they can't book or order prints properly. So they had to understand that at a fairly deep level of detail in order to be able to implement the support for it in their system.

Me: Will your company continue to be dealing exclusively with the security issues or do you see what perhaps might be going into the 3-D realm as well?

John: 3-D is kind of a done deal for us. Our software products-the security aspect of our business is actually not our primary focus. Security is a necessary technology, but our primary focus to help people get from the digital intermediate which is the digital version of the film in post production as it's completed-getting from that point to the exhibition screen. So, you know, right now, with film, what they do to get to that point from exhibition is they take the digital intermediate, they put it into a laser recorder and strike a negative-actually, I think they strike is inter-positive now- and that goes to the film lab, gets duplicated, and that goes to shipping and its sent to all the screens and in

the case of digital cinema, we take the digital intermediate, we do some color processing on it in order to move it to the digital cinema color space, encrypt it, duplicate the volumes, send it to all the screens, then make all the keys for all the screens and send those out. Every step along the way with that we have either products or we've worked on standards or we've been involved in testing for DCI-somewhere along that entire chain we have something to say.

Me: Are you all involved in film restoration?

John: No. Film restoration is more like what a postproduction house would do. They would have the equipment to scan the film-they would have the necessary artists to do dirt and scratch removal. They would have the artists to do color rendering and when they are all done. They would have a digital intermediate. And, for them to get that to the theater, they need to go through a process that they can buy from a number of different companies including us and sometimes, if they're really new to it, they buy training from us and we go in and spend half a day at the whiteboard explaining these different pieces. We don't really work with any particular motion picture projects except really weird special things like-we had-one of our studio customers had a problem and called us in to take a look at the master because it wasn't playing right on a particular player. So, that was about a particular project, but it had nothing to do artistically with a project. It was just a debugging within the mechanical gears that come between finishing it and seeing it on the screen in the actual theater.

Me: Interoperability kinds of things.

John: Exactly.
Me: With all the security encryption that you're dealing with, has it ever been an ironic situation where the amount of security that you're dealing with on your end has been a problem or compromised your own productivity?

John: Oh, sure. Encryption gets in the way. That's its nature. Just as a brief illumination on this, the purpose of the digital cinema package is to supplant 35mm film worldwide as the way high quality motion pictures are distributed. It's intended to be as high-quality and as ubiquitous. You can strike a print in one place in the world and play it in another place in the world. The two sides don't need to talk to each other-it's just going to work. And you've seen with your experience with computers how file formats atrophy or they stop being supported after some time and so forth. And so it's no small feat for us to try to attempt to come up with a file format that's going to live for 20 years and is completely able to

play on any operating system, on any hardware platform, any intellectual property-that's a really big deal for us.

Me: 20 years? With technology being so ephemeral, that seems impossible.

John: Not impossible. Bold. (Laughs)

Me: And why 20 years? Just the amount of expense and time it takes?

John: It is fantastically expensive to change over what's being distributed. It requires massive training, changes in workflow, all the way up and down the contribution pipeline-the next time we change, it will be easier because right now we're changing from a physical system to electronic system and so that doubles the complexity. But the real--one of the major threats to the ubiquity that we are searching for here is that something else would come along and take a share. That some other way of doing it would show up and people would say "Oh" and start doing that because it's easier or cheaper or whatever. So, we work very hard-

Me: How can that possibly happen if you're the standard?

John: India doesn't care what Hollywood thinks about film distribution. India's got an enormous distribution network and doing things with completely different standards. There is a whole world out there. It's not gonna happen within the world of Hollywood, but I'm-it just can't be. 35mm is a planetary standard that everyone depends on. And we're trying to do the same thing. So we try to engage our colleagues in Asia, and in Europe and in Oceana all the time because we need them to agree that this is the right thing to do, and so one of the reasons I've spent a bunch of time talking to Bob about this is this sort of thing needs to be taught in the schools. I can't imagine someone getting out of film school and not knowing what a digital cinema package is. And I've worked with probably a half a dozen other educational institutions in Germany, and in San Diego, and in New England who are interested in doing digital cinema mastering for scientific or film department kinds of things. And I tell all of them: "Don't use encryption (to finally get back to your original question.) Encryption costs money to use. It is inherently a block to the flow of information. And unless you have a financial interest in blocking the flow of information that equals or exceeds-maybe you have a fiduciary interest-that equals or exceeds the cost of implementing encryption, and don't touch the stuff because it's going to ruin you." So when you ask what roadblocks does it throw up? Well, it throws up massive roadblocks and massive expenses but those

roadblocks and expenses are deemed insignificant compared to the losses of unauthorized copy that those expenses are piled up against.

Me: Can you give me a specific example where maybe encryption code either prevented you from being able to move ahead, or maybe it was something that you created-

John: Sure. One of our software products is a mastering system that you use to take your digital intermediate and produce an encrypted digital cinema package. And we've been selling that system for about five years. Like any software product, it had an alpha phase, and a beta phase, and then it finally reached mature stability. One of our very early customers of the system encrypted a feature for one of their customers, and they kept a copy in the archive but they didn't keep a copy of the master encryption key that they used. So, they had an encrypted copy but they couldn't decrypt it. The customer came to them and said, "We've lost our digital intermediate-we can't make a new print of this film anymore-can you give us that DCP?" "Well, yeah, but we can't decrypt it." So, fortunately we archive all of our certificate authority content and we were able to recover their key from our archives and decrypt and repackage that for them-that's one of the special cases-we don't normally do mastering projects but these guys needed us to help them because we have special expertise to help them recover something that they lost.

Me: Was this particular business a major player, or smaller?

John: It was one of the major studios. Actually, maybe it was one of the boutique labels of one of the majors.

Me: The main question that we haven't talked about-you have the six studios involved in the standard-you said that they that they all have to be unanimous with these kinds of decisions. Is the MPAA involved at all in any of this?

John: Nope. The studios that comprise the MPAA are also the studios that comprise DCI. So, to the extent that those executive suites are in sync with each other the same basic interests are being upheld, but the bureaucracy of the MPAA went nowhere near digital cinema.

Me: You talked about the standard that you're working on with encryption being the standard for 20 years to come-is that what you're saying, or are you talking about the delivery and-this is a 20 year long-term plan?

John: Well the number "20" I threw off the top of my head as a number sufficiently far in the future- that in terms of stable computer file formats- it's an impressive number. We would like to see it live longer, I mean, when studios archive film, their horizon for that asset is 100 years. So, while it's possible that the digital cinema package as we know it today won't be in use in 100 years, it's entirely possible there will be a desire to decode that package In order to forensically retrieve. Just as we do film restoration today-you may want to go back and it might be that the only way you can get a copy of a particular motion picture is through a digital cinema package. Whether it be encrypted or not. While the format that is sent to theaters may have a shorter life-we may change over to something else-nonetheless the knowledge of how to….

Me: This is a really fascinating thing to me because in terms of home use of electronics and standards and digital rights management, standards have not lasted very long-the security encryption codes are usually broken but usually someone from like Norway or something like that.

John: Well the government won't protect the hardware. Try googling "trusted computing"- there was a push for a little while so that every motherboard that was in the personal computer had a little tamper responsive section in it. That section would be engaged in order to do things with copy protected content. And there's still, I think a little bit of a dream in certain circles that such a thing could come to exist but it's obviously a consumer-it's so easy to confuse citizens with consumers-isn't it? It's a disaster for citizens to have computer capacity with hidden remotely controllable features.

Me: That's awful. It's like discussions around selective output control.

John: yep. It is. You have to look at it- I completely accept that these major studios-their corporations- so they are amoral beings in the first place-and their goal is to-a legal fiction cannot have morals. The people that work for it can. A corporation is a legal fiction. That is, a nonperson from my point of view- and it just does what it set out to do and they're all set out to do-to exploit their catalogs and they've all learned that the best way to exploit their catalog is through controlled scarcity and so of course they're going to pursue these measures-it's their reason for living. So there's a side of digital libertarianism that says it's yeah well screw them I'm going to get access to my culture anyway but I take a more passive approach-if something is sold in a format that I don't find acceptable to me, I just don't buy it. You know, I still like buying music on CDs and rip them onto my Mac because I like the value proposition of the CD. The reason why I work on digital cinema is it has no fair use concepts whatsoever. I can ethically and morally do this all day and all

night because everybody knows precisely how bad they're being screwed when they walk into the room. And I have no problem with that.

Me: Where do you think the future of film is going in terms of exhibition?

John: Well, it's going to go all digital. And I tell you, I have a little crystal ball called the audio industry which tells me everything that's going to happen in the motion picture industry. So-through the 90s-we started the 90s in the audio business with digital audio workstations being a real high ticket item. Very big money, very specialized, and very prone to cantankerous-ness. It took a lot of time and effort to use them. By the end of that decade, digital audio workstations were the way to do things for everybody. Everybody had moved their work over to them, except for those who were still enamored with the artistic benefits of analog. So, you take away the people who like analog for artistic reasons who comprise a hundredth of a percent of the analog tape market, and you look at the major users of analog tape which are broadcast and radio networks and governments and schools-the complete ascension of digital recording as cheap and reliable over the course of the 90s caused all those institutions to switch over to digital, and they stopped buying tape. And the economy of scale that made tape possible to produce dropped out, and while you had people left that wanted to buy tape, it was impossible to construct a business that could make it for the price that anyone would consider possible to pay. So, the same thing is going to happen in film. As the majors continue to increase distribution digitally, they're going to be decreasing distribution on film. Institutional users, documentary shooters, small films-all of them are moving to digital formats because it's cheaper. And all you're going to be left with are people who need film for artistic reasons, and they're going to be stuck in the same place. The economy of scale is going to drop out of the market because all the institutional users have gone away, and it will become financially infeasible to make film. So, I think that there's more of a demand for it, and more money involved in it than there was for analog tape. So, I think there will be boutique producers of film for many decades to come. But it will be outrageously expensive. Because the number of people willing to buy it and able to buy it will be a fraction of what it is even today. Deluxe and Technicolor know this-they've been slashing and burning prices on prints. Kodak is completely freaking out because they see the loss of film as the loss of their blood. Film is completely dead. It's just a matter of time.

Me: So, you talked about the future of film being digital-what about venues? Theaters have always been viable and will remain viable. That's my opinion. Do you see the way in which we watch film as changing?

John: it's a cultural question. I like to think that I can see those things, but my prognostications continually prove that I'm a market audience of one. (laughs). I like film in theaters. I think they're fun. But I also think the only fun you can have is if the right crowd of people are around you.