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THE VIDEO GAME INDUSTRY AND VIDEO GAME CULTURE DICHOTOMY: RECONCILING GAMING CULTURE NORMS WITH THE ANTI-CIRCUMVENTION MEASURES OF THE DMCA

Corinne L. Miller[a1]

I. Introduction

Video games are an extremely lucrative industry; "sales of computer hardware, software, and networking products and services are growing at ***454** unprecedented rates."[1] In the 1990s, it would have cost a developer approximately $40,000 to develop a new game.[2] In 2004, this cost had increased to $10 million, which was partly due to the recent demand for increased technological graphics and sound effects.[3] In fact, software developers place large amounts of revenue into research and development to create more innovative games.[4] Not surprisingly, the developers of these games desire protection for their

intellectual property and they want to receive the financial benefits from their creations.[5] In the course of protecting their intellectual property rights, creators realized that the users they aim to serve are also the rivals they are trying to prevent from illegally accessing their works.[6]

The industry has resorted to placing technological protection measures (TPMs) directly on its intellectual property to prevent copying, which would potentially render its intellectual property economically worthless, due to the ease in which illegal copies can be distributed to millions at an instant.[7] Technology has redefined the notion of copying since the tools for doing so are easily obtainable and people can purchase them at a low cost.[8] Region encoding and the use of encryption keys are examples of the types of TPMs, also referred to as Digital ***455** Rights Management (DRM), that the video game industry instituted to prevent pirating of its intellectual property.[9]

The foundation for the copyright laws is in Article I, Section 8 of the Constitution, which states "Congress shall have power . . . to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."[10] In October of 1998, Congress amended the 1976 Copyright Act[11] by putting into effect the Digital Millennium Copyright Act (DMCA),[12] which grants legal protection against the circumvention of any TPM that copyright holders have implemented to prevent reproductions of their creations.[13] The DMCA is an intricate piece of legislation, and its anti-circumvention sections are broad and have been characterized as an "undue intrusion" on formerly open areas of computer research and innovation.[14]

This intrusion has greatly affected the video game culture, largely due to the disparity between the legal framework of the DMCA and the "Internet's . . . 'open philosophy,"' where there are few perceived boundaries on the exchange of copyrighted material.[15] To better facilitate both the gaming industry and culture's best interests, the gaming industry needs to approach application of the DMCA from the gaming culture's standpoint. This Comment argues that the gaming industry must implant an anti-circumvention norm within the gaming culture before it will begin to see any substantial change in the amount of pirating and circumvention of its intellectual property. To support this proposal, this Comment ***456** will examine the dichotomy within the world of video games resulting from the pressure the video game industry placed on video gamers to obey the anti-circumvention sections of the DMCA and the industry's simultaneous disregard of the gaming culture's norms that the industry helped build. Many of the measures the industry has implemented are in diametric opposition to these cultural norms, which have further estranged the gaming culture.

Part I of this Comment provides an overview of the anti-circumvention sections of the DMCA. Part II describes the basis of gaming culture norms, how these norms have evolved, and discusses the existing methods the gaming industry uses to prevent copyright infringement. Part III discusses the development of social norms within the gaming industry and the relationship between these social norms and the DMCA. Part IV concludes with recommendations for the gaming industry on how to improve protection of its copyrighted material, without implementation of the DMCA, while lessening the harsh effects protection places on the gaming culture. Finally, Part IV addresses possible shortcomings, from a cultural standpoint, arising from the industry's attempts to introduce an anti-circumvention norm.

II. Navigating the Anti-Circumvention Sections of the DMCA

The DMCA effectuates the World Intellectual Property Organization (WIPO) Copyright Treaty, which requires "legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts . . . which are not authorized by the authors concerned or permitted by law."[16] The WIPO Copyright Treaty provided for several international norms for the extension of copyright protection to digital works.[17] One of these norms requires "that signatory countries provide 'adequate legal protection and effective legal remedies' against the circumvention of TPMs used by copyright owners to protect copyrighted digital works from infringement."[18]

By enacting the DMCA, Congress intended to advance the growth and development of electronic commerce and to protect the rights of intellectual ***457** property owners.[19] The initially proposed DMCA contained a "strong and sweeping anti-circumvention provision," which was pushed by the copyright owners to give the utmost protection to their intellectual property.[20] On the other side, the major information-technology firms lobbied and convinced Congress that there were justifiable reasons to circumvent TPMs.[21] The enacted DMCA has three significant divisions that focus on prohibiting the circumvention of copyright protected technology.[22] In addition, Congress responded to the opposition's arguments in favor of circumvention and broadened the breadth of the proposed anti-circumvention provision by creating specific exceptions.[23]

The first division, § 1201(a)(1), "prohibits circumventing a technological measure that controls access to a protected work."[24] The second division, § 1201(a)(2), "forbids the trafficking or distribution of devices that facilitate circumvention of technological measures used to control access to a protected work."[25] The third division, § 1201(b), "prohibits trafficking in devices that circumvent technological control measures used to protect the exclusive rights of copyright holders."[26] In addition, Congress responded to the opposition's arguments in favor of circumvention and broadened the breadth of the proposed anti-circumvention provision by permitting exceptions that allow circumvention under certain circumstances for specific people.[27]

A. Violations Regarding Circumvention of Access Protection TPMs

The goal of § 1201(a)(1) is to prevent the circumvention of TPMs.[28] This places the primary focus on the wrongful conduct itself and not on the person ***458** responsible for that conduct.[29] Section 1201(a)(1)(A) states that "[n]o person shall circumvent a technological measure that effectively controls access to a work protected under this title."[30] The circumvention the statute is referring to, applies to descrambling, decrypting, avoiding, bypassing, removing, deactivating, or impairing a TPM.[31] The heart of this provision is the term "access."[32] This provision prevents a person without a right of access to the copyrighted work from gaining access to the work.[33] Its focus is on controlling the behavior of people who circumvent a TPM placed on a copyrighted work, while it is much less concerned with the actual effect it has on the value of the infringed work.[34]

B. Violations Regarding Circumvention of Rights Protection TPMs

The second division prohibiting circumvention of copyright protected technology distinguishes between acts of circumvention committed by an individual, and technologies that are produced and distributed which are designed to circumvent TPMs instituted by copyright holders.[35] Sections 1201(a)(2) and 1201(b) cover "'technologies, products, services, devices, components, [and] parts thereof' having circumvention-enabling capabilities, they are often referred to as 'Anti-Device' provisions."[36] Specifically, § 1201(a)(2) states that "no person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, [or] component . . . primarily designed or produced for the purpose of circumvent[ion], . . . [having] only limited commercially significant purpose, . . . [or] marketed . . . with that person's knowledge for use in circumventing technological measure[s] . . . ."[37]

***459** Section 1201(a)(2) was at issue in Davidson & Associates, Inc. v. Internet Gateway,[38] where the defendant reverse engineered the copyright holder's software and discovered the protocol language, which allowed people to use the software without a valid key password.[39] Some video games played on the computer come with an encryption key, which is composed of a specific alphanumeric password that must be entered upon a prompt from the system.[40] Game designers implemented the use of an encryption key to prevent people who had not purchased the game from playing it, and it was encrypted to prevent individuals from stealing the key when being transmitted over the Internet.[41] If the key is valid and not being used by another person, it will either allow activation of the game or allow the player to log onto the game provider's network to play the game online against others.[42] The court found that the defendants had infringed on the copyright holder's rights by breaching the trafficking portion of § 1201(a)(2).[43]

Unlike § 1201(a)(1)(A), § 1201(b) does not prohibit circumvention of "post-access copyright controls;" it only addresses the trafficking or distribution of devices that evade "post-access copyright controls."[44] Section 1201(b)(1) states that "[n]o person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof . . .," that is primarily for the purpose of circumvention, has limited commercial significance or purpose other than to circumvent, and is marketed with a person's knowledge to be used for circumvention of protection "afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof."[45] The House of Representative's Commerce Committee's report on the DMCA stated that § 1201(b)(1) aims to prohibit the creation or sale of technological means used to surmount TPMs and thereby advances copyright infringement.[46]

*460 C. Exceptions Allowing for Circumvention

Initially, copyright holders responded harshly to the exceptions to the anti-circumvention sections.[47] Congress attempted to

find a middle ground that would maintain the firm language of the statute, but still manage to diminish some of the concerns of the provision's opponents.[48] Congress's response to the criticism was to institute exceptions that take effect under certain circumstances in order to reduce undue burdens for legitimate and necessary activities.[49]

Under the DMCA there are seven exceptions to § 1201(a)(1)(A).[50] These exceptions are paralleled with Article I, Section 8's purpose because without them there would be a stifling of innovation.[51] Section 1201(d)(1) grants an exception for nonprofit libraries, archives and educational institutions, allowing them access to a copyrighted work to determine whether they want to acquire a copy of the work.[52] Section 1201(e), allows "any lawfully authorized investigative, protective, information security, or intelligence activity of an officer, agent, or employee of the United States . . . ." from circumventing a TPM.[53] Section 1201(f) permits a person who has lawfully acquired the right to use the material to circumvent the TPM for the sole purpose of researching and examining the aspects of the copyrighted program to achieve interoperability of the newly and independently created program to the extent that he or she does not infringe on the copyright holder's rights.[54] Section 1201(g) allows encryption researchers to circumvent the TPM if they lawfully obtained the copy, if the act is necessary for encryption research and if it does not infringe on the rights of the copyright holder.[55] Section 1201(h) addresses minors and states that courts may determine the necessity "for its intended and actual incorporation in a technology, product, service, or device, which . . . has the sole purpose to prevent the access of minors to material on the Internet."[56] Section 1201(i) permits users to circumvent the work's TPM if the ***461** work is capable of "collecting or disseminating personally identifying information reflecting the online activities" of the user.[57] Finally, § 1201(j) allows for circumvention of a TPM for security testing of a computer, system or network as long as the copyright holder grants permission for the testing.[58] The next Part examines the disparate views the gaming culture and the gaming industry have regarding the circumvention of TPMs.

III. The Great Divide: Culture v. Industry

The current battle between the gaming industry and gamers is due to their interests being in direct opposition. This dichotomy stems from the fact that the industry can only sell more games if it takes advantage of the gamers' curiosity and inquisitive nature; however, the more the gaming industry encourages them to test the game's rules, find secret areas and other game secrets, the more the industry is encouraging gamers to hack their TPMs. Thus, the gaming industry is sending mixed messages since it is difficult to draw a line saying hacking in the virtual world is fine, but hacking in the real world is not.

The culture of free information available on the Internet tends to conflict with copyright laws and this free flow of information may infringe on the copyrights of others.[59] The intellectual property rights of the gaming industry are being threatened and, as a result, it has had to step in to protect its investment by instituting various programs in the areas of anti-piracy, education, and outreach.[60] Looking at the culture of gamers reveals that previous attempts made by the industry to regulate infringement are not effective and gamers will continue to be at odds with the industry until the industry imparts a correction of the norms within the gaming culture.

A. The Origin and Evolution of the Video Game Culture

Video games are cultural objects.[61] "Bound by history and materiality," they are composed of an electronic element, a computer or console and a game, which is the software element.[62] The study of cybernorms, however, is equally a social ***462** phenomenon as well as a technical one.[63] The Internet allows people to obtain increased levels of communication and transfers of information, especially between individuals from different geographic regions.[64] Even though many of these activities are possible without the use of the Internet, Internet activities still present many new interesting questions not confronted by previous communication methods.[65] In addition, the Internet makes it effortless to inexpensively copy and share copyrighted material and the quality remains virtually identical to the original.[66]

The stereotypical geek sitting in a room by himself or herself with only his or her computer or console, completely shut off from the rest of the world, no longer exists.[67] Video games are not solitary and, in fact, even when they physically do only involve one player, they can incorporate many people in different geographic areas when massively multiplayer online games (MMOG) and other online games are considered.[68] The fact that many games involve or allow the use of a microphone headset is further evidence that a high level of social interaction is involved in playing games.[69]

In addition, the "open philosophy" of the gaming culture fosters a readiness to share strategies, secrets, and knowledge about secret areas or how to defeat difficult characters.[70] Intricate levels of social interaction, similar to in-person social interactions,

can be involved in the sharing of acquired knowledge such as trading ***463** one secret for another.[71] There are a number of different ways in which strategies can be shared online: downloadable frequently asked questions and hint sheets that discuss how to complete areas with difficult problems, as well as complete walkthroughs that detail all the steps required to complete each area within a specific game.[72] The fact that people display websites showing people how to cheat in certain levels, or how to beat a game, or even how to circumvent certain technological elements of games, demonstrates how open the gaming culture is.[73] With this open culture comes a free flow of information. Virtually anything within reason is attainable online, whether it is legally or illegally obtained. The ability to send and receive information rapidly and inexpensively is a critical component of norm formation on the Internet.[74] Moreover, gamers from completely different geographical regions can interact by speaking and exchanging information in chat-based channels.[75] This streamlined distribution of information assists in the shaping of norms, especially esteem-based norms, since it relies on a consensus of the worth of particular behaviors.[76]

Reputation within the gaming community is another concern for gamers, especially in MMOGs.[77] In many games, cooperation between players, such as forming groups, is necessary to progress through the game quickly and productively.[78] Frequently, players trying to gain membership into a particular group must spend time with them and be evaluated, which involves consideration of whether the player's personality fits with the group.[79] Additionally, once they become a member, players seek to maintain and strengthen their reputations within that group.[80]

Finally, anonymity is another characteristic of gaming and Internet culture. Unlike complete anonymity, which conceals all pertinent information about the user, the gaming culture has turned to more of a "pseudonymity."[81] "Pseudonymity" is the result of using aliases, also known as screen names or nicknames, which are chosen by the gamer to mask his true identity while creating ***464** a new gaming identity.[82] While the gaming culture strives to maintain its own identity and culture, the industry is attempting to protect its intellectual property through various mechanisms.

B. The Video Game Industry's Property and Its Protection Efforts

In the past several years, the video game industry has attempted to curb the amount of piracy targeted at its intellectual property.[83] While these acts by the gaming industry are necessary to protect their property, an examination of the impact these various TPMs have had on the gaming culture is necessary. As Peter Yu has pointed out, the entertainment industry uses five main strategies to protect its intellectual property: lobbying, litigation, self-help, education, and licensing.[84] This Section of the Comment examines these strategies and provides examples of the industry's attempts to implement them in its efforts to combat piracy.

The Entertainment Software Association (ESA) was created in 1994 to serve the needs of companies that produce computer and video games.[85] The ESA is composed of the nation's foremost gaming software developers, which in 2005 generated entertainment software revenues exceeding ninety percent of the entire entertainment software market in the United States and billions more in exports outside of the U.S.[86] The ESA also directs an Anti-Piracy Program that prevents global entertainment software piracy, which protects against losses of billions of dollars every year for the gaming industry.[87] The Anti-Piracy Program focuses on enforcement, training, and education in an attempt to protect ESA members' game products.[88] The ESA Online Monitoring and Enforcement Program monitors the ***465** Internet and since 1998 has taken down more than 150,000 sites involved in the distribution of pirated entertainment software.[89]

The industry lobbied Congress for unique safeguards for copyrighted works, which are obtainable on the internet, and in response, Congress instituted the DMCA.[90] Furthermore, the industry is in collaboration with the federal government in the Strategy Targeting Organized Piracy (STOP!) Program, which attempts to stop pirated materials at U.S. borders and helps U.S. businesses protect and secure their intellectual property.[91] The program has five principle aims: to "empower American innovators to better protect their rights at home and abroad; increase efforts to seize counterfeit goods at our borders; pursue criminal enterprises involved in piracy and counterfeiting; work closely and creatively with U.S. industry; and aggressively engage our trading partners to join our efforts."[92]

The industry has also been directly targeting those who violate the copyrights of their protected works by the use of litigation.[93] For example, video game users had obtained the code to several Microsoft Xbox games and discovered a way to change the appearances of the characters within the games.[94] These modifications did not fall under any of the seven exceptions to § 1201(a)(1)(A), which allow for circumvention under the DMCA.[95] Tecmo, Inc., a Japanese company that distributed the games, sued the administrators of a forum who hosted the content and the users that were involved in modification of the games.[96] The modifications that were made could only be used if the person owned the game, which made

them personal enhancements and in no way competed with the product Tecmo, Inc. was producing.[97] After negotiations and a settlement with the forum's administrators, the site was taken down and the lawsuit was dropped.[98]

***466** In addition to the abovementioned programs, the industry has engaged in self-help[99] by introducing TPMs on the intellectual property itself,[100] region encoding, and the use of encryption keys.[101] Region encoding is the act of encoding Digital Versatile Discs or Digital Video Discs (DVD) and Compact Discs (CD) and making them playable only on DVD and CD players specifically set to a particular geographic region to prevent private consumer importing and exporting.[102] An example of this technology is a DVD or CD made for retail in the United States would not be playable on a player made for retail in Japan.[103] Video game encoding is very similar to DVD and CD encoding, in that the video game console is permitted to only play software games that are encoded within its specific region.[104]

The industry has also attempted to educate consumers about intellectual property as well as educating businesses on how to protect their intellectual property rights.[105] Particularly, the ESA has attempted to target their education efforts towards children at the elementary school level to teach them to respect and obey the intellectual property laws.[106] Their goal is to implant in children respect for the intellectual property rights of the creators of the works as well as the entertainment software producers and to force students to tackle these issues "at the beginning of their academic careers to help them become responsible 'cybercitizens.'"[107]

Finally, the industry has implemented a licensing scheme for many of its games. For example, Blizzard's World of Warcraft and NC Interactive's Guild Wars, two of the most popular selling MMOG video games,[108] both have extensive End User License Agreements (EULA).[109] These EULAs are an example of how the industry allows the user to install the game on one or more computers owned by ***467** the user and allows use of the game for non-commercial entertainment purposes.[110] However, the EULA clearly states that the user "may not, in whole or in part, copy, photocopy, reproduce, translate, reverse engineer, derive source code from, modify, disassemble, decompile, or create derivative works based on the Game, or remove any proprietary notices or labels on the Game."[111] Considering the actions taken by the industry to protect their intellectual property, the following Part considers the gaming culture's unique norms and how they interact with the DMCA.

IV. The Relationship Between Cultural Norms and the DMCA

The gaming culture is a unique environment with its own set of norms that differ from those outside of it; as a result, one must examine how its culture differs in order to understand how to better enforce the intellectual property laws of the DMCA and apply social norms theories. Most people break the law at some point in their lives and for some reason certain laws are broken more than others are.[112] Analyzing social norms and their interaction with the law helps to explain why some laws are broken, while others are not.[113] Norms are socially accepted actions that force informal standards and restrictions on behavior, which result in creating expectations.[114] They are produced by "custom, convention, adherence to organizational structures, and a general sense of right and wrong."[115] A person who is ignorant or does not conform with a social norm will usually receive punishment or reprimand.[116]

Norms are extremely important in the analysis of legal rules, more specifically the DMCA, for a few reasons.[117] First, there are instances where people's behavior will be based solely on norms, and they will not need to take the ***468** law into consideration.[118] Second, in certain situations, laws and norms will be a direct influence on social behavior.[119] Finally, in other situations, norms and the law will directly affect one another.[120]

The distinction between law and social norms is somewhat of a misconception since they are both in constant interaction, and they are both responsible for shaping one another.[121] Usually, the law and social norms closely parallel one another.[122] On the other hand, as is the case here, where the law inaccurately reflects or is in direct opposition with social norms, a backlash may result, causing substantial non-compliance or only partial compliance with the law.[123] Nonetheless, social norms in their purest form are not enforced or driven by legal sanctions.[124] Research has shown that rational choice theories, warnings and threats of possible severe penalties, or a person's assessment of the likelihood of being caught are not effective deterrents and have a minor influence on illegal behavior.[125]

Observation of social norms theory has shown that individuals conform more to social norms instructing social behavior than they do to the laws mandating behavior.[126] In addition, when a social norm regarding a certain behavior is unsettled, legislative movements forcing movement in a certain direction by severe ***469** sanctions are often ineffective.[127] This problem is referred to as a "sticky norm."[128] Frequently, what occurs with a "sticky norm" is that the law is at odds with prevailing

norms and the law pushes to change the norm, but the public responds by resisting the change.[129] Therefore, many lawmakers' efforts at "unsticking" the norm are unsuccessful.[130] An example of lawmakers' frustrations regarding non-compliance with copyright laws is Senator Orin Hatch's statement, "damaging someone's computer 'may be the only way you can teach somebody about copyrights.'"[131]

Another theory to assist in considering why the DMCA is not strictly adhered to by gamers is rational choice or deterrence perspective theories, which look at how to attain voluntary cooperation with the law and states that one of the most important factors shaping law-abiding behavior is morality.[132] Morality is described as "feelings about what is right or wrong."[133] Research on the morality theory has shown that people just behave in a manner that they think is morally right, and they do not concern themselves with the potential benefits and losses that will occur if they break the law.[134] Specifically, this research leads to the finding that the public does not feel that acts in violation of intellectual property laws are wrong, which gives the public no reason to abide by intellectual property laws.[135] A second important factor for consideration is legitimacy, which is where a person feels the need to obey the law.[136] Generally, as long as the authorities who are ***470** making the laws are legitimate, then most people will follow the laws they create, regardless of what the laws are.[137] The problem with legitimacy is that the public's respect for the law can decline.[138]

Esteem theory is another theory that assists in explaining gamers' lack of observance of the DMCA, which states that norms are created because people care about others' opinions of them, and analyzes why people obey the law.[139] Esteem theory requires three conditions in order for the norm to occur.[140] First, there must be a consensus in existence regarding the beneficial or harmful esteem worthiness of engaging in the behavior.[141] Second, the person engaged in the activity must encounter a risk of detection of his or her activity.[142] Lastly, the relevant community must know of the existence of both consensus and detection.[143] In addition to these requirements, cybernorms require that two more additional factors are taken into consideration: anonymity and information flow.[144] Anonymity looks at the aspects of how one can hide his or her identity in cyberspace.[145] Information flow looks at how much information is available within the community.[146]

Memetics (or "memes") help to explain the spread of ideas and cultural phenomena and may help explain how information flows within the community, more specifically the Internet community.[147] Memes are a product of imitation and if the meme is a good idea and it catches on, then it will spread from person to person.[148] If a meme is effectively imitated, then it will be and the best way to do so is to get the idea into someone's mind and for that person to keep rehearsing it, thereby causing them to be more likely to remember it and pass the meme on to others.[149] The remainder of this Comment will turn to these individual cultural ***471** theories to analyze why gamers have not been receptive to the DMCA and how to begin to make the gaming culture more receptive to the DMCA.

V. Solutions for Improved Integration of the DMCA into the Gaming Culture

Introducing the DMCA into the gaming culture stifled a broad range of lawful activities, instead of its primary goal of preventing copyright infringement.[150] While the goals of the DMCA and its anti-circumvention sections aim to prevent pirating of copyrighted material, these goals should not supersede the rights and restrict the activities of the video game culture.[151] On one side stands the gaming industry, which sees that the most successful method of preventing the circumvention of TPMs is to restrict the accessibility of circumvention devices.[152] On the other side stands the game users, who have built an open, community-like environment.[153] This combination has placed game users in an unfortunate situation since the anti-circumvention sections tend to be very expansive, while its circumvention exceptions remain extremely constricted.[154] The gaming industry's attempts to protect its copyright interest have inadvertently alienated the gaming consumers who use its products. By examining the actions that the gaming industry has taken to limit pirating while also considering the established norms within the gaming culture, one can discover better approaches that would promote the industry's goal of minimizing pirating while still respecting the gaming culture's norms.

A. Promotion of Copyright Protection and Avoiding the Alienation of Gamers

Copyright law has the primary purpose of promoting the creation of new works,[155] however, it should also ensure that consumers and public users have easy access to online materials and that unreasonable burdens are not imposed on technology. Open access is the mantra of the Internet culture.[156] In many ways, the gaming industry has attempted to prevent access to copyrighted works, which only increases the desire of the gaming culture to pursue them. For example, some games are released exclusively in foreign countries and are never released in the ***472** U.S.[157] Even if a gaming consumer traveled to

a foreign country and legally purchased the game or imported the game, he or she could not play the game on their own U.S. console due to region encoding.[158] The demand for these games is essentially ignored by the industry and, as a result, the culture is finding ways around region encoding using modification chips. The "open philosophy" of the gaming culture promotes spreading the knowledge of how to circumvent the technologies to other gamers who are prevented from playing the games they want access to.[159] The industry has two primary ways that it can attempt to instill an anti-circumvention norm within the culture: through the use of technological methods and cultural methods.

1. Technological Methods

With numerous controversies surrounding the circumvention of copyright protected material, one must consider better ways the industry can protect its intellectual property while not completely isolating itself from the gaming culture. The industry itself may be able to solve the problem of gamers using modification chips to circumvent region encoding, which have become quite an issue since they allow players to get around region encoding.[160] Manufacturers also claim that modification chips allow players to play pirated games.[161] Essentially, these modification chips trick the device into believing that the disc is from the same region as the device, thereby circumventing the copyright protection barrier of region encoding.[162]

If game manufacturers released the games in high demand areas, then part of the need for modification chips would be unnecessary. This is because the inability to obtain these games is the main reason for the necessity of modification chips. If the game manufacturers released the desired games in these high demand areas, then the gamer has the opportunity to choose to buy the game rather than purchasing a modification chip to circumvent regional encoding of an imported game. The industry could still keep the games exclusively in these foreign countries for a certain amount of time, but then later release the game in other areas. This would potentially promote copyright protection since it would result in a reduction of the demand for modification chips.

The same reasoning applies to games that are no longer published, but are still in demand. It is impossible to play some games because the older consoles that ***473** play them are no longer manufactured or are not easily obtainable. Gamers circumvent this problem by using emulators, which trick the software into thinking that the appropriate console is present, thus allowing a computer or a console made by another manufacturer to play the game.[163] To meet this demand, the video game industry could manufacture emulators for home PCs to enable gamers to play out of date games. This would reduce the demand for emulators made by private individuals and the industry would be making a profit off of older games.

While the industry has engaged in self-help by instituting region encoding, it is possible to circumvent this technology by the use of modification chips, which is exemplified in Sony Computer Entertainment America, Inc. v. Gamemasters.[164] Gamemasters sold a device that, when connected to a Sony PlayStation console, had the capabilities of playing imported games from Japan and working on any PlayStation model.[165] However, it was the intention of the manufacturers that the console only be able to play games that were encoded within the same geographical location.[166] Relying on the language of the DMCA and section 1201(a)(2), the court held that the use of a modification chip violated the DMCA since it was solely designed for the purpose of circumventing a TPM that protected a validly copyrighted work.[167]

Potentially, releasing games in high demand from other regions, in addition to older games, would directly benefit the industry and game creators, since the money that the gamers were using to purchase modification chips and emulators would now be going to them. Arguably, making these games playable would result in development costs to the gaming industry; however, the benefits outweigh the costs of litigation. At a minimum, the industry would just have to put money into localization, which would allow games from previously unreleased areas to be played in different geographical areas. Translation of foreign games would most likely be unnecessary since most of the gamers who would want to play these games would be used to playing them without English translations, due to normally playing the imported versions of these games. For instance, Radiant Silvergun was a game only released in Japan and its storyline and voice acting is all in Japanese.[168] ***474** The demand for this game is so great that people are willing to pay almost twice the retail amount of the video game without translation into English.[169]

Even if the industry did not consider it to be in its best interests or economically profitable to directly sell emulators and release games in high demand from other regions, then it could always lobby legislators to make an amendment to the DMCA's circumvention exceptions.[170] For example, an exception to § 1201(a)(1)(A) would allow a gamer who legally obtains a copy of a game to purchase an emulator to play the software, only when the original hardware is no longer being manufactured.[171] Together with this proposed exception goes another circumvention exception, permitting people to manufacture emulators for distribution for the sole purpose of circumvention, which is specifically what §§ 1201(a)(2) and

1201(b)(1) prohibit.[172] While lobbying Congress to make changes in legislation will require the economic resources of the industry, it may not be as costly as marketing and manufacturing games from other regions and emulators.

The industry and its copyright holders do not have to engage in any of the technical models suggested here; however, they are running the risk of continued noncompliance with their TPMs. It is the game manufacturers' right, as copyright holders, to wait until demands are high enough to warrant a full-scale manufacture of the old product or waiting to release things until they are more cost effective. Article I, Section 8's purpose is to promote inventors to create, but with their intellectual property being stolen, they are less inclined to want to release their creations, which reduces incentives for software companies to produce a product.[173] It may be unfair that gamers are able to use piracy as leverage against the industry to effectuate a desired result, but if the industry wants to curtail the amount of piracy occurring, then it must, in some aspect, answer the demands of its customers. Nevertheless, reducing the amount of modification chips and emulators, and creating additional exceptions to the DMCA alone does not necessarily target a change within the gaming culture, which is what the industry must focus on to reduce the amount of pirating of its intellectual property.

***475** 2. Cultural Methods

Creating an anti-circumvention norm appears to be more difficult than just answering the economic demands of producing games that are in demand and changing technological methods, such as removing regional encoding. Assuming gamers do not consider the likelihood that authorities will catch them[174] and that they are more concerned with their own personal sense of right and wrong,[175] then the video game industry needs to take a different approach to deter gamers from circumventing its copyright technology.[176] The industry, instead of focusing on harsher punishments and instituting lawsuits against more people, needs to make people in the video game culture see that they are causing others harm. After gamers see the harm it causes the copyright holder, this harm should be integrated at a personal level to make gamers feel like they need to obey the law. Although the gaming culture has a "pseudonymity,"[177] gamers are still concerned about maintaining the reputation they have created with their aliases.[178]

A way to make gamers see the harm caused to the industry due to circumventing TPMs would be by directly punishing them by taking away the thing that matters most: the ability to play the game. Bungie, the developer of Halo, does this by monitoring certain actions taken by players during the game and banning people who violate rules or use hacked maps or game files from being able to play online.[179] This tool has been applied to acts of circumvention and pirating, where the user has been found to have pirated portions of the game.[180] If, for example, a player pirates a game or circumvents a TPM, then the makers of that game can ban the player.[181] Presently, this model would potentially only work for online games or MMOGs since gamers' actions are easily traceable by the way the games are organized and maintained by the creators. Instead of suspension, there could be other warnings or less severe sanctions for first-time offenders, such as lowering of levels within the game or taking of in-game assets. Conversely, it may be easier for the creators to assert legal charges against the players. However, it is ***476** far more economical for the company to take a player's currency earned within the game than to physically locate the player and institute a lawsuit against them.

The foundation of this theory requires the industry to be able to control these acts of piracy and circumvention, which requires that it retain as much control over the game itself as possible. A potential way to accomplish this is to make all video games require Internet authorization prior to game play, similar to how MMOGs require a user name and password authentication prior to game initiation.[182] If the leading video game companies, such as Nintendo, Sony, and Microsoft, required this kind of authentication and retained this sort of control over all of their games and not just their online games, this would make it exponentially easier to detect, prevent, and prosecute pirated-game users. If this system were implemented, then memes[183] would begin to spread throughout the culture and esteem theory would potentially effect a change.

Esteem theory requires three things to occur.[184] First, a consensus must arise among individuals, while also eliciting a response from others regarding the specific activity.[185] In the situation before us, gamers would rapidly take sides, since their ability to play the game would be at stake. Once most gamers realize their ability to play the game is at risk, they will rapidly begin to consider the activities of others, especially those within their group, and they will not want to associate with the group since the group's activities could affect their individual rights.[186] The second requirement would also be fulfilled since there would be a greater risk of the person's activities being detected due to the control the game creators are retaining over the game.[187] The third requirement is that consensus and detection are realized within the community.[188] The realization of detection could be easily accomplished since game manufacturers could post the new methods of detection on their websites to explain their new monitoring process, just as Bungie does.[189] Furthermore, word would travel rapidly through the Internet

due to the openness of the culture.[190] In a way, the industry would be using the openness of ***477** the culture to spread the word of its new detection techniques, which would be accomplishing its ultimate goal--the prevention of circumvention techniques. Even if the industry attempts to use a technological method to curtail circumvention, it must also effect a cultural change; otherwise, a battle between the industry and the gamers to beat out each other's technology will continue cycling.

Looking again to esteem theory may provide solutions the gaming industry needs.[191] Esteem theory is based on the premise that people really do care what others think of them.[192] If this theory is combined with the premise from rational choice theory, that people concern themselves with their own personal sense of right and wrong,[193] then once enough people have begun to consider this one of their own personal morals, anti-circumvention norms may begin to spread throughout the culture. It is possible that gamers will see that the culture frowns upon the act of infringement and unaffected gamers might fear that others within the culture will shun them. If this is attainable, the trend will spread throughout the culture, but only if the industry can instill the idea that copyright infringement hurts the creators within a core of people in the gaming culture.

The idea is simple: implant an anti-circumvention norm into the culture and watch the culture begin to shift towards the beliefs of the industry. The greatest barricade to implementing an anti-circumvention norm into the culture, however, is the actual shifting of the culture. The culture itself is virtually at war with the industry, in that not only does the industry attempt to force compliance with its intellectual property rights, it also forces players to play the game the way the industry wants it played. For example, if a player wishes to jump from lower level to higher-level regions or wishes to complete tasks alone rather than with a group, then the game should allow this. The designers should not attempt to prevent this type of play by making updates to the game with the sole purpose of weakening a player's skills or prohibiting certain actions which otherwise have no negative consequences to the game world or other players; this is known as "nerfing."[194] While nerfing is an attempt to force the gamers to obey the established rules and keep balance within the game, it can potentially create animosity on behalf of the gamers since the creators are interfering with their game play.[195] Ultimately, gamers just want to play the game their own way and when gamers find ways around the game's normal path while still obeying the rules, the industry still forces them to conform. To effect a change in gaming norms, the industry must consider ***478** some of the acts that it is committing to turn the culture against it, in addition to targeting groups within the culture.

The industry's attempts to focus its education efforts on young children appear to be beneficial in gaining compliance and in beginning to shift the norms of the culture.[196] A large chunk of the population of gamers, however, are adults, considering that only thirty-one percent of game players are below the age of eighteen and that the average age of a game player is thirty-three.[197] The industry must find ways to gain adult compliance, otherwise there will be a large lag in the point in time the culture begins to change. If the industry cannot find a way to get gaming adults to comply, then the culture will not really begin to change until the present adult gamers stop playing games and the gamers who are now children become the majority, which is still relying on the premise that the industry's education attempts actually effect a change.

A potential way to turn the adult culture is to allow adults to personalize the games they have purchased.[198] This is one way to give the gamers more control over the game itself, which may instill a little bit of trust back into the industry. This may result in gamers beginning to have more respect for the industry, which in turn might be enough to begin to send out the message that illegal modifications, circumvention, and emulators harm the industry. Conversely, allowing game modifications may result in an economic loss for the industry. However, if the owner legally purchased the game and the owner is only able to make modifications on his or her own personal copy, then there is no reason that this should result in any foreseeable harm to the industry or the game's creators.[199]

The industry has an uphill battle, because, ultimately, it is hard to combat a system where people can obtain things for free. The industry has the challenge of making a culture of open sharing, with the ability of obtaining almost anything at no cost to them, see that they should be paying for the games they have acquired. One of the industry's best weapons is to use the game itself against those who have illegally obtained it. It is as if the industry will literally begin to play the game. The industry has the ability to control online games by resetting servers, suspending accounts, and cancelling accounts. If those who cheat the system are eliminated from the system, then this will begin to spin the culture to a more compliant culture, since the remaining people have legally obtained the game and have shown that they are willing to obey the established rules.

*479 B. Potential Obstacles in Implementing an Anti-Circumvention Norm

Regardless of any changes made towards implementation of the DMCA, there is no guarantee that any efforts to implant an anti-circumvention norm within the gaming industry will have an effect on the culture and potential problems will surface. At

its simplest level, gamers might simply determine that they do not wish to deal with certain protection measures and may ultimately not buy the game. This result may occur especially where certain members of the industry are using different measures, which results in gamers having a choice. A way around this problem is if the entire industry chose one particular protection measure, thus, denying gamers an option.

Users could be concerned with issues of privacy. The requirement of Internet authorization naturally requires the gamer to have access to the Internet. This may pose problems for people who do not have access to the Internet or whose connections are not optimal. This could potentially be solved by allowing authentication possibly over the phone, using a toll-free number. Additionally, there are issues of how much access the authentication system has to portions of the user's computer.[200] For users to remain satisfied with the authentication system they must be able to trust that the industry is not lurking around on their computers or at least if the industry has the ability to do so, then they must remain up front about how much access they actually have to the user's system.

Additionally, a system of Internet authorization requires that each user have an account, which poses a problem for people who wish to sell the game to secondary users. Without a tangible form of the game such as a disc, even though the purchaser paid the full amount for the game, the EULAs of some games do not allow a transfer or sale of the account or its contents.[201] For this reason alone, many gamers may chose not to buy a copy of the game made by creators who do not allow transfer since this is a severe limitation on their resale rights in property they have lawfully acquired.

Finally, gamers might find it unnecessary to use a completely separate entity to authenticate users prior to game initiation. It may cause more problems for gamers since they have the risk of not only having game servers go down, but also the authentication server's risk of failing. This can be potentially unappealing to users, which may result in them not purchasing the game.

***480** Additionally, while some manufacturers are making it possible to play older games on newer consoles, there is still a loss to the consumer.[202] It is true that the industry is making some games available; however, the gamer is at the whim of the industry's selection of what games are being re-released. In addition, some consumers have already bought these games and are now having to pay for them a second time. While there may be many more instances of reasons why implanting an anti-circumvention norm within the gaming industry may have potential shortcomings, these examples serve the purpose of highlighting some of the inevitable setbacks of any attempts to effect a change within the culture.

VI. Conclusion

For the industry to effectively prevent circumvention of its TPMs while not alienating gamers with implementation of the DMCA, it must instill in the culture an anti-circumvention norm. The two most effective ways of accomplishing this is by using technological as well as cultural methods; however, to be effective, the two must be combined. Technological advances without modifications within the culture will not be as effective since the users within the culture will likely not see any harm in their acts of circumvention.

One of the most important methods in making gamers realize the harm they are causing is by taking away their rights to play the game if they are caught using pirated software or are caught circumventing TPMs. The easiest way to detect this type of behavior is for the creators of the games to retain the maximum amount of control over the game by requiring Internet authentication prior to game initiation. Once gamers realize that they could potentially lose their rights to play the game, word would spread throughout the groups of gamers playing the games and the industry would be using the openness of the culture itself to broaden knowledge regarding anti-circumvention, which would help implant an anti-circumvention norm within the gaming culture.

Moreover, using cultural methods, in addition to advancing TPMs to attempt to prevent piracy and circumvention, will still allow the industry to use the game against gamers. In these situations, the industry will need to get gamers to begin to consider anti-circumvention as one of their own personal morals, then anti-circumvention norms may begin to spread throughout the culture since those who are not obeying the law will be shunned by the majority who are. Ultimately, if the industry can begin to change the culture itself, then the potential for the culture as a whole to recognize and respect the industry's prevention methods would increase. This increase in respect for the intellectual property rights of the industry and the ***481** game creator's needs must be instilled within the culture before the industry will be able to reach its goal of preventing circumvention and piracy by the users of the games they create, which can be accomplished without rigid

enforcement of the DMCA.

Footnotes

[a1] Ms. Corinne Miller received her B.S. degree in Biology from George Mason University in 2004. Ms. Miller is a 2008 J.D. Candidate at Michigan State University College of Law. Many thanks to Professor Peter Yu for his invaluable insight, guidance, and patience throughout the writing process.

[1] Herbert J. Hammond et al., The Anti-Circumvention Provision of the Digital Millennium Copyright Act, 8 Tex. Wesleyan L. Rev. 593, 593 (2002).

[2] Robert W. Crandall & J. Gregory Sidak, Video Games: Serious Business for America's Economy §2, at 7 (2006), available at http:// papers.ssrn.com/sol3/papers.cfm?_abstract_id=969728. "It is widely estimated that in the next five years these development costs will range from $15 to 25 million per game as new hardware systems with faster and more complex processors drive up the cost of creating more immersive and graphically rich games." Id. §1, at ii.

[3] Id. §2, at 7.

[4] Id. §1, at ii (stating that one of the major game development companies "spent between 16 and 22 percent of revenues per year on research and development").

[5] Deborah F. Buckman, Annotation, Intellectual Property Rights in Video, Electronic, and Computer Games, 7 A.L.R. Fed. 2d 269 (2005) ("Most of the litigation surrounding intellectual property protection for video, electronic, and computer games has focused on copyrights.").

[6] Deborah Tussey, From Fan Sites to Filesharing: Personal Use in Cyberspace, 35 Ga. L. Rev. 1129, 1133 (2000) (referring to the preventive actions taken by intellectual property rights holders to prohibit access to their protected works as "access wars").

[7] Peter Moore, Steal this Disk: Copy Protection, Consumers' Rights, and the Digital Millennium Copyright Act, 97 Nw. U. L. Rev. 1437, 1438 (2003); see Hammond et al., supra note 1, at 595.

[8] Id.; see Vijay G. Brijbasi, Note, Game Console Modification Chips: The Effect of Fair Use and the Digital Millennium Copyright Act on the Circumvention of Game Console Security Measures, 28 Nova L. Rev. 411, 411-12 (2004) (stating that modification chips can be bought by consumers for as little as twenty-five dollars, which allows consumers to perform functions on video game consoles that were not originally intended by the console manufacturers); see also YiJun Tian, Problems of Anti-Circumvention Rules in the DMCA & More Heterogeneous Solutions, 15 Fordham Intell. Prop. Media & Ent. L.J. 749, 768 (2005) ("The widespread availability of such tools or devices has greatly threatened the interests of copyright holders who employ technological protection measures on their works.").

[9] See C.J. Alice Chen & Aaron Burstein, The Law and Technology of Digital Rights Management: Foreword, 18 Berkeley Tech. L.J. 487, 488-89 (2003).

[10] U.S. Const. art. I, §8, cl. 8.

[11] Copyright Act of 1976, 17 U.S.C. §§101-1332 (2006).

[12] Digital Millennium Copyright Act of 1998, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified as amended in scattered sections of 17 U.S.C.); see also Tian, supra note 8, at 755 (advocating the use of a more holistic approach from outside of copyright law to reform the anti-circumvention legislation).

[13] Tian, supra note 8, at 755.

[14] Myron Hecht, Reconciling Software Technology and Anti-Circumvention Provisions in the Digital Millennium Copyright Act, 2004 UCLA J.L. & Tech. 3, 5 (discussing changes that should be effectuated within the anti-circumvention sections of the DMCA to prevent stifling activities of the technological community); see also Moore, supra note 7, at 1437 (stating that "[t]he Digital Millennium Copyright Act of 1998 (DMCA) has been called the 'most sweeping revision[] ever to the Copyright Act of 1976"' (footnote omitted) (quoting David Nimmer, A Riff on Fair Use in the Digital Millennium Copyright Act, 148 U. Pa. L. Rev. 673, 674 (2000) (alteration in original))).

[15] See Hecht, supra note 14, at 5; Cecilia Ogbu, Note, I Put Up a Website About My Favorite Show and All I Got Was This Lousy Cease-and-Desist Letter: The Intersection of Fan Sites, Internet Culture, and Copyright Owners, 12 S. Cal. Interdisc. L.J. 279, 282 (2003) (quoting David Beckett, Internet Technology, in Internet Ethics 13, 22 (Duncan Langford ed., 2000) (discussing that this mentality of openness and willingness to share created by the first group of internet users still exists); see also James Newman, Videogames 157 (Routledge 2004) ("Sharing and trading knowledge about games is an important part of the social interactions that take place among videogame fans.").

[16] World Intellectual Property Organization Copyright Treaty art. 11, Dec. 20, 1996, 36 I.L.M. 65 (1997) [hereinafter WIPO Copyright Treaty], available at http://www.wipo.int/clea/docs_new/pdf/en/wo/wo033en.pdf; see also Pamela Samuelson, The U.S. Digital Agenda at WIPO, 37 Va. J. Int'l L. 369, 375-76 (1997) (stating shortly after the United States finally became a party to the Berne Convention in 1989, the major international copyright treaty, a committee was formed to consider a possible supplementary agreement to the Berne Convention, which resulted in the formation of the WIPO Copyright Treaty).

[17] WIPO Copyright Treaty, supra note 16, art. 11.

[18] Hammond et al., supra note 1, at 594 (quoting WIPO Copyright Treaty, supra note 16, art. 11).

[19] H.R. Rep. No. 105-551, pt. 2, at 23 (1998).

[20] Hammond et al., supra note 1, at 594 (stating that the DMCA proposed by the Clinton Administration "banned all circumvention activity except for law-enforcement or intelligence purposes").

[21] Id. at 595 (noting "encryption research and computer-security testing" as legitimate reasons).

[22] Universal City Studios, Inc. v. Corley, 273 F.3d 429, 440 (2d Cir. 2001) (holding that linking to a site and circumventing its encryption technology is a violation of the DMCA only if the link is made with the knowledge that the offending material is on the linked to site, with knowledge that the circumvention technology used is not lawfully obtainable, and for the purpose of creating or maintaining a link to distribute that technology); see infra Part I.A-C.

[23] Id. at 441; see infra Part II.C.

[24] 17 U.S.C. §1201(a)(1) (2006).

[25] Id. §1201(a)(2).

[26] Id. §1201(b).

[27] Id. §1201(a)(1)(B), (c)-(j); Corley, 273 F.3d at 441; see infra Part II.C.

[28] 3 Melville B. Nimmer & David Nimmer, Nimmer on Copyright §12A.03 (2006) ("The basic provision contains two complementary components. Initially, it bars the circumvention of technological measures, as elaborately defined. Then, it purports to limit the scope of that bar by safeguarding various user interests and delaying its effective date.").

[29] Id.

[30] 17 U.S.C. §1201(a)(1)(A) (2006).

[31] Id. §1201(a)(3)(A).

[32] See 3 Nimmer & Nimmer, supra note 28, §12A.03.

[33] 3 Nimmer & Nimmer, supra note 28, §12A.03.

[34] Jason M. Schultz, Note, Taking a Bite out of Circumvention: Analyzing 17 U.S.C. § 1201 as a Criminal Law, 6 Mich. Telecomm. & Tech. L. Rev. 1, 15 (2000) ("The text of 1201, on the other hand, primarily concerns controlling the behavior of any person who circumvents a TPM on any copyrighted work, regardless of the effect it has on the value of that work.").

[35] Julie E. Cohen et al., Copyright in a Global Information Economy 607, 608 (2d ed. 2006).

[36] 17 U.S.C. §1201(a)(2) (2006); 17 U.S.C. §1201(b); Tian, supra note 8, at 756.

[37] 17 U.S.C. §1201(a)(2); see also Chamberlain Group, Inc. v. Skylink Techs., Inc., 381 F.3d 1178, 1204 (Fed. Cir. 2004) (holding that a copyright holder must show a "reasonable relationship between the circumvention at issue and a use relating to a property right for which the Copyright Act permits the copyright owner to withhold authorization--as well as notice that authorization was withheld").

[38] Davidson & Assocs., Inc. v. Internet Gateway, 334 F. Supp. 2d 1164 (E.D. Mo. 2004), aff'd, 422 F.3d 630 (8th Cir. 2005).

[39] Id. at 1166-74.

[40] Id. at 1169.

[41] Id.

[42] Id.

[43] Id. at 1186.

[44] Tian, supra note 8, at 760.

[45] 17 U.S.C. §1201(b)(1) (2006).

[46] H.R. Rep. No. 105-796, at 6 (1998).

[47] Tian, supra note 8, at 762 (noting how the copyright industries attempted to obtain the maximum copyright protection possible for their protection measures, while the information technology industries and public user groups argued that protections that were too extensive would affect their fair use rights).

[48] Hammond et al., supra note 1, at 597 (discussing the initial response to the anti-circumvention provision by persons in the industry and academics "who argued that the ban detrimentally affected legitimate circumvention activities").

[49] Id. at 597-98.

[50] 17 U.S.C. §1201(a)(1)(B), (c)-(j) (2006).

[51] U.S. Const. art. I, §8, cl. 8.

[52] 17 U.S.C. §1201(d)(1).

[53] Id. §1201(e).

[54] Id. §1201(f)(1).

[55] Id. §1201(g)(2).

[56] 17 U.S.C. §1201(h) (2006).

[57] Id. §1201(i)(1)(A).

[58] Id. §1201(j).

[59] Ogbu, supra note 15, at 282.

[60] Entertainment Software Association, Intellectual Property, Anti-Piracy: Worldwide Anti-Piracy Program, http://www.theesa.com/policy/antipiracy.asp (last visited May 16, 2008) [hereinafter Anti-Piracy Policy].

[61] Alexander R. Galloway, Gaming: Essays on Algorithmic Culture 1 (2006).

[62] Id.; see also T.L. Taylor, Play Between Worlds: Exploring Online Game Culture 39 (2006) ("The importance of linking design with the social life of a game cannot be overemphasized....highlight[ing]...that the role-playing tools for communication or community building form an integral part of the game and suggest[ing] that designers must be attuned to creating robust systems that support this activity.") (citing Jessica Mulligan & Bridgette Patrovsky, Developing Online Games: An Insider's Guide (2003)).

[63] April M. Major, Norm Origin and Development in Cyberspace: Models of Cybernorm Evolution, 78 Wash. U. L.Q. 59, 60 (2000) (stating that cybernorms must be considered when laws are being instituted).

[64] Ogbu, supra note 15, at 282; see also John Weckert, What Is New or Unique About Internet Activities?, in Internet Ethics 47, 47-48 (Duncan Langford ed., 2000) (stating that people have always talked to one another through many different forms of communication such as: telephone, letter, e-mail, chat groups, and other Internet means).

[65] Weckert, supra note 64, at 47 (commenting that the main concern is whether the new Internet activities stir up novel ethical questions: "[a] number of features of the Internet do seem to be sufficiently different from anything that has gone before to allow it to be said that ethical questions are raised in new or unique ways").

[66] Ogbu, supra note 15, at 282-83; see also Moore, supra note 7, at 1438 (stating that digitally stored information is "subject to flawless, exact, and potentially limitless reproduction using electronic equipment").

[67] Newman, supra note 15, at 145-50.

[68] Newman, supra note 15, at 145-50; see also Taylor, supra note 62, at 36 ("MMOGs are by their very nature social ventures in that they involve numerous players gaming together in real time in a shared virtual environment.").

[69] Newman, supra note 15, at 153.

[70] See Ogbu, supra note 15, at 282; see also Newman, supra note 15, at 157.

[71] Newman, supra note 15, at 157.

[72] Newman, supra note 15, at 158.

[73] Newman, supra note 15, at 157.

[74] Daniel B. Levin, Building Social Norms on the Internet, 4 Yale J.L. & Tech. 97, 121-22 (2001) (explaining that "rapid dissemination of information can enhance norm formation").

[75] Id. at 121.

[76] Id.; see also infra Part IV.

[77] See Taylor, supra note 62, at 43.

[78] Id. at 42.

[79] Id. at 43-44.

[80] Id. at 44.

[81] Levin, supra note 74, at 118.

[82] Id. at 119 (offering as an example e-mail addresses, which sometimes may be assigned by the consumer's Internet service provider, but most of the time aliases can be created by the consumer).

[83] Entertainment Software Association, Intellectual Property, Anti-Piracy Training, http://www.theesa.com/policy/antipiracy_training.asp (last visited May 16, 2008) [hereinafter Anti-Piracy Training].

[84] Peter K. Yu, The Escalating Copyright Wars, 32 Hofstra L. Rev. 907, 909 (2003) (considering Professor Yu's paper is targeted at a discussion of Peer to Peer file sharing, a comparison of these protection methods can be drawn to the gaming industry).

[85] Entertainment Software Association, 2006 Sales, Demographic and Usage Data: Essential Facts About the Computer and Video Game Industry 12 (2007), http://theesa.com/facts/pdfs/ESA_EF_2007.pdf (discussing the wide array of services the ESA offers its members, "including operating a global anti-piracy program, staging the Electronic Entertainment Expo trade show, fielding business and consumer research, and representing the industry at the federal, state and local levels on a wide range of policy issues") [hereinafter Essential Facts].

[86] Id.

[87] See Anti-Piracy Policy, supra note 60.

[88] Anti-Piracy Policy, supra note 60.

[89] Anti-Piracy Policy, supra note 60.

[90] Yu, supra note 84, at 911 ("Since the statute's enactment, the industry has used the DMCA to prevent the dissemination of information concerning the circumvention of encryption technologies.").

[91] U.S. Dept. of Commerce, Office of the U.S. Coordinator for International IP Enforcement, Strategy for Targeting Organized Piracy: Accomplishments and Initiatives 1 (2006), http:// www.stopfakes.gov/pdf/STOPsheet_0606.pdf.

[92] Id.

[93] Yu, supra note 84, at 913 (commenting on how it is costly for the industry to institute litigation with individuals, but that actions against companies has proved to be successful).

[94] Kevin Poulsen, Hackers Sued for Tinkering with Xbox Games, SecurityFocus, Feb. 9, 2005, http://www.securityfocus.com/news/10466.

[95] See supra Part II.C.

[96] Electronic Frontier Foundation, Unintended Consequences: Seven Years under the DMCA (2006), http://www.eff.org/files/DMCA_unintended_v4.pdf.

[97] Poulsen, supra note 94.

[98] Electronic Frontier Foundation, supra note 96, at 9.

[99] Yu, supra note 84, at 918.

[100] Moore, supra note 7, at 1438.

[101] Chen & Burstein, supra note 9, at 488-89.

[102] Moore, supra note 7, at 1444.

[103] Moore, supra note 7, at 1444.

[104] See Sony Computer Entm't Am., Inc. v. GameMasters, 87 F. Supp. 2d 976, 987 (N.D. Cal. 1999).

[105] See U.S. Dept. of Commerce, supra note 91.

[106] Entertainment Software Association, Intellectual Property, Anti-Piracy Education, http://www.theesa.com/policy/domesticip.asp#4 (last visited May 16, 2008) [hereinafter Anti-Piracy Education].

[107] Id.

[108] Essential Facts, supra note 85, at 6 (ranking World of Warcraft number one and Guild Wars number eleven in the list of the "Top 20 Selling Computer Games of 2006 By Units Sold").

[109] GuildWars.com: Guild Wars User Agreement, http:// www.guildwars.com/support/legal/users-agreement.php [hereinafter Guild Wars Agreement] (last visited May 16, 2008); World of Warcraft, End User License Agreement, http://www.worldofwarcraft.com/legal/eula.html (last visited May 16, 2008).

[110] Guild Wars Agreement, supra note 109.

[111] Guild Wars Agreement, supra note 109.

[112] See Tom R. Tyler, Why People Obey the Law 3 (2006) ("Legal authorities know that the key to their effectiveness is their ability to make laws and decisions that will be followed by the public, so they try to act in ways that will promote public compliance with the law.").

[113] See id. (noting that effectiveness of legal authorities depends on their ability to make laws and decisions that will be obeyed by the public and that they try to act in ways to encourage public conformity).

[114] Major, supra note 63, at 61-62 (discussing how "social norms theory seeks to explain...informal constraints on human behavior").

[115] Major, supra note 63, at 62.

[116] See Major, supra note 63, at 62 (explaining, for example, "co-workers may think less of a colleague who chooses not to recycle white office paper").

[117] Richard H. McAdams, The Origin, Development, and Regulation of Norms, 96 Mich. L. Rev. 338, 339, 347-50 (1997) ("Law can influence behavior by changing the norms that determine the meaning ascribed to behavior; often one cannot predict the effect of law...without considering this interpretive dimension.").

[118] Id. at 347 (stating that "a norm may govern behavior so tightly that the choice between (plausible) legal rules is irrelevant").

[119] Id. (discussing how "norms frequently matter because the legal and norm-based rules each independently influence behavior...[when they] reinforce each other by obligating the same behavior").

[120] Id. at 348-50 (explaining that, generally, "if legal rules sometimes change or create norms, one cannot adequately compare an existing legal rule with its alternatives without considering how a change in the legal rule may affect the relevant norms").

[121] Geoffrey Neri, Note, Sticky Fingers or Sticky Norms? Unauthorized Music Downloading and Unsettled Social Norms, 93 Geo. L.J. 733, 746 (2005) ("Such is the case with laws regarding murder, rape, and theft. A vast majority of people believe that such acts are morally wrong and believe that the law appropriately sanctions those behaviors.").

[122] Id. (discussing how most people consider murder, rape, and theft to be morally wrong and that most people obey these laws without considering the potential consequences).

[123] Id. at 746-47 (explaining that even though jaywalking is illegal, most people do not perceive it as wrong and the jaywalking laws are virtually ignored).

[124] Major, supra note 63, at 64; see also Neri, supra note 121, at 748 (concluding that "social norms theory suggests that (1) people's behavior generally conforms more closely with internalized social norms regarding how people should behave than with laws dictating behavior; (2) where the law and norms diverge, noncompliance often results; and (3) social norms often prove resistant to heavy-handed, top-down manipulation by lawmakers.").

[125] Tom R. Tyler, Compliance with Intellectual Property Laws: A Psychological Perspective, 29 N.Y.U. J. Int'l L. & Pol. 219, 220-21 (1996) (concluding that "since most of how people react to laws is not linked to risk judgments, deterrence strategies based upon changing such judgments will have, at best, a minor influence upon law-related behavior").

[126] See Dan M. Kahan, Gentle Nudges vs. Hard Shoves: Solving the Sticky Norms Problem, 67 U. Chi. L. Rev. 607, 607 (2000).

[127] Neri, supra note 121, at 747; see also Kahan, supra note 126, at 607-08.

[128] Neri, supra note 121, at 747.

[129] Id.; see also Kahan, supra note 126, at 609, which notes:
If the law condemns too severely--if it tries to break the grip of the contested norm (and the will of its supporters) with a "hard shove"--it will likely prove a dead letter and could even backfire. If it condemned more mildly--if it "gently nudges" citizens toward the desired behavior and attitudes--it might well initiate a process that culminates in the near eradication of the contested norm and the associated types of behavior.

[130] See Neri, supra note 121, at 747 ("When prevailing norms do not correspond with legislation...prosecutors and judges are reluctant to view the behavior as a serious infraction, and as a result, the former are unlikely to prosecute and the latter are more likely to

hand down lenient or suspended sentences.").

[131] CBS & The Associated Press, Radical Illegal Download Remedy, CBS News, June 18, 2003, http://www.cbsnews.com/stories/2003/05/02/tech/main551969.shtml.

[132] Tyler, supra note 125, at 220, 225-26 (stating that research on intellectual property law violations were influenced by "likely consequences of illegal use," however, morality of illegal use was a more important factor).

[133] Tyler, supra note 125, at 226.

[134] Tyler, supra note 125, at 226.

[135] Tyler, supra note 125, at 226 ("[R]esearch on law related behavior as well as by studies in related areas such as negotiation and interpersonal relations, supports the proposition that fairness judgments influence behavior.... People do not uniformly regard lawbreaking as morally wrong-- their attitude differs for varying types of illegal behavior.").

[136] Tyler, supra note 125, at 229.

[137] Tyler, supra note 125, at 229 (stating that legitimacy is more of an all-inclusive acceptance "of law's value than morality").

[138] Tyler, supra note 125, at 230 (stating that public respect for the law and legal authorities has been steadily declining over the past fifty years) (citing Seymour M. Lipset & William Schneider, The Confidence Gap: Business, Labor, and Government in the Public Mind 1-3 (1983)).

[139] McAdams, supra note 117, at 357.

[140] Major, supra note 63, at 94-95.

[141] Major, supra note 63, at 94.

[142] Major, supra note 63, at 97.

[143] Major, supra note 63, at 94-95.

[144] Major, supra note 63, at 97.

[145] Major, supra note 63, at 97.

[146] Major, supra note 63, at 102.

[147] Richard Dawkins, The Selfish Gene 192 (2d ed. 1989) (stating "[e]xamples of memes are tunes, ideas, catch-phrases, clothes fashions, ways of making pots, or of building arches").

[148] Id.

[149] Susan Blackmore, The Meme Machine 40-41 (1999) (stating that memes that grab attention, rather than those that are easily forgotten, are more likely to be mentally rehearsed and will do better).

[150] Electronic Frontier Foundation, supra note 96, at 8.

[151] See Hecht, supra note 14, at 40.

[152] See Tian, supra note 8, at 768.

[153] See Ogbu, supra note 15, at 282.

[154] See Tian, supra note 8, at 769; see supra Part I.

[155] See U.S. Const. art. I, §8, cl. 8.

[156] See Ogbu, supra note 15, at 282.

[157] See Moore, supra note 7, at 1444.

[158] See Moore, supra note 7, at 1444.

[159] See Ogbu, supra note 15, at 282.

[160] Ogbu, supra note 15, at 282.

[161] See Ogbu, supra note 15, at 282.

[162] See Moore, supra note 7, at 1444.

[163] Davidson & Assocs., Inc. v. Internet Gateway, 334 F. Supp. 2d 1164, 1172-73 (E.D. Mo. 2004), aff'd, 422 F.3d 630 (8th Cir. 2005).

[164] See Yu, supra note 84, at 918.

[165] Sony Computer Entm't Am., Inc. v. Gamemasters, 87 F. Supp. 2d 976, 981 (N.D. Cal. 1999).

[166] Id. at 987; see also Barry Fox, Sony PlayStation Ruling Sets Far-Reaching Precedent, NewScientist, Feb. 15, 2002, http://www.newscientist.com/news/news.jsp?id=ns99991933 (explaining that Sony divided the world into three regions, giving each region a different code for its devices and discs, and that the devices check the disc's region code to ensure compatibility).

[167] Sony Computer, 87 F. Supp. 2d at 987; see supra Part II.B.

[168] James Mielke, Radiant Silvergun - Full Review, Gamespot.com, http://www.gamespot.com/saturn/action/radiantsilvergun/review.html?om_ act=convert&om_clk=gssummary (last visited May 16, 2008).

[169] A search of eBay will bring up auctions for Radiant Silvergun showing the various amounts consumers are willing to pay for this game. See eBay.com, http://www.eBay.com (enter relevant search terms, e.g., "Radiant Silvergun").

[170] See supra Part II.C.

[171] See supra notes 30, 162 and accompanying text.

[172] See supra notes 37, 45 and accompanying text.

[173] See supra note 10 and accompanying text.

[174] See supra note 125 and accompanying text.

[175] See supra note 133 and accompanying text.

[176] See Tyler, supra note 125, at 226; see also supra note 112 and accompanying text.

[177] See supra notes 81, 82 and accompanying text.

[178] See Levin, supra note 74, at 119.

[179] Bungie, Halo 2 and Cheating, http:// www.bungie.net/stats/content.aspx?link=h2cheating (last visited May 16, 2008) [hereinafter Bungie].

[180] Id.

[181] Id. (stating that they monitor game play data for indications that someone has cheated and once they obtain adequate evidence of cheating the player is listed in a ban list, he or she will be unable to play Halo 2 online. First-time offenders will be banned for seven days from online game play. Secondary offenses or more serious issues will result in a permanent ban being issued).

[182] See, e.g., Valve, Steam - The Electronic Distribution Platform, http://www.valvesoftware.com/business.html (last visited May 16, 2008) (stating that Valve, the maker of Half Life 2, uses Steam to distribute and manage its games online, it is a content delivery, digital rights management, distribution platform specifically developed as an authentication system for video games).

[183] See Dawkins, supra note 147, at 192.

[184] Major, supra note 63, at 94-95; see supra Part III.

[185] See Major, supra note 63, at 94-95.

[186] Bungie, supra note 179 ("Clans that cheat are subject to the same punishments as individual players....Players who repeatedly cheat while playing for a Clan are subject to all the various penalties listed above.").

[187] Major, supra note 63, at 94.

[188] Major, supra note 63, at 94-95.

[189] See Bungie, supra note 179.

[190] See Ogbu, supra note 15, at 282.

[191] See supra Part IV.

[192] McAdams, supra note 117, at 357; see also supra Part IV.

[193] Tyler, supra note 125, at 226; see also supra Part IV.

[194] World of Warcraft, Glossary, http:// www.worldofwarcraft.com/info/basics/glossary.html (last visited May 16, 2008) (defining "nerf" as "to downgrade, to be made softer, or make less effective").

[195] Id.

[196] See Anti-Piracy Education, supra note 106.

[197] Essential Facts, supra note 85, at 2 (stating that "sixty-nine percent of American heads of households play computer or video games").

[198] See Poulsen, supra note 94.

[199] Poulsen, supra note 94.

[200] E.g., Steam, Half-Life 2: Episode One Gameplay Stats, http:// www.steampowered.com/status/ep1/ (last visited May 16, 2008) ("Steam has allowed us to collect more information than was previously possible. Episode One, for example, includes a reporting mechanism which tells us details about how people are playing the game.").

[201] See, e.g., Steam, Steam Subscriber Agreement, http:// www.steampowered.com/v/index.php?area=subscriber_agreement (last visited May 16, 2008) (stating, "[y]ou may not sell or charge others for the right to use your Account, or otherwise transfer your Account").

[202] See Nintendo, Wii Virtual Console, http:// www.nintendo.com/wii/virtualconsole (last visited May 16, 2008) (discussing how the Wii console allows players to download games previously released on older consoles).

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