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Mod as Heck: Frameworks for Examining Ownership Rights in User-Contributed Content to Videogames, and a More Principled Evaluation of Expressive Appropriation in User-Modified Videogame Projects

John Baldrica*

INTRODUCTION: THE DIAMOND AND THE DOLL:

John Diamond is a professional game designer.¹ Observing a ritual common in the gaming culture, Diamond goes by a professional nickname,² reminiscent of a fighter pilot's call-sign.³ In the lingo of cyberspace, he is more colorfully known as "Irritant."⁴

Ten years ago, that moniker turned out to be prophetic. In 1997, Irritant and a team of other unpaid programmers⁵ were working on an amateur project known in the world of computers as a "Mod," a user modification of the source art, 3D characters, environments, or game engine of a commercially-

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1. Mogul, *Interview with John Diamond, Founder of COR Entertainment*, PLANETQUAKE.GAMESPY.COM, <http://planetquake.gamespy.com/View.php?view=Articles.Detail&id=346> (last visited Apr. 18, 2007).

2. See, e.g., the company website of Johnathan "FATALITY" Wendel, professional gamer who has released a line of game-related products, *available at Fatal1ty*, <http://www.fatal1ty.com/> (last visited Apr. 18, 2007).

3. See, e.g., TOP GUN (Paramount Pictures 1986).

4. Mogul, *supra* note 1.

5. *Id.*

produced video game.⁶ Irritant and his team were developing “Alien Quake,” a planned Mod of the Id Software game “Quake,” where the original game’s environments and the monsters that had populated them would instead be entirely replaced by the characters, environments and sounds depicted in the *Alien* movie franchise.⁷ In the vernacular of “Modders,” this extensive level of alteration was referred to as a “Total Conversion.”⁸ However, Twentieth Century Fox, owner of the rights to the *Alien* films, was not pleased; it demanded complete destruction of all of the work Irritant and his team had produced.⁹ The reaction spawned a term among later

6. David Kushner, *It’s a Mod, Mod World: For Computer Game Developers, Encouraging Users to Modify Copyrighted Material is Good for Business*, SPECTRUM ONLINE, <http://www.spectrum.ieee.org/careers/careerstemplate.jsp?ArticleId=i020203> (last visited Apr. 18, 2007) (describing the process of game “modding,” or directly modifying the game’s code to allow new forms of gameplay or other significant changes). As general background on Modding, see Wikipedia, Mod (Computer Gaming), [http://en.wikipedia.org/wiki/Mod_\(computer_gaming\)](http://en.wikipedia.org/wiki/Mod_(computer_gaming)) (last visited Apr. 18, 2007). Note that wikipedia.org is a collaborative information website which can be edited by its visitors, and so its content may be updated frequently. In practice, much Mod-related information is exclusively available on such websites and electronic forums. Modding is generally a decentralized endeavor that relies heavily on collaboration via the internet (those working on the same project may often never meet in person, or even reside in different nations). The digital dissemination of Mod-related information and discussion reflects that trend.

7. Mogul, *supra* note 1.

8. See Wikipedia.org, Modding, *supra* note 6.

9. The previous homepage of the “Alien Quake” project now displays (and has for nearly ten years) simply the following message:

The Alien Quake project has been discontinued by 20th Century Fox. I received an email on April 11th, 1997, from a 20th Century Fox representative that ordered us to cease all activity. The Alien Quake project was using copyrighted material without permission and this makes Alien Quake an unauthorized and illegal production. Therefore, you are hereby ordered to remove all your Alien Quake files from your computer storage. *You must also remove all references to Alien Quake from any WWW pages or internet sites you keep or maintain.* All distribution of Alien Quake is illegal and you should know that the Alien Quake team is under an obligation to report the name and URL of any distributor to 20th Century Fox. Please let us know if you know the URL of a distributor or potential distributor. Thank you for your co-operation.

Former Alien Quake Homepage, <http://www.student.nada.kth.se/~nv91-gta/quake/> (last visited Apr. 18, 2007) (emphasis added). It is an interesting rhetorical question whether, by merely detailing the history of these events, this very article could be in violation of the command “remove all references” to the Mod. For full text of one such demand, see also Being Foxed, posting to

Modders for such heavy-handed legal tactics: Irritant was the first person to get “Foxed.”¹⁰

Coincidentally also in 1997, the Danish band Aqua released the song “Barbie Girl,” with lyrics that included “I’m a blonde bimbo girl/dress me up/make it tight/I’m your dolly.”¹¹ This time, it was Mattel who was displeased, suing MCA records for infringement of Mattel’s Barbie trademark.¹² The United States Court of Appeals for the Ninth Circuit concluded that “Barbie Girl” was not purely commercial speech and therefore fully protected under the First Amendment.¹³ Mattel later pursued similar actions against a photographer who depicted the famous doll mangled inside kitchen appliances in a series he called “Food Barbie.”¹⁴ Again, this time with the artist recruiting the help of the American Civil Liberties Union (ACLU), this case was dismissed.¹⁵

Is there a principled distinction between the Barbie examples and the Alien Quake Mod, as to the use of appropriated intellectual property in new creative works? What kind of intellectual properties rights and protections do game Modders merit? Do they have an expression-related right to create a Mod at in the first place, independent of situations where they are explicitly given permission to do so by the game developers in the game’s End User License Agreement (EULA)?¹⁶ And, if so, do Modders have any rights or

BinaryBonsai.com (July 20, 2004) (last visited May 8, 2007), at <http://binarybonsai.com/archives/2004/07/20/cease-and-desist/>.

10. Andrew Smith, *3D Realms Fences in Foxing Fans*, THE REGISTER, Feb. 12, 2001, http://www.theregister.co.uk/2001/02/12/3d_realms_fences_in_foxing/.

11. Ed Meikle, *Barbie Goes to Court*, BRAND CHANNEL.COM, Oct. 21, 2002, http://www.brandchannel.com/features_effect.asp?pf_id=127.

12. *Id.*

13. *Mattel v. MCA Records*, 296 F.3d 894 (9th Cir. 2002).

14. Chris Gaither, *Art Attack: Touring Exhibit Tests the Limits of Copyright Laws that Block Artists from Using Corporate Images*, BOSTON GLOBE, July 14, 2003 at C1.

15. *Id.*

16. This is a practice which is actually fairly common among developers, as successful Mods can significantly extend the commercial success of the original game. See Kushner, *supra* note 6. See also Paul Hyman, *Videogame Companies Encourage “Modders,”* HOLLYWOODREPORTER.COM (Apr. 9, 2004), http://www.hollywoodreporter.com/hr/search/article_display.jsp?vnu_content_id=1000484956. Because of technology requirements, Mods are generally only created for games played on PCs. Microsoft has recently announced the “XNA Creators Club,” which allows individuals to create and release games for use on its Xbox 360 game console for others to download and play—but only by

protections if they create a Mod which further incorporates the intellectual property of a third party (such as the monsters from *Aliens*), and if so, under what circumstances? Are the legal standards of creative appropriation the same as articulated in cases like *Mattel v. MCA*? Do Modders possess any independent intellectual property rights in their Mod? Any right to sell it as art?

In attempting to answer some of these questions, this Note will examine several cases and scholarly evaluations of the ownership rights and issues posed by user-created content in computer games. The malleable nature of such games and the connectivity of the internet has encouraged a phenomenon no other medium of mass entertainment has so fully embraced:¹⁷ a symbiosis of content creation. While commercial entertainment software companies design and publishers release the initial game product, the end-users of the software are themselves often responsible for creation of additional content, which then contributes to, expands, and sometimes even eclipses¹⁸ the original game and its user experience. Ironically however, in a medium where these user-content-contributions are arguably more significant than in any previous medium, the law has generally been loath to grant formal protection (such as ownership) to these contributions. This reluctance is in part a result of legal analysis that has focused primarily on the computer code underlying the game, rather than on the user's experience of the game. This distinction is particularly notable when compared to the existence of doctrines (involving artistic appropriation and fair use) that have developed—in other media—to balance the rights of original creators of intellectual property with

other subscribers to the Club (at \$100 per year). Jill Duffy and Simon Carless, *For the People, By the People*, GAME DEVELOPER, Mar. 2007, at 5.

17. Admittedly, phenomena like fan-created stories involving popular fictional characters, such as those archived at FanFiction.Net, <http://www.fanfiction.net/> (last visited Apr. 18, 2007) have an extensive history as well. See also Wikipedia, Fan Fiction, http://en.wikipedia.org/wiki/Fan_fiction (last visited Apr. 18, 2007). However, evidence of any re-incorporation of such fiction into new content produced by the character's original creators is extremely rare, in comparison to the commonplace incorporation of Modded content (or hiring of Mod programmers) by a game's original developers. See Kushner, *supra* note 6.

18. Hyman, *supra* note 16 (noting that many players were purchasing the game "Half-Life" simply to be able to play the user-created Mod "Counter-Strike").

subsequent creators' rights to expressive re-imaginings of that original material (something which is demonstrated in cases such as *Mattel*.)

In Part I, this Note will propose an alternative framework for considering the varying levels of ownership rights that Modders—and other users—might possess in the content they create, by categorizing such content on a “Spectrum of User Contribution.” This Spectrum reflects both an objective analysis of the end users' contribution to the content of the game (such as, for Modders, altering or adding new computer code), as well as a subjective examination of how the new user-content-altered experience differs from or transforms the original experience.¹⁹

Part II will apply the framework of this Spectrum to the legal question of whether, in general, any user/player ownership rights exist to content that is created by them *within* a game. This conceptual framework may be helpful, because the preponderance of the legal and academic scholarship examining rights of expression²⁰ and intellectual property ownership in games have focused on a single genre of games in which player actions take place within online “virtual worlds”

19. Defining and describing the “experience” of a videogame or interactive project poses its own set of challenges, but is a task in which commentators are actively engaged. See, e.g., CELIA PEARCE, *THE INTERACTIVE BOOK: A GUIDE TO THE INTERACTIVE REVOLUTION* (MacMillan Technical Publishing/New Riders 1997). Yet judges and factfinders are frequently asked to make such subjectivity-tinged evaluations. See, e.g., Learned Hand's analysis of copyrightable plot-elements in *Nichols v. Universal Pictures Corp*, 45 F.2d 119 (2d Cir. 1930). But because videogames are still relatively unfamiliar to many judges (and the public in general), they may have difficulty evaluating games as a form of protected expression. See Henry Jenkins, *Reality Bites: Eight Myths About Videogames Debunked*, in *THE VIDEOGAME REVOLUTION*, <http://www.pbs.org/kcts/videogamerevolution/impact/myths.html> (last visited May 7, 2007).

20. See Chris Suellentrop, *Global Gaming Crackdown: How governments from Beijing to the Beltway could shackle your freedom*, WIRE, Apr. 2006, available at <http://www.wired.com/wired/archive/14.04/law.html>. Chinese players of the MMO “World of Warcraft” staged a mass in-game “suicide” of their characters as a protest against a Chinese government attempt to limit the number of hours that Chinese gamers could play online games; similar protests have also been levied by U.S. gamers against the U.S. government. Gamers have also protested policies of the game-developers themselves, such as an aborted effort by World of Warcraft to stop gay players from identifying themselves as such within the game. See Posting of Dan Hunter to Terra Nova, http://terranova.blogs.com/terra_nova/2006/02/open_letter_to_.html (Feb. 08, 2006).

that are simultaneously populated by thousands of users (so-called Massively-Multiplayer-Online-Games, or MMOs).²¹ Much of this MMO research is relevant to similar concerns with Mods, and so will be examined more closely. The discussion will also consider legal methods by which such ownership rights may or may not be limited (such as by user agreements),²² and also the conceptual problems of applying existing law (such as contract or copyright) to these ownership questions, which depend on how both the scope of the game's rules and the nature of these virtual worlds are defined.

However, because Mods involve altering the nature of the *game itself*, a broader vision of user-contributed content is ultimately warranted than found in the discussion of MMOs, and Part III of this Note will attempt to apply the Spectrum framework to these different circumstances. The analysis will first briefly summarize the relevant legal theories and precedent that currently govern Mods. It will then examine ways in which well-formed legal doctrines from other areas of creative expression, such as artistic appropriation and fair use, might best apply. Finally, the discussion will illustrate ways this framework might be helpful in characterizing the legal status of other existing (and potential future) types of user-created content and expression which incorporate or otherwise appropriate game technology.

I. A SPECTRUM OF USER CONTRIBUTION

The first step in addressing any rights of ownership in user-contributed content is clearly defining the meaning of the term. In practice, however, such content may take many forms, from a simple investment of play-time required to "earn" an in-game reward (a common practice in an MMO), to the use of the game as a component in an art gallery exhibit piece.²³ I

21. See, e.g., State of Play IV: Building the Global Metaverse, <http://www.nyls.edu/pages/2396.asp> (last visited Apr. 18, 2007).

22. Note that similar agreements, requiring posters to video sites like YouTube.com to surrender some or all of their rights to their own creations, have also begun to bear criticism, particularly as the market value of such sites have skyrocketed. See, e.g., Douglas Rushkoff, *You May Be Time's Person of the Year, but Big Media is Still in Control*, DISCOVER, Mar. 2007, at 70. Some sites do offer revenue-splitting with users, but this approach is not universal. See Tim Webber, *YouTubers to Get Ad Money Share*, BBC NEWS (last updated Jan. 27, 2007), <http://news.bbc.co.uk/1/hi/business/6305957.stm>.

23. See, e.g., Game/Play,

suggest that content contribution may instead be conceived of as falling within a spectrum of user contribution. On one end, this may include content which results from merely playing the game, or content which is created using user-accessible features within the game. On the other (as with Mods) the content might involve altering the game itself, or using the game to create entirely independent expressive projects. Understanding where Mods would fall within this Spectrum may help to better define the level of protection they should receive within the existing legal framework of artistic appropriation and expression.

A. USER-CONTRIBUTED CONTENT COMPRISING THE GAME

At its simplest, such user content may be characterized as a result of an investment of time while playing within the rules of the “game universe” itself. As noted, MMOs are games in which literally hundreds of thousands of players (in some games, millions) can simultaneously coexist in the same, persistent, virtual environment.²⁴ In these cases, such content can consist of unique in-game items, virtual real estate, or other elements which grant the players an in-game advantage.²⁵

Notably, such content elements only enter these virtual worlds upon a contribution of shared labor. The reward items themselves—and the in-game means of obtaining them through “quests” or tasks—are generally designed and dictated by the game’s developers,²⁶ but actually acquiring them in the game may require an investment of many hours, sometimes hundreds, of a user’s time.²⁷ In addition to such “labor” providing a basic argument for creation of a Lockean-type

http://www.http.uk.net/docs/exhib11/pr_game_play.htm (a touring exhibition which includes a piece, [*giantJoystick*], in which games are played using a 6-foot tall controller which must be manipulated by two people at once).

24. Edward Castronova, *Geekonomics*, WIRED, April 2006, available at <http://www.wired.com/wired/archive/14.04/gecon.html>.

25. *Id.*

26. A notable exception is “Second Life,” which allows users to use third-party 3D animation and design programs to create and upload their own items for their own in-game use or sale to other players. Second Life’s Terms of Service (ToS) agreement explicitly allows players to retain IP rights in their creations. See Second Life Terms of Service, <http://secondlife.com/corporate/tos.php> (last visited Apr. 18, 2007).

27. Castronova, *supra* note 24.

property interest,²⁸ this requirement of substantial user time-investment has the practical effect of creating a scarcity of these powerful items in the virtual world. Because these reward items are often transferable between players' "avatars" (their in-game characters), a vibrant resale marketplace has arisen, with gamers who are unwilling to invest the playtime paying real dollars (sometimes *thousands*) to purchase these virtual items from other players who "earned" them through actual gameplay.²⁹ Not surprisingly, the resulting real-world value of these items has also inspired exploitation. Virtual "sweatshops" have arisen, generally overseas, where low-wage workers spend hours earning virtual gold and items for resale to Western gamers.³⁰ And, in at least one case in China, murder was inspired by an in-game "theft" of a virtual item.³¹ In Korea, where MMOs are incredibly popular, such thefts of virtual items have been deemed criminally punishable,³² but only as long as they happen outside of the "rules" of the game itself.³³

28. See Stanford Encyclopedia of Philosophy, John Locke, <http://plato.stanford.edu/entries/locke/> (last visited Apr. 18, 2007).

29. See, e.g., <http://www.ige.com/> (a third-party run website which facilitates this resale for a number of popular MMOs). Such resale is often prohibited under the terms of the MMOs' user agreements, although one MMO, "Second Life" expressly allows such transfers, even creating an official "currency exchange" where real money can be used to purchase in-game funds, called "Linden Dollars," and vice versa (though the ToS categorizes this exchange as a "transfer of license rights."). See Second Life Marketplace, <http://secondlife.com/whatis/marketplace.php>. This direct currency exchange was partly responsible for raising the attention of the FBI, which was concerned that the activities of some players in the MMO might then constitute online gambling. Adam Pasick, *FBI Checks Gambling in Second Life Virtual World*, REUTERS (last updated Apr. 4, 2007), <http://www.reuters.com/article/technologyNews/idUSHUN43981820070405>.

30. Julian Dibbell, *The Unreal Estate Boom*, WIRED, Jan. 2003, available at <http://www.wired.com/wired/archive/11.01/gaming.html>. It has been estimated that, at one time, the average hourly-wage/GDP of the MMO Everquest exceeded that of the nation of Bulgaria. Castranova, *supra* note 24.

31. *Real-Life Murder in Online Gaming Dispute*, CBC NEWS, <http://www.cbc.ca/world/story/2005/06/08/gamer050608.html> (last updated June 8, 2005).

32. Mark Ward, *Does Virtual Crime Need Real Justice?*, BBC NEWS, <http://news.bbc.co.uk/2/hi/technology/3138456.stm> (last updated Sept. 29, 2003).

33. See Edward Castranova, *The Right to Play*, 49 N.Y.L. SCH. L. REV. 185, 188-89 (2004) (discussing the theoretical differences that must be taken into account when a "theft" takes place inside the context of a game whose governing rules allow it: a "steal" of a basketball during a game is not

Perhaps due to the sheer size of some of these MMOs (“World of Warcraft”³⁴ boasts a player population larger than the size of Chicago),³⁵ a relatively large number of journal articles and other works have examined these issues, as did the recent “State of Play” symposiums hosted by NYU Law School.³⁶ These cross-disciplinary analyses have looked at internal economics, external economics,³⁷ and legal issues that surround ownership of virtual real-estate.³⁸

B. USER-CONTRIBUTED CONTENT EXPLOITING THE GAME

In addition to content contributed strictly through users’ time spent “playing” or “laboring” within the rules of the game, users might simply exploit the game environment or user tools as a forum to speak or create other expressive content. This type of content is particularly relevant (though not limited)³⁹ to

criminally punishable, nor presumably would be “stealing” of an item by a player taking the role of a “thief” in a role-playing game. But just as a “foul” in a sport, if egregious enough, could cross the line into an assault, stealing which goes beyond the rules of videogame (such as by fraud, hacking, or other means), would presumably be punishable under the Korean law). Note: where the potential for actual property and profit intersect with the arbitrary rules (and purported aim of “fun”) of a game, the potential for tension lurks darkly. There have been in-game “massacres” of Chinese players of the Korean MMO “Lineage,” spurred in part by the fact that the Chinese gamers were accused of taking the money or items dropped by in-game monsters killed by other players—items which had real value on the resale market. James Ransom Wiley, *Korean Gamers Massacre Chinese Over Etiquette Dispute*, JOYSTIQ.COM (Feb. 21, 2006), <http://www.joystiq.com/2006/02/21/korean-gamers-massacre-chinese-over-etiquette-dispute>. In addition to the frightening specter of an international incident spurred by actions within a video game, these actions are further infused with potential issues of discriminatory nationalism, which, in the US, might run afoul of a host of other legal concerns (First and Fourteenth Amendment among them).

34. See World of Warcraft Website, <http://www.worldofwarcraft.com> (last visited Apr. 18, 2007).

35. See Tony Walsh, *World of Warcraft: Population 6 Million*, CLICKABLE CULTURE, Mar 1, 2006, http://www.secretlair.com/index.php?/clickableculture/entry/world_of_warcraft_population_6_million/.

36. See State of Play IV: Building the Global Metaverse, <http://www.nyls.edu/pages/2396.asp> (last visited Mar. 26, 2007).

37. Castronova, *supra* note 24.

38. Castronova, *supra* note 33, 196-205; see also Posting of Greg L. to Terra Nova, http://terranova.blogs.com/terra_nova/2006/06/the_droids_were.html (June 14, 2006).

39. See, e.g., Posting of Ren Reynolds to Terra Nova, http://terranova.blogs.com/terra_nova/2006/05/deadiniraq_.html (May 5, 2006)

MMOs, where the persistent virtual world allows a social interaction. For instance, MMO users have found ways to stage rallies, political protests, and even theater productions⁴⁰ within the virtual environments, thereby opening additional questions of both free expression and copyright. Additionally, players can potentially use character-creation tools to create avatars that resemble copyrighted or trademarked characters, as was the claim in a recent action brought by Marvel Comics.⁴¹ However, even if the game-technology allows players to choose to mimic existing characters that are copyrighted, the ability to do so may still implicate issues of fair use of those copyrights.⁴² Finally, giving even more creative freedom to the users, some MMOs, such as “Second Life”, now allow users—which include major corporations and political candidates⁴³—to create and import their own items (such as virtual t-shirt designs) into the game environment and offer them for sale to other players for virtual currency⁴⁴—which then can be exchanged for real funds.⁴⁵ Second Life’s Terms of Service (ToS) explicitly allow users to retain intellectual property rights in these creations,⁴⁶ but there is growing debate over the fairness and enforceability of such EULA and ToS agreements,⁴⁷ and they may still not answer the question of whether players or developers would have ownership of

(describing the actions of and responses to protester, Joseph DeLappe, who logs into games of virtual military combat, then, instead of participating in the game itself, merely begins typing in a list of the names of soldiers who have been killed on duty in Iraq).

40. Brad Cook, *Everquest: The World is Your Playground*, <http://www.apple.com/games/articles/2003/03/everquest/>.

41. *Marvel Enters v. NCSOFT Corp.*, 74 U.S.P.Q.2d 1303 (C.D. Cal. 2005).

42. Barry Steinhardt, *Preserving Fair Use in the Digital Age*, UNESCO, available at http://webworld.unesco.org/infoethics2000/documents/paper_steinhardt.rtf (last visited Mar. 11, 2007).

43. See Leslie Suzukamo, *Geek Island Odyssey: Best Buy Enters Virtual World of Second Life, Creating an Online Playground for Geek Squad Agents and Technophile Visitors*, ST. PAUL PIONEER PRESS, (Apr. 7, 2007), at 1C (noting also that Barack Obama and John Edwards have campaign offices within the game, and have even suffered virtual “vandalism.”).

44. Annalee Newiz, *Your Second Life is Ready*, POPULAR SCIENCE, Sept. 2006, at 75; see also *Second Life*, <http://secondlife.com/> (last visited Apr. 18, 2007).

45. See *Second Life Marketplace*, *supra* note 29.

46. See *Second Life IP*, *supra* note 26.

47. See *YouTube*, *supra* note 22.

creative works produced *within* a gamespace.⁴⁸

C. USER-CONTRIBUTED CONTENT RE-DEFINING THE GAME

The user-created content may also extend beyond the bounds of the existing game by re-engineering the game engine to create a different type of gameplay.⁴⁹ This is where Modding generally falls, and where much of the discussion in this Note will be centered.

Some of these gameplay changes can be relatively simple, such as altering the graphics and sounds.⁵⁰ These changes might be analogized to sculpting a customized set of pieces with which to play a game of chess. However, other Mods are much more extensive, altering the rules by which the game is played, or even changing its “genre.”⁵¹ This more extensive altering process could be compared to starting with the pieces of a chessboard, incorporating a pair of dice, and creating a game like “Risk.”

Within the realm of possible Mods, there are still issues of infringement, both with respect to the intellectual property rights of the original game developer, and of any third party who feels that the content of the Mod too closely resembles their own intellectual property.⁵² Mod projects themselves have resulted in only limited case law examining ownership rights, most notably *Micro Star v. FormGen Inc.*⁵³ However, the ruling in *Micro Star* concerned a relatively simple type of Mod, known as a Map⁵⁴ (a 3D environment in which the avatars can move about, and which might possess inherent characteristics which could alter the overall gameplay without

48. See Castranova, *supra* note 33, at 198.

49. See Kushner, *supra* note 6 (gameplay is composed of a myriad of factors such as graphics, sounds, physical environments, the tools or weapons which the player uses, the tactics and types of enemies, the physics, the genre of the game (i.e., is it a basketball game or a combat game), whether the game is designed for a solo player or a group of players, etc. Mods may alter few, some, or all of these factors.).

50. Kushner, *supra* note 6.

51. *Id.*

52. See, e.g., Mogul, *supra* note 1.

53. Kushner, *supra* note 6 (discussing a ruling, *Micro Star v. FormGen Inc.*, 154 F.3d 1107 (9th Cir. 1998), which set the precedent that “no amount of modification to a copyrighted or patented game element voids the owner’s rights.”) Interestingly, the opinion was written by the same Ninth Circuit Judge, Alex Kozinski, who found for the defendant, MCA Records, regarding “Barbie Girl” in *Mattel v. MCA Records*, 296 F.3d 894 (9th Cir. 2002)).

54. *Id.*

needing to change the “rules” of the game; in the chess analogy, it could mean creating a custom-made board, but with 20 squares on a side, so that the pieces have more room to move). Thus it may be worth reexamining the assumptions of this arguable precedent in light of recently developed, more extensive user-created Mod projects.

D. USER-CREATED CONTENT RE-PURPOSING THE GAME

A last major way in which content is created is by using the game technology in unanticipated expressive ways in a “meta” creative process—that is, using the game engine, graphics, or other elements to create a new expression which is no longer a game.⁵⁵ By way of analogy, this could be thought of as using the original or modified chess pieces to stage a performance of Shakespeare—and then perhaps filming the performance and releasing it on DVD. The most common of these alternative uses of game technologies to create, and sometimes even commercially release,⁵⁶ animated short films called “Machinima.” Other creative endeavors include using the game environments as virtual art projects⁵⁷, or even interactive training tools.⁵⁸

This last type of appropriated use seems to fall most closely in line with the rationale of protected artistic expression embodied in cases such as *Mattel v. MCA*,⁵⁹ in which the protections of a copyrighted work are balanced against the social value of transformative fair use of that copyrighted work.

55. See, e.g., RED V. BLUE (ROOSTER TEETH 2007). These are a series of short films entirely created within the within videogame “Halo,” by recording in-game actions and their actions. These videos have been released for sale as DVD compilations, and full clips are also available at <http://rvb.roosterteeth.com/home.php> (last visited Apr. 18, 2007).

56. See, e.g., *id.*

57. See, e.g., Velvet Strike, a violence-awareness project where artists log into game servers and, rather than engaging in virtual battle, instead decorate the virtual environment with logos promoting peace. Velvet-Strike: Counter Military Graffiti for CS, <http://www.opensorcery.net/velvet-strike/nonflame.html> (last visited Apr. 18, 2007).

58. Rob Riddell, *Doom Goes to War: The Marines are Looking for a Few Good Games*, WIRED, Apr. 1997, at #, available at http://www.wired.com/wired/archive/5.04/ff_doom_pr.html (discussing the Marines’ use of a Modded version of the game “Doom” as a way to train their soldiers).

59. *Mattel v. MCA Records*, 296 F.3d 894 (9th Cir. 2002); see also Meikle, *supra* note 11.

By analyzing the similarities and differences between these permissible artistic appropriations and the expressive nature of Mods, this Note hopes to provide a clearer understanding of the legal significance that should be given to Mods as a unique form of collaborative art, and to argue that the current legal regime—in which Mods are deemed uncopyrightable derivative works⁶⁰—is inappropriately narrow.

But before this Note discusses these legal questions regarding Mods, a brief overview of the scholarly analysis of user rights in MMO environments will be helpful by making three key points: (1) that determining ownership rights of user-contributed content in games need not be an all-or-nothing analysis, (2) that EULAs should not (and may not) be a definitive determination of these rights, and (3) that different levels and contexts of user-contribution demand different rationales for legal analysis of these rights, and determining the correct rationale can be complicated.

II: ARGUMENTS FOR AND ISSUES OF OWNERSHIP IN USER-CONTRIBUTED CONTENT

Much scholarship and research has addressed the issues of user-content creation and ownership in MMO games, in which thousands of gamers coexist in a persistent virtual environment. Such a wealth of commentary is understandable because these games present vast social networks in which people lie, cheat, make friends, protest, buy things, steal things, and do many other things that humans do when they interact in the real world.⁶¹ As one commentator stated, game “designers have . . . managed to make places that millions of people prefer to Earth.”⁶² Much of the force of these academic analyses therefore comes from analogies to the law governing the “real” physical spaces in which these creative or expressive activities take place. For instance, if free speech is protected (and, when “fixed” in written form, potentially copyrightable⁶³) when it is produced or performed in a physical company-owned

60. See *Micro Star v. FormGen.*, 154 F.3d 1107 (9th Cir. 1998).

61. See *Castronova*, *supra* note 33.

62. See *id.* at 5.

63. See 17 U.S.C. § 102(a) (2000) (“Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”).

town, it should arguably also be similarly protected in a game-developer-owned virtual town.⁶⁴ However, under the terms of their EULA or Terms of Service (TOS), game developers of MMOs in the United States generally claim ownership of everything that exists or occurs within the game servers,⁶⁵ though continuing developments may ultimately put the effective scope of these EULAs into question,⁶⁶ particularly where they may conflict with constitutional rights of expression.⁶⁷

Because Mods, in the proposed Spectrum of User Contribution, might better be analogized as expressive or creative endeavors in and of themselves,⁶⁸ any arguments drawn from expressive player actions within MMOs will be imprecise. However, as mentioned, EULAs often explicitly grant users the right to create Mods, and often explicitly or implicitly limit what Modders can do with their Mods, such as offer them for sale.⁶⁹ Therefore, it is useful to look at arguments against EULAs in the MMO context for what they reveal as to the logic of (1) any existence of ownership rights that might vest in the game users for content they might create within the game that would go beyond the limitation terms asserted in the EULA, and (2) if such ownership rights exist, against whom might those rights be asserted (such as against other players, against the game developers, or against third parties with arguable trademark or copyright interests).

A. EULA AND YOU: CAN PLAYERS EVER HAVE OWNERSHIP OF ANYTHING AT ALL?

Edward Castranova, an economist, provides a particularly interesting analysis of EULAs in an MMO context. He

64. See Peter Jenkins, *The Virtual World as a Company Town – Freedom of Speech in Massively Multiplayer Online Role Playing Games*, 8 J. INTERNET LAW 1 (July 2004).

65. See Castranova, *supra* note 33, at 196.

66. See, e.g., Posting of Greg L. to Terra Nova, http://terranova.blogs.com/terra_nova/2006/06/the_droids_were.html (June 14, 2006) (discussing a lawsuit claiming that, by suspending a player's account, in response to charges of hacking, the developers of the MMO "Second Life" unlawfully seized the player's "assets" (of virtual real estate) which, at internet auction, would be worth more than \$8000).

67. See Jenkins, *supra* note 64.

68. See Kushner, *supra* note 6.

69. See *id.*

examines the intuitive problems with their use, and ultimately argues that, much as the government defines and regulates the legal fiction of a virtual “person” (a corporation), the government, not EULAs, should, at least in some cases, have authority in regulating virtual spaces.⁷⁰

The terms of EULAs in MMOs are often defended as analogous to a user signing a membership contract to join a social club, a comparison which Castranova criticizes as extending logic to the point of absurdity. “[W]hen a private club becomes an entire social community, an imposition of speech regulations becomes so oppressive that the State would be justified to intervene.”⁷¹ He particularly criticizes the ownership rights in expression within the game environment that EULAs purport to grant to game developers:

If Jones and Smith and Miller get together in the club and write a poem using the club’s stationery, and then sell it on the street corner outside for \$10,000, on what grounds can the club [enjoin] that practice and even claim ownership of the poem? . . . [T]hese are the things that EULAs try to do.⁷²

B. DO PLAYERS OWN THEIR OWN WORDS? DIFFERING RATIONALES OF PROPERTY RIGHTS

A core presumption of Castranova’s argument here (which is shared by many other academics⁷³) is that the scope of the EULA should not be extended to claim ownership or dominion over expressive or creative activities undertaken in a virtual environment that would have been protected activities in a real physical environment, even a privately owned one.⁷⁴

Note that this analysis is different than the question of who owns the virtual space itself, or any of the virtual items, virtual characters, or other game objects within it. This is an important distinction, because it suggests a conceptual point of differentiation along the Spectrum of User Contribution, from user-contributed content *comprising the game environment* (such as the virtual items that a player’s character has earned by playing the game) to content which merely somehow *exploits the existence* of the game environment—such as, say, an in-

70. See Castranova, *supra* note 33, at 201-202.

71. See *id.* at 8.

72. *Id.*

73. See, e.g., Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CAL. L. REV. 1 (2004).

74. See Castranova, *supra* note 33, at 198.

game screenshot, which the player consciously composes by moving his character inside the virtual world to capture an image of a particular, original view of the virtual landscape.⁷⁵ It is entirely plausible to imagine that differing legal analyses can and should be employed when evaluating the validity of EULA claims of ownership over these varying types of user-created content.

1. Example One: Ownership of the Virtual Items Might Implicate Property and Contract Analysis

For instance, the virtual items, despite the player's Lockean investment of time and work to obtain them,⁷⁶ might be found to be entirely the domain (and ownership) of the game developers, as they necessarily own and manage the physical servers on which all the player's game data is located, and could presumably shut them down at any time.⁷⁷ But, even if the developers are held to have ultimate ownership over such items, there may still be analogies⁷⁸ to property and contract law that would seem to apply to give players rights as to each other.

For example imagine that, in a jurisdiction where baseball season tickets can be transferred, *Dodgers fan #1* agrees to let *fan #2* take over his yearly-renewable front-row season tickets for an upfront price of \$10,000. If the Dodgers go out of business a week later, *fan #2* would likely have no cause of

75. Note also that 17 U.S.C. § 120(a) (2000) suggests that the right to photograph privately-owned architectural works is also permitted as long as these works are visible "from a public place". This presents interesting questions of when a virtual space, like a company-owned town, would be considered to have a "public place" for the analysis of various EULA prohibitions, either of such photography, or of free expression. See Jenkins, *supra* note 64, for further analysis.

76. See Locke, *supra* note 28.

77. See Terra Nova, *supra* note 66 for an analysis of this logic, based on the largely prudential concern that, without such presumed ownership, game developers could be held liable to players for any accidental deletion of players' game data—or presumably for discontinuing the MMO entirely—both of which are fairly common occurrences in the video game market. Note, however, that this analogy is not precise, as a bank would not be considered owner of its customers' funds, simply by virtue of owning the servers on which the account records were kept.

78. For instance, consider common-law property doctrine, where an individual's claim to ownership of found-property is good against all except the "one true owner."

action against the entity who owns the team, the seat, and the ballpark. *Fan #2* might, however, still have a contract claim against *fan #1*, if *fan #2* could prove a frustration of purpose—that the agreement was clearly conditional on the Dodgers remaining a team.⁷⁹ In Korean courts, these kinds of user-versus-user disputes over virtual items are being addressed.⁸⁰ Theoretically, resolving such disputes would not require the existence of property or other rights which are good against the game developer, but rather only against the other players.⁸¹ In the United States, however, both scenarios are currently treated under the same logic and considered non-justiciable.⁸² Similarly, in a case in China, a gamer was informed of the powerlessness of the legal system to prosecute the theft of a player's in-game item by another player, which arguably contributed to the first player's resorting to extra-legal action in physically killing the thief.⁸³

2. Example Two: Ownership of the User-Created Screenshots Might Implicate Copyright and Trademark Law

The user's original creation of an in-game screenshot, however, might well require analysis under copyright and/or trademark law. Is a user's taking of a screenshot the equivalent of taking a photograph? In that case, would the logic of *Burrow-Giles Lithographic v. Sarony* apply (finding authorship in the photograph rests in the photographer, and granting a copyright)?⁸⁴ Is the entire virtual world tantamount to a sculpture or graphic work, in which case sales of a mere

79. See, e.g., *Taylor v. Caldwell*, (1863) 122 Eng. Rep. 309 (K.B.) (finding frustration of purpose when a music hall was booked for a specific performance but burns down before the performance date).

80. See Castronova, *supra* note 33, at 192.

The Korean police actively prosecute people who hack into games, and they give more weight to case[s] in which valuable game items are destroyed or transferred . . . Latstowka and Hunter (2004) have given us definitive arguments that [virtual items] are just as eligible, in principle, for property rights-based protections as items outside of synthetic worlds.

Id.

81. See *generally id.* This logic would also not contradict the game developers' EULA assertion that they owned the virtual world as a whole, and thereby would retain right to shut the game down entirely at any time.

82. It remains to be seen whether actions like the FBI's investigation of "Second Life" will eventually affect these analyses. See Pasick, *supra* note 29.

83. See CBC NEWS, *supra* note 31.

84. See *Burrow-Giles Lithographic v. Sarony*, 111 U.S. 53 (1884).

photographic reproduction of the virtual world might be prohibited?⁸⁵ Or is it more akin to an architectural work, in which case individual “standard” architectural features would be non-copyrightable, as would some photography of it?⁸⁶ Would it matter if the screenshot incorporated architectural or graphical features, such as logos, that were separately trademarked, or if the screenshot rather was simply an image of the virtual wilderness? Would it matter if the player added further creative expression to the screenshot (perhaps posing other virtual characters—even trademarked ones—in the screenshot to create an homage to *The Last Supper*?)

This last scenario would begin to touch more clearly on issues of artistic appropriation and fair use, such as the “Food Barbie” exhibit⁸⁷ (what if the same artist recreated his “Food Barbie” photographs using screenshots from an MMO and avatars instead of physical dolls?). These issues will be relevant when discussing projects, further along the Spectrum, which involve much more extensive contribution of user-created content (such as Mods and Machinima.) But the point of this brief discussion of user rights in MMO environments is that, regardless of the ultimate analysis of EULAs, ownership

85. 17 U.S.C. § 101 (2000)

“Pictorial, graphic, and sculptural works” include two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, diagrams, models, and technical drawings, including architectural plans. Such works shall include works of artistic craftsmanship insofar as their form but not their mechanical or utilitarian aspects are concerned; the design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.

Id.

86. *Id.*

An “architectural work” is the design of a building as embodied in any tangible medium of expression, including a building, architectural plans, or drawings. The work includes the overall form as well as the arrangement and composition of spaces and elements in the design, but does not include individual standard features.

Id. The adoption of the Berne Convention regulations allow copyright in photographs of architecture when they are taken from a public place. See Mary Yeager and Catharine Golden, *LLP: Owner vs. Architect: Who Owns the Design* (2004), at <http://library.findlaw.com/2004/Mar/29/133362.html>.

87. See Gaither, *supra* note 14 (discussing Barbies photographed in blenders).

rights of user-created content is not logically an all-or-nothing analysis, and may implicate different legal rationales for different forms of ownership rights.

C. Marvel vs. NCSOFT: What are Players Allowed to Imagine?

As mentioned, much of the scholarship involving user content has dealt with player contributions within MMOs, but before returning to the subject of Mods directly, it is illustrative to briefly examine the recent case of *Marvel vs. NCSOFT*.⁸⁸ Although Marvel settled the action before judgment,⁸⁹ its subject matter touched on users' rights of expression and conflict with third-party-holders of trademarks and copyrights.⁹⁰

NCSOFT created an MMO, "City of Heroes," which allowed users to create superhero characters and customize them in terms of their powers (*e.g.*, flight, heat vision, etc.), and their appearance.⁹¹ Marvel, a publisher of superhero comic books and graphic novels, sued NCSOFT on a number of charges, most notably for direct and contributory copyright infringement.⁹² Marvel's rationale was that, by creating a game in which the *users* could create heroes which resembled (and potentially infringed) on copyrighted/trademarked Marvel characters (such as the Incredible Hulk), NCSOFT was liable for both direct and contributory infringement and should be enjoined from offering such user-customization options in their game, as well as liable for damages to Marvel's potential market for games as well.⁹³

Marvel's stance riled much of the MMO user community as going too far,⁹⁴ and raised a number of troubling questions as to the extension of such logic. Would comic publishers soon be able to sue linen makers for knowingly contributing to children tying red sheets over their shoulders and pretending to be Superman? Ultimately, the action settled and so these

88. *Marvel Enters. v. NCSOFT Corp.*, 74 U.S.P.Q.2d 1303 (C.D. Cal. 2005).

89. See Posting of Ross Miller to Joystiq.com <http://www.joystiq.com/2005/12/14/marvel-vs-city-of-heroes-lawsuit-settled> (Dec. 14, 2005).

90. See Posting of Greg Lastowka to Terra Nova, http://terranova.blogs.com/terra_nova/2005/02/marvel_ncsoft_u.html (Feb. 9, 2005).

91. See *Marvel Enters.*, 74 U.S.P.Q.2d at 1303.

92. See *id.*

93. See *id.*

94. See Lastowka, *supra* note 73.

questions were left largely undecided, but it is worth noting the court's dismissal, without leave to amend, of over half of Marvel's claims before the settlement took place.⁹⁵ This implies that the expression of in-game players has at least some protection against third party copyright/trademark holders, enough that normal "real world" legal inquiries regarding fair use and infringement were deemed applicable.⁹⁶

III. USER-CONTRIBUTED CONTENT IN MODS AND BEYOND: REDEFINING THE GAME AND RE-PURPOSING THE GAME

As discussed, a Mod could, in one way, be conceptualized as a mere alteration of an underlying copyrighted game.⁹⁷ This conception would presumably cause Mods to fall under the doctrine of derivative works,⁹⁸ and therefore, when unauthorized by the original copyright holder, would strip Modders of most, if not all, copyright protection.⁹⁹ But alternatively, Mods could be more broadly envisioned, as in the "Barbie Girl" song, as a form of original expression which merely made fair, transformative use of copyrighted material in creating something new.¹⁰⁰

This section of the Note will briefly examine theoretical distinctions between original copyrightable works, derivative works, and fair use of original copyrightable works. Then the discussion will examine several cases that directly touch on the legal rights to modify video games in any fashion (notably *Midway Mfg. v. Arctic International* ("Midway"),¹⁰¹ *Galoob v. Nintendo* ("Galoob"),¹⁰² and *Micro Star v. FormGen* ("Micro

95. See Miller, *supra* note 89.

96. See *Marvel Enters*, 74 U.S.P.Q.2d at 1303.

97. See Kushner, *supra* note 6, at 1.

98. See Paul Goldstien, *Derivative Rights and Derivative Works in Copyright*, 30 J. COPR. SOC'Y 209 (1983).

99. See *Anderson v. Stallone*, 11 U.S.P.Q.2d 1161 (C.D. Cal 1989) (an unsolicited treatment written as a proposal for a fourth "Rocky" film was held to be an unauthorized derivative work, and therefore the writer had no cause of action for copyright infringement when the storyline of Rocky IV arguably incorporated the details of the treatment).

100. See *Mattel v. MCA Records*, 296 F.3d 894, 894 (9th Cir. 2002).

101. See *Midway Mfg. Co. v. Artic Int'l, Inc.*, 704 F.2d 1009 (1983) (a circuit board which merely "speeded up" an arcade game was found to be a derivative work).

102. See *Lewis Galoob Toys, Inc. v. Nintendo of America, Inc.*, 964 F.2d 965

Star”))¹⁰³, and the legal doctrines and analyses that these cases implicate. Thirdly, the analysis will attempt to illustrate the ways in which these cases should not be applied to analyze the legal expression and ownership questions presented by more recent examples of Mods, particularly ones which, measured on the spectrum of user contribution, would incorporate a significant amount of user content.

The expressive nature of this content argues that, for user-created Mods, the derivative-work analysis should not focus on the complex technical interplay between the Mod files and the original game’s underlying software *code*, as underlies the rationale of *Micro Star*¹⁰⁴ and similar cases. Instead, the analysis, as in *Mattel*, should turn on the transformative nature of the Mod’s *expression*, and its relationship to the expression of the original copyrighted game.¹⁰⁵ This stance is reinforced by a brief examination of Machinima, in which the user-created content may no longer be considered to be a game at all.

A. ANALYSIS OF ORIGINAL WORKS, DERIVATIVE WORKS, AND FAIR USE

Under the United States Copyright Act, the creator of an original copyrightable piece of expression is also given the exclusive right to authorize any derivative works based upon that original work.¹⁰⁶ The scope of what comprises a derivative

(9th Cir. 1992), *cert. denied*, 507 U.S. 985 (1993) (holding that even if a device which altered a game (including speeding up the action) would be found to be a derivative work, it would fall under fair use).

103. *See* *Micro Star v. FormGen.*, 154 F.3d 1107 (9th Cir. 1998). (Holding that new levels created to work with a game were derivative works, and also not within fair use).

104. *See id.* at 1110 (examining the nature of the modified files “running in conjunction” with the original code as a factor in assessing its derivative nature).

105. *See* *Mattel*, 296 F.3d at 894. *See also* 17 U.S.C. § 101 (2000) (defining derivative works as works that may be transformed). *But cf.* *Campbell v. Acuff-Rose Music*, 510 U.S. 569 (1994) (holding that a musical parody of “Pretty Woman” recorded by the group 2Live Crew, was transformative enough in nature to qualify as fair use). Note that the analysis of the “transformative” nature of fair-use of copyrighted works is inherently in tension with the protections for “transformative” derivative works. Lloyd Rich, *Parody: Fair Use or Copyright Infringement?*, PUBLISHING LAW CTR. (1999), <http://www.publaw.com/parody.html>.

106. 17 U.S.C. § 106 (2000) (“Subject to sections 107 through 120, the owner of copyright under this title [17 U.S.C.] has the exclusive rights to do and to authorize any of the following: . . . to prepare derivative works based upon the

work¹⁰⁷ has been found to be quite broad and powerful,¹⁰⁸ and the original copyright holders' exclusive right to authorize these derivative works has been held to signify that unauthorized derivative works—so far as they are pervaded by the content of the original copyrightable work—are themselves non-copyrightable,¹⁰⁹ a case which can lead to further unsettling questions of ownership.¹¹⁰

As a check on the scope and power of the derivative works doctrine, some unauthorized derivative works are nonetheless copyrightable under the doctrine of fair use, which “allows a holder of the privilege to use copyrighted material in a reasonable manner without the consent of the copyright owner.”¹¹¹ The fair use limitation on exclusive rights is codified in § 107 of the Copyright Act,¹¹² and it outlines four factors to consider as to whether use of copyrighted material would not result in infringement: 1) the purpose and character of the use, whether for commercial or non-profit educational purposes, 2) the nature of the copyrighted work, 3) the amount and substantiality of the portion used in relations to the copyrighted work as a whole, and 4) the effect of the use upon

copyrighted work.”).

107. 17 U.S.C. § 101.

A “derivative work” is a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a “derivative work.”

Id.

108. ROBERT MERGES ET AL., INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGY AGE 426 (3d ed. 2003) (arguing that creators such as George Lucas and other authors can earn far greater returns from movie, toy, and other tie-ins than on the original works on which these derivative works are based).

109. *See Anderson v. Stallone*, 11 U.S.P.Q.2d 1161 (C.D. Cal 1989).

110. *See Merges, supra* note 108, at 434 (“Because there is not blocking copyrights doctrine, copyright law is left with a vacuum in certain cases. What should be done with the hypothetical infringer who creates otherwise protectable new expression? Should that new expression be unprotectable because it derives from an infringement? Should it be in the public domain? Should it be deemed “captured” by the original copyright holder?”).

111. *Narell v. Freeman*, 872 F.2d 907, 913 (9th Cir. 1989)

112. 17 U.S.C. § 107 (2000).

the potential market for or value of the copyrighted work.¹¹³ The final factor, the use's effect upon the marketability of the original copyrighted work, has generally been held to the "most important, and indeed, central fair use factor."¹¹⁴ However, it is notable that, in practice, this balance between determination of fair use and derivative work is a precarious one, and it has not been applied with obvious consistency in cases involving modification of video games.¹¹⁵

B. INCONSISTENT LEGAL ANALYSIS OF DERIVATIVE WORKS
WITHIN VIDEO GAME ENHANCEMENT CASES: WHAT IS BEING
ANALYZED, THE CODE OR THE EXPRESSION?

While legal history examining fair use in games is not nearly as extensive as fair use in other media, some rough guidance can be found through "a series of cases involving video games [which] has addressed whether add-on devices and software designed to enhance the playing experience constitute derivative works."¹¹⁶ However, I suggest that, because of their primary focus on the nature of videogames as computer programs, many of these cases demonstrate a legal analysis which is inconsistent with an application of the fair use doctrine in other media permitting the incorporation of copyrighted material into original expression.¹¹⁷

In the case of a videogame, the copyrightable material that is "fixed in a tangible medium of expression"¹¹⁸ is the underlying computer *code* of the game, often referred to as the game "engine."¹¹⁹ However, in the user's *experience* of a videogame, this underlying code itself is essentially invisible. It is akin to a projector in a movie theatre; without it, a film cannot be shown, but it would not be considered copyrightable as part of the *expression* of the film. I would suggest that, for the purposes of evaluating fair use in modification of games,

113. *Id.*

114. *See* Galoob Toys, Inc. v. Nintendo of America, Inc., 964 F.2d 965, 971 (9th Cir. 1992), *cert. denied*, 507 U.S. 985 (1993).

115. *See* Merges, *supra* note 108, at 917 (questioning the consistency of *Galoob* and *Micro Star*, and suggesting that *Micro Star* might not have been a case involving a derivative work).

116. *Id.* at 435.

117. *See* Mattel v. MCA Records, 296 F.3d 894 (9th Cir. 2002).

118. 17 U.S.C. § 101 (2000).

119. *See* Kushner, *supra* note 6.

the *expression*¹²⁰ would more accurately be thought of as the user experience that the code makes possible. To extend the metaphor, a Mod can more logically be thought of as placing a different reel of film (the expression of the new player experience) into the same projector (the underlying code of the game engine). Under that analysis, part of analyzing fair use would be a process of evaluating how close the new expression (the player experience) is to the old—in other words, how transformative the new user experience is.¹²¹ In fact, many Mods operate this way on the level of the computer code, with the Modded code stored in a separate location on the user's hard drive, and simply executed in the place of some portion of the original game's code, leading to a different user experience.¹²²

Part of the conceptual problem may come from the nature of a computer program, or “game engine,” which functions as both a tool allowing the creation of an expression (a gameplay experience, which, at a minimum, is an audio-visual display¹²³), and a copyrightable expression of written computer code in and of itself. In the case of a film, use of the projector, a *physical* creation, would have been protected by patent law,¹²⁴ and the *expressive* creation of the film would have been protected under copyright.¹²⁵ The cases which have addressed game modification have struggled with this dichotomy—whether similarities of player experience or similarities of the underlying code should serve the measure of transformative expression for purposes of derivative works and fair use

120. *See id.*

121. This is similar to the rationale of *Mattel*, where the lack of similarity between Aqua's song and Mattel's doll (and therefore, minimal possibility of confusion by the end consumer as to the source of the song), was a strong factor arguing against infringement. 296 F.3d at 894.

122. *See, e.g.*, Mods for the Id Software game “Doom.” These were some of the first Mods ever produced, and were distributed as self-contained “WAD” files that the user would activate in conjunction with the underlying game. http://en.wikipedia.org/wiki/Doom_WAD (last visited May 7, 2007).

123. *See Lewis Galoob Toys, Inc. v. Nintendo of America, Inc.*, 964 F.2d 965, 971 (9th Cir. 1992), *cert. denied*, 507 U.S. 985 (1993).

124. 35 U.S.C. § 101 (2000) (“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.”).

125. *Compare* 35 U.S.C. § 101 (2000) (defining patentability of inventions), *with* 17 U.S.C § 102 (2000) (defining scope of copyright).

analysis¹²⁶—and have tended to muddle the two.

For example, in *Midway*,¹²⁷ a manufacturer produced a circuit board which sped up the play of Midway's Galaxian and Pac-Man arcade games. The court in *Midway* first noted that, in situations involving sound recordings, a merely sped-up version was not a derivative work.¹²⁸ But then, focusing on the user experience by noting that a sped-up videogame was "more challenging and exciting"¹²⁹ to play, the *Midway* court justified extending the monopoly of derivative works protection in this case. While this argument does have some policy justifications (the court states that Midway itself should have the exclusive right to sell a sped-up version of its own games because of such games' potential for popular appeal),¹³⁰ the decision is presented as if the logical result of a bright-line rule. That logic breaks down on closer examination. For instance, if the circuit board in *Midway* had been a generic piece of computer hardware that sped up *any* program run on it—as would a modern computer, with its much faster processor and thus much faster gameplay—would running the code of the original Pac Man on it be an act of infringement, analogous to creating a derivative work? And if the identical "fixed" code (the originally copyrightable element), run under different circumstances, can be held to be a derivative work, then isn't the new *experience* (and its resultant market value) really what is being evaluated in *Midway*?

The same strained logic used on *Midway* was used in *Galoob*. In *Galoob*, the court attempted to reconcile how much of a user's experience versus how much of the underlying code of a game serves as the source of copyright protection.¹³¹ In that case, Galoob, Inc. created a product, called the "Game Genie," which when plugged in-between a Nintendo game console (the computer that processed the game code) and a game cartridge (the media that held the game code), would

126. See *Midway Mfg. Co. v. Artic Int'l, Inc.*, 704 F.2d 1009 (1983).

127. *Id.*

128. See *id.* at 1013-1014 ("The change in time of the added chorus, and the slight variation in the base of the accompaniment, there being no change in the tune or lyrics, would not be 'new work.'") (citing *Shapiro, Bernstein & Co. v. Jerry Vogel Music Co.*, 73 F.Supp. 165, 167 (S.D.N.Y. 1947).

129. See *id.* at 1013.

130. See *id.*

131. See *Lewis Galoob Toys, Inc. v. Nintendo of America, Inc.*, 964 F.2d 965 (9th Cir. 1992), *cert. denied*, 507 U.S. 985 (1993).

intercept certain bits of data and replace their values.¹³² This replacement would in turn affect the actions of the game's characters, such as by increasing the value of a character's strength to make him "invincible."¹³³ Analogizing to the rights of the end user of a video-recording to enjoy it at a time and manner outside of the control of the copyright holder,¹³⁴ the *Galoob* court found that the Game Genie was a derivative work but that its use was fair.¹³⁵ The court characterized Galoob's actions as creating and selling a tool that also allowed users to *experience* video games in the manner they chose.¹³⁶

Departing from the rationale of *Midway*, *Galoob* focused much attention on the lack of any meaningful likelihood of harm to Nintendo in the video game market by versions which could include, among other effects, sped-up gameplay.¹³⁷ Perhaps the most telling evidence of the court's continuing difficulty in understanding the interactive nature of expression in a videogame context is the court's repeated description of the game experience as merely comprised of copyrighted audio-visual "displays."¹³⁸ The court held that Galoob's Game Genie, although it created a derivative work by altering Nintendo's "displays," did so within the scope of fair use, since the end user had the right to modify such displays for their own enjoyment (relying on the logic of *Sony*).¹³⁹

But this logic presents a problem unique to video games: in every play-through of a video game, by controlling the action of an on-screen character, a user alters these audio-visual "displays." Does that mean that by merely *playing* a game—and using the code as it was intended by the programmer—a player (like a flesh and blood version of a Game Genie) creates a derivative audio-visual work? If that is the case, where is the locus of the original, fixed, expressive work? There is no facet of a video game that remains permanently "fixed" except the

132. *Id.* at 967.

133. *Id.*

134. *See, e.g., Sony Corp. of America v. Universal City Studios*, 464 U.S. 417 (1983).

135. *Galoob*, 507 U.S. at 971.

136. *Id.*

137. *Id.* at 971–72.

138. *Id.* at 971.

139. *See Sony*, 464 U.S. at 450 (recording programs in their entirety to view them at a later time found to be fair use).

game's underlying computer code. Yet both *Galoob* and *Midway* suggest that the user's *experience* of the code—through the speed of the gameplay, the changing of “displays,” or other dynamic elements—should factor into the analysis of both the possible existence of a derivative work and, if derivative works are found, the existence of a fair use defense.

The final case in this game-enhancement trifecta, *Micro Star*, attempts to straddle the line between evaluating the expression of the code and the expression of the user experience in video games.¹⁴⁰ In *Micro Star*, a collection of user-created game levels, generally referred to as “Maps,”¹⁴¹ was held to be a derivative work and outside of fair use, even though the code which described these Maps did not include any of the original game's code or graphics (often referred to as “assets”). These maps merely provided additional code which instructed the computer as to how the game engine should to put to use the original assets of the game, in order to create the new gameplay environments.¹⁴²

The only clear factual distinction between *Micro Star* and *Galoob* seems to be that in *Micro Star*, the instructions that caused the modifications to the underlying code were permanently recorded in computer files on the user's hard drive,¹⁴³ while in *Galoob*, the alterations to the original game's code were performed in real time without being saved as the data passed through the circuits of the Game Genie.¹⁴⁴ But if the expression that is being labeled a “derivative work” can only be defined by reference to its altered gameplay (as in *Midway*) or altered visual displays (as in *Galoob*), rather than any direct alterations to the original code itself, then the technical mechanism (real time instructions vs. additional instructions saved on the user's hard drive) by which these experiential changes are effected would seem to be irrelevant to an analysis of whether they constitute a transformative fair use. What is essentially being evaluated is the experience of the user. Therefore any technical intricacies behind how that experience is created that are *invisible* to the user should not be considered dispositive in videogames, when they would not

140. See *Micro Star v. FormGen.*, 154 F.3d 1107 (9th Cir. 1998).

141. See *id.* at 1110.

142. See *id.* The functionality of the maps can be thought to be similar in effect to swapping the blueprints before building a house.

143. See *id.* at 1111-12.

144. See *id.*

be in other media where the new experience was found to be sufficiently transformative to merit fair use.

C. PROBLEMS WITH CURRENT CONCEPTIONS OF FAIR USE IN MODS

The fine technical distinction in *Micro Star*, outlining the differences between where the Modded code is stored and how it works in conjunction with the original code, does not seem significant enough to close the door on the fair-use doctrine in all cases of user Modding—particularly given the complexity and expressivity of modern Mods¹⁴⁵ which go far beyond the mere user-created “Maps” at issue in *Micro Star*.¹⁴⁶ Yet *Micro Star* effectively stands as the most current example of courts’ analysis of Mods as a fair-use derivative work.

Furthermore, in its economic-harm analysis (considered the most significant fair-use factor in *Galoob*¹⁴⁷), the *Micro Star* court does not present a full consideration of the factors unique to Mods (and the economic model of the game industry) which makes Mods less likely to present such a risk of harm.¹⁴⁸ For instance, as discussed, Mods require users to purchase and install the original game on their hard drives in order for the Mod to operate by altering the original game’s instructions to the computer.¹⁴⁹ Logically, a successful Mod would indicate that sales of the original game would not be harmed, but would actually have increased. This has proven to be the case.¹⁵⁰ It is true that developers also make money by licensing out the

145. See, e.g., Wikipedia, Computer Gaming, *supra* note 6. An example is “Counter-Strike,” (CS) a Mod for the game “Half-Life” which replaced the original gameplay (a single-player, science-fiction battle against an alien invasion) with a multiplayer-only, realistic battle between terrorists and police. For quite a while, CS was the most popular online game played in the world, and Valve (the creators of the original game) ended up hiring the Mod-makers. See Counter-Strike Source, <http://www.counter-strike.net> (last visited Apr. 18, 2007).0

146. See Wikipedia, *supra* note 6. Total Conversions, for example, are Mods in which nearly every asset of the original game, such as graphics, sounds animation, and models, are replaced with user-created versions. “Alien Quake” (the foxed Mod), discussed *supra* note 1, was to be an example of such a Total Conversion.

147. See *Lewis Galoob Toys, Inc. v. Nintendo of America, Inc.*, 964 F.2d 965 (9th Cir. 1992), *cert. denied*, 507 U.S. 985 (1993).

148. See *Micro Star v. FormGen*, 154 F.3d 1107, 1112 (9th Cir. 1998).

149. See Kushner, *supra* note 6.

150. *Id.*

use of their game engines to other commercial game developers to create games.¹⁵¹ A successful Mod in a particular genre might mean that a commercial game developer, interested in licensing the original game engine, might opt not to create a similar game in the same genre as the Mod. But it is an open question whether the loss of this potential licensing revenue would eclipse the profit from customers who would need to buy the original game in order to play the Mod.¹⁵² *Micro Star* also does not consider the benefits of Modders to game developers. The game-industry, in an effort to reduce training costs, practices a widespread custom of hiring employees who have developed their experience by Modding.¹⁵³ All of these factors may significantly diminish the claim that Modders' fair use harms the marketplace, and thus the significance that this factor should play in a derivative-work analysis, particularly since potential market harm is the effective focus in many Mod-like situations where additional content is merely added, and underlying (copyrighted) code is unaltered.¹⁵⁴

Interestingly, the prevailing ethos of Modders is to both create and release their Mods without attempting to charge users for them,¹⁵⁵ but this is not universally the case. Notably, some developers' EULAs explicitly permit Modders to sell their projects.¹⁵⁶ But the fair use analysis remains critical in determining whether the Modders, like the performers of "Barbie Girl," would be legally permitted to sell their derivative expression without such authorization.

D. ALTERNATIVE PROPOSALS OF ARTISTIC APPROPRIATION ANALYSIS

As discussed previously, Mods often represent a high point on the Spectrum of User-Contribution, where the user-added content can significantly re-define the game experience itself.

151. See Wikipedia, Game Engine, *available at* http://en.wikipedia.org/wiki/Game_engine (last visited Apr. 18, 2007).

152. See, e.g., Steampowered.net, Homepage, <http://www.steampowered.net> (last visited Apr. 18, 2007). In fact, we see evidence of this with the Mod "Counter-Strike," which has helped keep its parent game, "Half-Life," available as a full-price retail product for nearly ten years. See Hyman, *supra* note 16 (but noting also that other developers discourage such Modding, citing brand "dilution" concerns).

153. See Kushner, *supra* note 6.

154. See, e.g., *Midway Mfg. Co. v. Artic Int'l, Inc.*, 704 F.2d 1009 (1983).

155. See Kushner, *supra* note 6.

156. *Id.*

Therefore, intuitively, Modders' claims of ownership of such added content would seem to be even greater than would players merely contributing content within MMOs (ownership that Korean Law has already recognized).¹⁵⁷ However, Mods' practical legal status as derivative works has, in effect, stripped such ownership (particularly copyright) from Modders. A preferable analysis of Modding would reevaluate the technical analysis that has dominated caselaw precedents (such as whether information is saved or altered in real time),¹⁵⁸ and further examine the totality of a Mod's alterations to the gameplay experience, and the effect these transformations have upon the ultimate expression that is communicated to the user.¹⁵⁹ This holistic approach seems more in line with the rationale of *Mattel* and other artistic-appropriation/fair-use cases and analyses.¹⁶⁰

1. Minor Expression Changes: Reconciling and Applying Midway and Galoob

Midway, recognizing that the user experience of "excitement" (and its resultant market value) was important in determining whether sped-up gameplay presented a derivative work (and, therefore implicitly an entirely new *expression*), employed a form of user-experience rationale in its analysis. However, *Midway* stopped short of the more convincing rationale of *Galoob* when it did not find the derivative work was within fair use.¹⁶¹ As held in *Galoob*, minimal changes in the experience of the user, such as speeding-up gameplay or increasing character strength, are more logically classified as

157. See Ward, *supra* note 32.

158. See, e.g., *Lewis Galoob Toys, Inc. v. Nintendo of America, Inc.*, 964 F.2d 965 (9th Cir. 1992), *cert. denied*, 507 U.S. 985 (1993).

159. The suggestion is in current analysis of the existence of derivative works and fair use through an analysis of the function of the underlying code, which, as discussed *supra*, may also be a misunderstanding of the way that Mods interact with the underlying game code, which must be present for the mod to operate.

160. See BARRY STEINHARDT, AMERICAN CIVIL LIBERTIES UNION, PRESERVING FAIR USE IN THE DIGITAL AGE 5, *available at* http://webworld.unesco.org/infoethics2000/documents/paper_steinhardt.rtf (last visited Apr. 18, 2007) ("Fair Use promoted free expression and cultural development . . . Consider the work of painters like Andy Warhol, who composed numerous works with such images as Campbell's Soup cans . . . images that were protected under intellectual property laws.")

161. See *Midway Mfg. Co. v. Artic Int'l, Inc.*, 704 F.2d 1009, 1014 (1983).

akin to a user of a VCR adjusting the fundamental experience of viewing a movie (skipping scenes, watching without the sound), and thus, users and Modders of games should be within their rights in doing so.¹⁶² Therefore, similar to *Galoob*, such Mods should generally be protectable under copyright by the Modders who create them.

Developers can instead seek their protection under the heightened requirements of trademark and other commercial competition laws, as was an approach in *Mattel*.¹⁶³ If the Modders' changes are minor and the Mods are so similar to the expression of the original game as to create marketplace confusion as to their source, then they might still be enjoined from being sold as a commercial product, because the Mods might only constitute a commercial expression.¹⁶⁴ Yet the Mods themselves would still be allowed to exist and be protected as a fair use. This analysis meshes with the logic of the spectrum of user contribution, in which different levels of user-created content might implicate different legal frameworks and protections.

2. Extensive Expression Changes: Applying *Mattel* to Micro Star, Machinima, and Beyond

As the complexity of the expression within a Mod grows more evident to a factfinder, the allowances of both fair use under copyright law as well as for non-commercial expression under trademark and other laws would allow an artist to put the original work to derivative use, as they did for the artists in *Mattel*.¹⁶⁵ Modders would then be able to freely sell their Mods as distinct, protectable forms of expression. The Mod's derivative expression would be allowable under fair use and other applicable commercial-confusion doctrines.

As previously discussed, the line between an acceptable derivative expression and a misappropriation of copyrighted

162. See *Galoob*, 507 U.S. 985 at 971.

163. See *Mattel v. MCA Records*, 296 F.3d 894 (9th Cir. 2002).

164. See 15 U.S.C. § 1051 (2002). Trademark protection applies only to marks that are used in commerce. Its rationale is designed to avoid market confusion as to the source of a product associated with those marks. By contrast, the use of the trademarks in the song "Barbie Girl" was held to present no possibility of confusion that it was, in fact, produced by *Mattel*. See *Mattel*, 296 F.3d at 895.

165. See *Mattel*, 296 F.3d at 984.

work is far from clear.¹⁶⁶ However—when Mods are viewed within the larger framework of user contribution—drawing such a line might be more principled and more in line with the constitutional tradition of valuing creativity, expression, and invention¹⁶⁷ than is the current hard line drawn by *Micro Star*, whose technology-focused reasoning effectively removing Mods from ever asserting a claim of copyright.

A more expression-related inquiry is clearly sensible in the case of game-related projects like “Machinima,” where game engines are put to work to create entirely non-game derivative works, such as short films, and even talk shows produced from within virtual-worlds.¹⁶⁸ With the advent of distribution venues such as YouTube.com, such projects are becoming more prevalent, and some creators have begun releasing their work commercially, such as the in-*Halo*-engine filmed Red vs. Blue film series.¹⁶⁹ Furthermore, in addition to their long practice of encouraging the development of Mods,¹⁷⁰ some game developers have even begun sponsoring contests and online festivals for the creation of Machinima as well,¹⁷¹ with the business rationale being that these user-created films spurs awareness and ultimate market lifespan of the games used to create them.

Mods, create a potentially more complicated situation, but the underlying expressive issues are the same. These works are certainly, by the standards set forth in *Mattel* and other cases, clearly transformative forms of expression. They are creative works that incorporate independently created scripts, soundtracks, virtual actors, and elements of humor, parody, and drama.¹⁷² Yet, under the aging rationale of *Micro Star*, they are evaluated, as a form of expression, only by the

166. See Gaither, *supra* note 14, at C1 (one need only see the controversies over “Food Barbie” and other projects as examples).

167. See Steinhardt, *supra* note 160, at 2.

168. See John Pavlus, *The Late Late Show, Live from Inside Halo*, WIRED, Apr. 2006, at 127 (detailing an artist who hosts a talk show, This Spartan Life, by inviting guests to meet him within an online battlefield of the game Halo, then films the exchanges and posts them online).

169. See RED vs. BLUE, *supra* note 55.

170. See Hyman, *supra* note 16.

171. See, e.g., Xfire Homepage, http://www.xfire.com/cms/xf_wow_contest/ (last visited Apr. 18, 2007) (a Machinima contest sponsored by developers of the MMO World of Warcraft).

172. See RED vs. BLUE, *supra* note 55.

similarity of arrangement of ones and zeros of their underlying computer code. The nature of expression in games is no longer, as was involved in *Midway*, merely a yellow semi-circle chasing dots around a maze. They have, and can continue to, explore the full range of human emotions and artistic themes.¹⁷³ Modders, as “underground” creators using new media of art, are often the first to push the expressive goals of copyright ahead. It is time to grant these unique expressions the protection they deserve.¹⁷⁴

CONCLUSION

Videogames, with their malleable technology and their embrace of the connectivity of the internet, have engendered collaborative experiments often beyond other forms of media. Users are frequently also contributors, supplying their own time or expertise to transform the experience of the games they play. Commentators are already arguing the case for recognition of a level of ownership (and other) rights for such users, particularly in regard to MMOs, as some nations have already done. But confusing legal analyses of Mods have generally left their creators without much legal protection or ownership in their contributed content. A broader conceptual framework—a Spectrum categorizing the level of user-contribution to games—both helps to illustrate this oversight in the analysis of Mods, and also argues for a more principled application of doctrines of creative expression to protect such transformative projects.

173. See Castronova, *supra* note 33, at 188–92.

174. One potential approach, worthy of additional attention, would be to apply a compulsory-licensing system to Mods, analogous to the model which currently allows musicians to perform, record, and sell “cover versions” of other bands’ musical compositions. See US Copyright Office, *Circular 73: Compulsory License for Making and Distributing Phonorecords*, <http://www.copyright.gov/circs/circ73.pdf>. Parallels are evident in the public policy behind these compulsory licenses. Like the music industry, the game industry has a high expectation that individuals will develop their skills “on the road” so to speak, through a progression of amateur and semi-professional work, before being hired as full professionals. And, like the music industry plucking from the best local bands, the game industry recruits heavily from Modder teams. If a traveling college band can pay its way to potential stardom with questionable covers of “Free Bird,” why not Modders with their own riffs on “Doom”?