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Modding: Amateur Authorship and How the Video Game Industry Is Actually Getting It Right

I. INTRODUCTION

The video game industry is one of the largest entertainment industries in the world. In 2012, the global video game industry posted revenues of \$78.5 billion.¹ Although this revenue falls short of the \$88.2 billion brought in by the global movie industry last year,² the growth and strength of the video game industry is amazing considering that the industry is not even fifty years old,³ and has, arguably, only hit its stride within the last twenty years.⁴ As an example of the vast earning potential of video games, this year Take-Two Interactive Software's *Grand Theft Auto V* smashed sales records and reached \$1 billion in sales within three days of its release;⁵ James Cameron's *Avatar*, the highest grossing movie of all time,⁶ reached that milestone in seventeen days.⁷

1. *Factbox: A Look at the \$78 Billion Video Games Industry*, REUTERS (June 1, 2012), <http://www.reuters.com/article/2012/06/01/us-videogameshow-e3-show-factbox-idUSBRE8501IN2 0120601>.

2. IBISWORLD, GLOBAL MOVIE PRODUCTION & DISTRIBUTION (2013) <http://www.ibisworld.com/industry/global/global-movie-production-distribution.html> (last visited Sept. 18, 2013).

3. *CNBC Special: A History of Video Game Industry*, NBCNEWS.COM, (Nov. 30, 2006, 11:03 AM), <http://www.nbcnews.com/id/15734058/#.UTqouXNeu4c> (noting that in the 1970s advancements in computing made widespread video game production possible).

4. *See, e.g.*, Chris Suellentrop & Stephen Totilo, *Gaming Faces Its Archenemy: Financial Reality*, N.Y. TIMES, Oct. 7, 2012, at ARI, available at <http://www.nytimes.com/2012/10/07/arts/video-games/video-game-retail-sales-decline-despite-new-hits.html?pagewanted=all&r=0> (noting that the video game industry barely survived the recession of the early 1980s.); Mia Consalvo, *Console Video Games and Global Corporations: Creating a Hybrid Culture*, 8 NEW MEDIA & SOC'Y 117, 119 (2006) (noting that "Nintendo almost single-handedly revitalized the game industry in America" after the release of its Nintendo Entertainment System in 1985).

5. Tom Gara, *How 'Grand Theft Auto V' Will Make Its Second Billion*, WALL STREET JOURNAL BLOGS: CORPORATE INTELLIGENCE (Sept. 16, 2013, 1:56 PM), <http://blogs.wsj.com/corporate-intelligence/2013/09/26/how-grand-theft-auto-will>

However, despite the commercial success of this relatively new media form, video games were only fairly recently recognized as speech worthy of protection under the First Amendment.⁸ While the artistic and social utility of video games continues to be fiercely debated,⁹ this Comment does not attempt to engage in that debate. Instead, proceeding under the assumption that video games are a valuable method of speech and artistic expression, this Comment examines one avenue of game creation that gives private individuals access to this method of speech known as modifying a game, or "modding."

Modding is the process of altering, adding to, or deleting video game code to change the way that a particular game is played.¹⁰ Modding can cover a wide variety of actions. For example, private individuals can simply change game artwork through a process known as "reskinning,"¹¹ or they can introduce new content, such as

make-its-second-billion/. Not even a year earlier, Activision's *Call of Duty: Black Ops 2* had broken sales records by reaching the \$1 billion mark within fifteen days. Dave Their, *Call of Duty: Black Ops 2 Makes \$1 Billion in Sales*, FORBES (Dec. 5, 2012, 11:01 AM), <http://www.forbes.com/sites/davidthier/2012/12/05/call-of-duty-black-ops-2-makes-1-billion-in-sales/>.

6. *All Time Box Office Worldwide Grosses*, BOX OFFICE MOJO, <http://boxoffice Mojo.com/alltime/world/> (last updated Sept. 19, 2013).

7. Gara, *supra* note 5.

8. *Brown v. Entm't Merchants Ass'n*, 131 S. Ct. 2729, 2761 (2011).

9. *See, e.g.*, Benedict Carey, *Shooting in the Dark*, N.Y. TIMES, Feb. 12, 2013, at D1, available at http://www.nytimes.com/2013/02/12/science/studying-the-effects-of-playing-violent-video-games.html?_r=0 (debating whether or not video games cause violence among users); Roger Ebert, *Video Games Can Never Be Art*, ROGER EBERT'S JOURNAL (Apr. 16, 2010), <http://www.roger-ebert.com/rogers-journal/video-games-can-never-be-art> (arguing that video games, because of their interactive nature and commercial justifications, cannot be art); Kellee Santiago, TEDx Presentation at the Univ. of S. Cal.: Are Video Games Art? (Aug. 17, 2009), available at http://stevens.usc.edu/Kellee_Santiago_Are_Video_Games_Art.flv (arguing that video games can be art and that the evolution of video game industry is leading game makers to create more artistic games); Roger Ebert, *Okay, Kids, Play On My Lawn*, ROGER EBERT'S JOURNAL (July 1, 2010), <http://www.roger-ebert.com/rogers-journal/okay-kids-play-on-my-lawn> (stating that although the author still believes that video games are not art, because he has not played very many video games, he cannot rule out the possibility that video games could be an artistic experience for some people).

10. *See* David Kushner, *It's a Mod, Mod World*, IEEE SPECTRUM (Feb. 1, 2003, 5:00 GMT), <http://spectrum.ieee.org/consumer-electronics/gaming/its-a-mod-mod-world>.

11. A reskin of a game could be something as simple as replacing a character's face or giving him a cape, to something as complex as replacing all of the artwork from the original game with user-created artwork. Therefore, even though a reskin is presented in this context as something simple, a complete reskin of a game could have an enormous impact on any particular game. For a collection of amusing reskins, see Jill Harness, *The 16 Funniest and*

levels, characters, items, or objectives.¹² Even more drastically, a modder could remove nearly all of the original game content, substitute in new content, and essentially create a new game. This process is known as “total conversion modding.”¹³ Some total conversion mods have become massively popular and successful games in their own right, including *Counter-Strike*, a mod of the Valve game *Half Life*,¹⁴ and *Team Fortress*, a mod of the Id Software game *Quake*.¹⁵

Modding provides numerous benefits to the video game industry. First, modders create new features and content that video game consumers, also known as “gamers,”¹⁶ enjoy. However, beyond simply benefiting those who play the games, new content benefits the original developer of the game because it extends the life of the modded game, can spark interest in the original product, and can even incentivize new people to purchase the game just to play the mod.¹⁷ Most, if not all, mods require that the original game be present on the hard-drive of the computer running the mod for the

Coollest Video Game Mods Ever, NEATORAMA (May 31, 2012, 5:08 AM), <http://www.neatorama.com/2012/05/31/the-16-funniest-and-coolest-video-game-mods-ever/#13Uo3>. Note that most, if not all, of the mods highlighted on the site use copyrighted characters and are, therefore, violations of copyright law.

12. These types of mods typically take the form of new content that can be inserted into a preexisting game by the gamer. For example, modders have created many new objectives, known in game as quests, for the popular game *The Elder Scrolls V: Skyrim*. *Skyrim Mods: Browse Quests*, CURSE, <http://www.curse.com/mods/skyrim/category/quests> (last visited Oct. 22, 2013).

13. *Mod (Video Gaming)*, WIKIPEDIA, [http://en.wikipedia.org/wiki/Mod_\(video_gaming\)](http://en.wikipedia.org/wiki/Mod_(video_gaming)) (last visited Sept. 20, 2013).

14. The Counterstrike Mod changed a sci-fi, single-player game into a realistic terrorist/anti-terrorist multiplayer game. Greg Finch, *The Top Ten Game Mods of All Time*, CREATORS PROJECT BLOG (July 20, 2011), <http://www.thecreatorsproject.com/blog/the-top-10-game-mods-of-all-time>.

15. *1996*, MOD HALL OF FAME, <http://www.modhof.com/> (last visited Sept. 20, 2013).

16. Although the Supreme Court of the United States has not yet embraced the term “gamer,” a handful of circuit court cases have used it when speaking of those who play video games. See, e.g., *In re NCAA Student-Athlete Name & Likeness Licensing Litig.*, 724 F.3d 1268, 1285 (9th Cir. 2013); *Facenda v. N.F.L. Films, Inc.*, 542 F.3d 1007, 1016 (3d Cir. 2008).

17. See, e.g., Luke Plunkett, *PC Zombie Darling Causes Sale Explosion*, *ArmaA Devs Happy to Help*, KOTAKU (May 15, 2012, 1:00 AM), <http://kotaku.com/5910279/pc-zombie-darling-causes-sale-explosion-arma-devs-happy-to-help> (reporting that the popularity of a mod increased the sales of a two-year-old game by fivefold).

mod to work.¹⁸ Therefore, people interested in playing a particular mod must first (presumably) purchase a retail copy of the game, making it possible for a popular mod to drive the sales of an original game. Second, modding provides a constant stream of ideas and innovations that game developers can draw from when creating new games. As Craig Peterson, a video game developer for Valve, has said:

[T]he right way to approach community involvement is not in a developer [to] customer relationship, but more as a collaborative approach, where there are some parts of the product that we'll build, and other parts that the community will build, and that the lines between those parts will continually shift.¹⁹

There is some proof that Peterson's collaborative approach can be extremely successful in practice. In fact, entire genres of video games have been created through modding.²⁰ For example, the genre of games known as multiplayer online battle arenas, or MOBAs, was first created and made popular by mods of Blizzard Entertainment's *Starcraft* and *Warcraft III*. The most popular MOBA, *League of Legends*, now has over thirty-five million players and is the most played game in the world.²¹

Finally, through modding, private individuals learn valuable programming, game design, and artistic skills that are valued by commercial game developers. In fact, some game development companies consider a person's modding activities when hiring new developers. As the game director for Bethesda's *Skyrim* (a massively popular role-playing video game) stated, "Because our [game production] tools have been out for so long, if you're applying with us, we'll say, 'Throw something up!' So we can look at their mod,

18. *Mod (Video Gaming)*, *supra* note 13.

19. Craig Pearson, *Valve's Robin Walker on Six Figure Item Sales and the Future of Modding*, PC GAMER (Jan. 11, 2013, 5:00 PM), <http://www.pcgamer.com/2013/01/11/valves-robin-walker-on-six-figure-item-sales-and-the-future-of-modding/>.

20. *Multiplayer Online Battle Arena*, WIKIPEDIA, http://en.wikipedia.org/wiki/Multiplayer_online_battle_arena (last visited Sept. 20, 2013).

21. Jason Evangelho, *'League of Legends' Bigger Than 'WoW,' More Daily Players Than 'Call of Duty'*, FORBES, (Oct. 12, 2012, 10:26 AM), <http://www.forbes.com/sites/jasonevangelho/2012/10/12/league-of-legends-bigger-than-wow-more-daily-players-than-call-of-duty/>.

their level—and our bar is, ‘Would we have shipped this?’”²² Being able to choose from a large population of people who are highly skilled in video game design and production and who are familiar with the specific tools that a particular development company uses is extremely valuable for game development companies.

Because of the benefits of modding, many game development companies encourage modding through actively releasing programming tools that are designed to make modding easy.²³ However, not all game development companies are mod friendly. Game companies may choose not to allow modding of their products because they are worried about losing artistic control of their product,²⁴ they may be concerned about online or multiplayer stability and fairness,²⁵ or they may simply not have the resources to develop user friendly modding tools.²⁶

22. Kirk Hamilton, *Skyrim Director Wishes Console Gamers Could Experience PC Mods*, KOTAKU (June 12, 2012, 6:00 PM), <http://kotaku.com/5917893/skyrim-director-wishes-console-gamers-could-experience-pc-mods>.

23. Some game companies that readily release their production tools and encourage modding include Valve, Tom Senior, *Portal 2 Mod Tools Are Out Now*, PC GAMER (May 11, 2011, 11:14 AM), <http://www.pcgamer.com/2011/05/11/portal-2-mod-tools-are-out-now/>; Blizzard Entertainment, Tom Senior, *StarCraft 2 Mod Tool Updates to Let Players Create Custom Models, UI and Cutsscenes*, PC GAMER (Oct. 23, 2011, 3:04 AM), <http://www.pcgamer.com/2011/10/23/star-craft-2-mod-tool-updates-to-let-players-create-custom-models-ui-and-cutsscenes/>; Bethesda, James Plafke, *Official Skyrim Mod Tools Released, Along With Portal 2 Space Sphere Mod*, GEEKOSYSTEM (Feb. 7, 2012, 3:18 PM), <http://www.geekosystem.com/skyrim-mod-tools-released-space-sphere-mod/>; Id Software, Ian Miles Cheong, *Bethesda and Id Software Release RAGE Modding Tools*, GAMERANX (Feb. 8, 2013), <http://www.gameranx.com/updates/id/12652/article/bethesda-and-id-software-release-rage-modding-tools/>; Epic Games, Chris Faylor, *Unreal Tournament 3 PC-PS3 Mod Tools Released*, SHACK NEWS (Jan. 7, 2008, 7:57 AM), <http://www.shacknews.com/article/50611/unreal-tournament-3-pc-ps3>.

24. Known as a “moral right,” independent of the economic assignment of their works, authors maintain a right to protect their works against “distortion, alteration, or mutilation of [their] work that is prejudicial to [their] honor or reputation.” Roberta Rosenthal Kwall, *Copyright and the Moral Right: Is an American Marriage Possible?*, 38 VAND. L. REV. 1, 10–11 (1985).

25. Introducing mod tools makes creating cheats and hacks easier. Preventing cheats and game hacking is particularly important when a game is a massive multiplayer game where thousands of players play on online servers at the same time. As one developer of *Battlefield 3*, a popular first-person shooter, explained, “It’s a huge investment for us to [release modding tools], and also a bit complicated, and to some degree there’s also [a concern] security-wise. It’s a bit scary to take an investment like *Battlefield 3* and just let people dig into that engine and do whatever they want. We’re dedicated to try and really limit the amount of hacks and exploits that come out there, but as soon as you let something like that out, people have all the tools in the world that they need to sit there and try to create cheats that actually would destroy the experience for a lot of other people. I’m not blaming mod tools for hacks and

As the law currently stands, mods are viewed as derivative works and are, therefore, violations of the copyright holder's rights if made without the copyright holder's consent.²⁷ Therefore, mods can only legally exist through the permission of the copyright holder and if, at any time, the copyright holder disagrees with the direction that a particular mod is taking, it can pull the plug and require the development or distribution of the mod to cease. For example, when Square Enix, the developer of the popular *Final Fantasy* series, found out about a fan-based mod that had taken art from a ROM file for a game owned by the company, Square Enix promptly sent a cease and desist letter to the mod developers threatening \$150,000 in damages per work.²⁸ The mod had been in development for five years and was ninety-eight percent complete.²⁹ Threatened with litigation and lacking a legal basis for their work, the developers abandoned their project.³⁰ As derivative works, mods made without the consent of the copyright holder have no protection before the law.

Recent proponents of modding have attempted to find legal protection for mods by calling for a reinterpretation or adaptation of current copyright law.³¹ Although the specifics of the

exploits in any way, but there's a lot of things we need to consider." Cam Shea, *Battlefield 3 Developer Talks Mod Tools*, IGN (Sept. 18, 2011), <http://www.ign.com/articles/2011/09/18/battlefield-3-developer-talks-mod-tools>. That being said, Activision, the developer of the *Call of Duty* series, one of the most popular online multiplayer first-person shooter games, has expressed interest in releasing mod tools for its newest games. Phil Hornshaw, *Black Ops 2 Team Will Make Mod Tools "If They Have the Resources"*, GAME FRONT (June 6, 2012), <http://www.gamefront.com/black-ops-2-team-will-make-mod-tools-if-they-have-the-resources/>.

26. Logan Booker, *Why Don't More Developers Release Mod Tools?*, KOTAKU (Dec. 11, 2011, 12:30 PM), <http://www.kotaku.com.au/2011/12/why-dont-more-developers-release-mod-tools/>.

27. *Micro Star v. Formgen Inc.*, 154 F.3d 1107, 1112–13 (9th Cir. 1998) (holding that new MAP files that modified a video game were derivative works and that a third party's attempt to sell them constituted copyright infringement).

28. Earnest Cavalli, *Square Enix Kills Near Complete Chrono Trigger Fan Project*, WIRED (May 11, 2009, 4:16 PM), <http://www.wired.com/gamelife/2009/05/square-enix-kills-near-complete-chrono-trigger-fan-project/> (last visited Sept. 23, 2013).

29. *Id.*

30. *Id.*

31. See Patrick McKay, Note, *Culture of the Future: Adapting Copyright Law to Accommodate Fan-Made Derivative Works in the Twenty-First Century*, 24 REGENT U. L. REV. 117 (2011); Note, *Spare the Mod: In Support of Total-Conversion Modified Video Games*, 125 HARV. L. REV. 789 (2012) [hereinafter *Spare the Mod*]; John Baldrice, *Cover Songs and Donkey Kong: The Rationale Behind Compulsory Licensing of Musical Compositions Can Inform a Fairer*

proponents' arguments vary, they are unanimous on one point: modding should be legalized.³² According to this group, legalization could come through (1) changing copyright law altogether,³³ (2) reinterpreting judicial decisions to hold that some mods are not derivative works, or (3) redefining the fair use doctrine to include mods.³⁴ Change in copyright law, however, is unnecessary. Specifically, this Comment argues that mods are derivative works and that most mods do not fall within the doctrine of fair use. Any attempt to fit mods into the framework of the fair use doctrine would require a manipulation of the doctrine that would be inconsistent with legal precedent. Even so, despite the lack of legal protection under copyright law doctrines, modding is thriving due to the consent of video game developers. In addition, the current trend in video gaming known as “microtransactions” may make modding even more economically desirable and accepted by commercial video game developers.

Part II of this Comment will provide an introduction to modding, including a brief discussion of the different components of video games and the technical methods modders use to create mods. Part III will then transition to a legal discussion of modding by discussing the basics of copyright law and by providing a legal history

Treatment of User-Modified Videogames, 11 N.C. J. L. & TECH. 103 (2009) [hereinafter Baldrica, *Cover Songs*]; R. Keith Sawyer, *Creativity, Innovation, and Obviousness*, 12 LEWIS & CLARK L. REV. 461, 483 (2008); John Baldrica, Note, *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*, 8 MINN. J.L. SCI. & TECH. 681, 703 (2007) [hereinafter Baldrica, *Mod as Heck*]; Zvi Rosen, Comment, *Mod, Man, and Law: A Reexamination of the Law of Computer Game Modifications*, 4 CHI.-KENT J. INTELL. PROP. 196 (2005).

32. See, e.g., Baldrica, *Cover Songs*, *supra* note 31, at 115 (“[M]ods could more properly be envisioned as expression which makes fair, transformative use of copyrighted material.”); McKay, *supra* note 31, at 139 (“[T]he law must change to provide specific protections for fan-made media and similar non-commercial derivative works.”).

33. McKay, *supra* note 31, at 139–40 (“The simplest way . . . would be to add ‘non-commercial, transformative use’ to the preamble of Section 107 of the Copyright Act, which lists examples of works Congress intends to be considered fair use.”) (citation omitted).

34. Rosen, *supra* note 31, at 203 (“Total conversions . . . are not derivative works under any application of statute or case law.”); Baldrica, *Spare the Mod*, *supra* note 31, at 789 (“This Note argues that total-conversion add-on modifications, even those created for a commercial purpose, should qualify as nonderivative works, or alternatively, as fair use.”) (footnote omitted); Baldrica, *Cover Songs*, *supra* note 31, at 115 (“[M]ods could more properly be envisioned as expression which makes fair, transformative use of copyrighted material.”) (citation omitted).

of how courts have handled modding in the past. Part III will also deal with current arguments attempting to “legalize” modding and show that mods are derivative works and are not protected as a fair use. Part IV will then show how modding is thriving through the consent of the video game industry and will briefly discuss how modders can ensure that their actions remain legal. Part V will conclude the Comment.

II. MODDING 101

A. The Technology of Modding

When a person plays a video game, whether on a computer, video game console, mobile device, or cellphone, he or she is really only seeing a small part of the product that makes the video game possible. Essentially, a video game can be broken down into two distinct parts: the game engine and the game content.³⁵ Video game players spend almost all of their time interacting with the content of the game. Typically, a gamer takes control of a character and interacts with other computer characters or objects. Additionally, he or she proceeds through levels using tools or weapons to achieve objectives and solve problems. All of the characters, levels, and items are displayed to the player using the distinct artwork employed by the developers and conveyed via the user interface, or UI, which includes all of the information on the television screen or computer monitor and often contains information such as the user’s life, ammunition, or other important information.³⁶ Finally, games typically involve a wide variety of music and sounds. All of these things—the “art, sound, characterization, story, visual style, genre, and game objectives”—make up the game content.³⁷ In most instances, a modder only modifies game content.

Underlying the game content is what is known as the game engine, which makes all of the game content work together. The engine is a “collection of reusable software modules” that essentially

35. Baldrice, *Spare the Mod*, *supra* note 31, at 790.

36. See Desi Quintans, *Game UI by Example: A Crash Course in the Good and the Bad*, GAMEDEVTUTS+ (Jan. 22, 2013), <http://gamedev.tutsplus.com/tutorials/aesthetics/game-ui-by-examp-le-a-crash-course-in-the-good-and-bad/>.

37. Baldrice, *Spare the Mod*, *supra* note 31, at 791.

creates the foundation and underlying rules that the game will utilize.³⁸ An engine typically includes a graphics renderer, a physics engine, sound modules, and artificial intelligence.³⁹ The graphics renderer takes all of the different pieces of a model,⁴⁰ such as the model's geometry and shape, its colors and textures, lighting components, and artwork, and fuses them together into a single unit to be used within a game.⁴¹ Everything that a gamer sees is constructed from a set of files from the game content that is patched together using the graphics renderer.

The physics engine governs how physical objects in the game move and interact with each other.⁴² For example, a physics engine governs a grenade's trajectory and movement after it hits the ground, a rocket's path as it flies through the sky, and what happens if you run a car into a wall.

Even though the game content is often the focus of both players and critics alike, the game engine itself is extremely important and can be very expensive to create.⁴³ Therefore, game developers who create their own game engines will often reuse their engines or license them to other developers who wish to use them in their own games.⁴⁴ For example, *Half-Life 2*, *Portal*, *Team Fortress 2*, and *Counter-Strike: Source* were all developed using Valve's Source Engine, even though the games are vastly different both in substance and style.⁴⁵ One of the largest game engines, Epic Game's Unreal Engine, has been used in over 250 unique games created by big name developers such as Ubisoft, EA, Lucasarts, Rocksteady, Bioware, and 2K.⁴⁶

38. *Id.* at 790.

39. *Id.* at 790–91.

40. A "model" could be anything from the user-controlled character, to aliens, a car, a building or a cloud.

41. Baldrice, *Spare the Mod*, *supra* note 31, at 790 n.9.

42. *Id.* at 791 n.10.

43. *Id.* at 790.

44. *See, e.g.*, DEVMASTER, <http://devmaster.net/devdb/engines> (last visited Oct. 28, 2013) (containing a searchable database that contains information about many different engines available for licensing).

45. Baldrice, *Spare the Mod*, *supra* note 31, at 791.

46. *List of Unreal Engine Games*, WIKIPEDIA, http://en.wikipedia.org/wiki/List_of_Unreal_Engine_games (last visited Oct. 28, 2013).

To reuse a particular game engine, the game developer must obtain a license from the game engine copyright holder.⁴⁷ Game engine copyright holders typically offer a variety of licensing options. First, large-scale, commercial game developers may seek to obtain a full-source game engine license.⁴⁸ This license gives the developer access to the game engine's source code along with the right to modify the engine in any way that it sees fit.⁴⁹ However, obtaining a full-source license can be extremely expensive. For example, licensing a full-source version of the popular Unreal 3 Engine is estimated to cost upwards of \$700,000.⁵⁰ Second, private individuals interested in developing and selling their own games are often able to obtain cheaper, limited-access licenses for game engines.⁵¹ These limited licenses do not give developers access to the game engine code or permission to alter it.⁵² The cost for these limited-access, commercial licenses usually include a one-time fee as well as an agreement to pay royalties to the game engine owner.⁵³ Finally, many game engine copyright holders also provide free, limited-access licenses for the creation of non-commercial or educational programs.⁵⁴ In this context, "non-commercial" means

47. See *Licensing*, UNREAL ENGINE, <http://www.unrealengine.com/en/licensing/> (last visited Oct. 28, 2013).

48. *Terms*, UNREAL ENGINE, <http://www.unrealengine.com/licensing/terms/> (last visited Oct. 28, 2013).

49. *Licensing*, *supra* note 47.

50. *Unreal Engine 3*, DEVMASTER, <http://devmaster.net/devdb/engines/unreal-engine-3> (last visited Oct. 28, 2013). The cost of many game engines are closely guarded secrets and are protected by non-disclosure agreements. See, e.g., *Licensing*, CRYENGINE, <http://mycryengine.com/?conid=3> (last visited Oct. 28, 2013); VALVE, SOURCE ENGINE LICENSING INFORMATION SHEET 2, *available at* http://www.valvesoftware.com/SOURCE_InfoSheet.pdf.

51. See, e.g., *UDK: Licensing FAQs*, UNREAL ENGINE, <http://www.unrealengine.com/udk/licensing/licensing-faqs/> (last visited Oct. 28, 2013).

52. *Id.*

53. The licensing agreement for the limited-access, commercial version of the Unreal 3 Engine (UDK) requires a one-time \$99 fee and twenty-five percent royalties on any profits made after the first \$50,000. *Id.* Other major engines such as Valve's Source Engine and Crytek's CryENGINE 3 have similar licensing regimes. See *Source Engine:Source SDK*, VALVE BUSINESS SOLUTIONS, <http://source.valvesoftware.com/sourcesdk.php> (last visited Oct. 28, 2013) (only requiring purchase of a game using the *Source* engine to have access to the SDK, which is the equivalent of the UDK); *Game Development License*, CRYENGINE 3, <http://mycryengine.com/index.php?conid=43> (last visited Oct. 28, 2013) (allowing free non-commercial use of the engine and requiring a developer license with a twenty percent royalty fee for commercial uses).

54. *UDK: Licensing FAQs*, *supra* note 51.

works distributed for free.⁵⁵ The free licenses also typically do not provide access to the game engine source code and prohibit altering of the engine.⁵⁶

Modders rarely modify game engines and, instead, work almost exclusively with game content. Content alteration is accomplished in one of two ways. First, a modder can create new content or alter existing content by utilizing official “tools” released by the developer of the game being modded.⁵⁷ These tools are provided to the gaming community specifically so that individual gamers can create mods, and are typically similar, or identical, to the actual tools that the game creators used to create the game.⁵⁸ By using officially released tools, modders are easily able to integrate their new work into that of the original game.⁵⁹ Additionally, along with the official modification tools, game creators typically include an End User License Agreement (“EULA”) that expressly grants consent to allow video game users to modify their games.⁶⁰ However, the EULA also typically signifies that any user-created content is property of the original developer and, therefore, cannot be sold by the modder.⁶¹

55. *Id.*

56. *See id.*

57. Booker, *supra* note 26.

58. *Id.*

59. *Id.*

60. For example, the EULA in Bethesda Softworks’ *Skyrim* included creation tools that were released by Bethesda to modify the popular game. *Download Terms and Conditions*, STEAM, http://store.steampowered.com/eula/eula_202480 (last visited Oct. 28, 2013) (“This downloadable editor, titled The Creation Kit™ (the “Editor”), enables the end user (“You”) to create new or customized levels or otherwise adjust Your experience in using the copy of The Elder Scrolls V: Skyrim® software product purchased by You (the “Product”).”).

61. *See, e.g., id.* (“You may not cause or permit the sale or other commercial distribution or commercial exploitation (e.g., by renting, licensing, sublicensing, leasing, disseminating, uploading, downloading, transmitting, whether on a pay-per-play basis or otherwise) of any New Materials without the express prior written consent of an authorized representative of Bethesda Softworks. This includes distributing New Materials as part of any compilation You and/or other Product users may create. . . . You are only permitted to distribute the New Materials, without charge (i.e., on a strictly non-commercial basis), to other authorized users who have purchased the Product, solely for use with such users’ own authorized copies of such Product and in accordance with and subject to the terms and conditions of this Agreement and all applicable laws. If You distribute or otherwise make available New Materials, You automatically grant to Bethesda Softworks the irrevocable, perpetual, royalty free, sublicensable right and license under all applicable copyrights and intellectual property rights laws to use, reproduce, modify, adapt, perform, display, distribute and otherwise exploit and/or dispose of the New Materials (or any part of the New Materials) in any way Bethesda Softworks, or its respective designee(s), sees fit.”).

A second way that a modder may attempt to mod a game in the absence of official modification tools is to use third-party modding programs. Many private individuals have created unofficial modding tools and made them widely available on the Internet.⁶² The danger when modding this way is that many EULAs prohibit modification, and the absence of official tools is often, though not always, a signal of the developer's prohibition on modding.⁶³ Therefore, this type of modification is much more likely to be without consent and a violation of a game developer's copyright. Modders wishing to mod in the absence of official modding tools should always check the EULA to see whether modding is allowed.

III. THE LEGALITY OF MODDING

A. Copyright 101

Modding primarily implicates sections 106(2) and 107 of the Copyright Act, which deal with derivative works and fair use of copyrighted works, respectively.⁶⁴ Central to the focus of this Comment is whether mods are (1) derivative works and (2) a fair use of the original copyrighted work. Therefore, this section will briefly identify the standards used to evaluate the two doctrines.

1. Derivative works

Section 106 of the Copyright Act explicitly outlines the rights of a copyright holder. Among those rights is the exclusive right to create or authorize the creation of derivative works.⁶⁵ Section 101 of the Copyright Act defines a derivative work:

62. A simple Google search for any commercial video game name plus the search term "mod tools" (e.g., "Halo mod tools") will return many sites with free, downloadable tools.

63. *See, e.g.*, Luke Plunkett, *Diablo III Mods are Forbidden, Banned, Not Allowed*, KOTAKU (Aug. 1, 2011, 4:30 AM), <http://kotaku.com/5826453/diablo-iii-mods-are-forbidden-banned-not-allowed> (noting that Blizzard Entertainment was not facilitating mod development and was banning mods of all kinds); *But see* Ross Lincoln, *Gearbox: No Borderlands 2 Official Tools, But Modding Encouraged*, GAME FRONT (July 9, 2012), <http://www.gamefront.com/gearbox-no-borderlands-2-official-tools-but-modding-encouraged/> (reporting that a game developer was not releasing official mod tools but was encouraging the gaming community to "get to work" developing mods).

64. 17 U.S.C. §§ 106-07 (2012).

65. 17 U.S.C. § 106 (2012).

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.”⁶⁶

Because works that represent “original works of authorship” are still derivative if they are based upon, or incorporate large parts of, the preexisting work, the statutory definition of derivative work casts an extremely wide net.

When determining whether a specific work is a derivative work, courts look to see if the work has been “substantially copied from the prior work.”⁶⁷ To show that copying has occurred, the copyright holder can either show actual evidence of copying or can instead show “(a) that the defendant had access to the copyrighted work and (b) the substantial similarity of protectable material in the two works.”⁶⁸ In summary, “[a] work will be considered a derivative work only if it would be considered an infringing work if the material which it has derived from a prior work had been taken without the consent of a copyright proprietor of such prior work.”⁶⁹ However, even though unauthorized derivative works are presumed to be infringing works, they will not necessarily be found to be infringing.⁷⁰ Instead, the alleged infringer can argue that his work is a fair use of the copyrighted work.⁷¹

2. *The fair use doctrine*

The fair use doctrine is found in section 107 of the Copyright Act and essentially states that even though a particular work may be a derivative work, if it is a “fair use” of the original work then the derivative work is not a copyright violation.⁷² To evaluate whether a

66. 17 U.S.C. § 101 (2012).

67. *Litchfield v. Spielberg*, 736 F.2d 1352, 1357 (9th Cir. 1984).

68. *Kregos v. Associated Press*, 3 F.3d 656, 662 (2d Cir. 1993).

69. *Litchfield*, 736 F.2d at 1357 (citing *United States v. Taxe*, 540 F.2d 961, 965 n.2 (9th Cir. 1976)) (emphasis omitted).

70. 17 U.S.C. § 107 (2012).

71. *Id.*

72. *Id.*

particular use is a fair use, section 107 provides four factors to consider:

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.⁷³

Because understanding the factors will be important when evaluating potential arguments for considering modding as a fair use, I will briefly address each here.

The first factor, purpose and character of the use, is directly tied to an explanation provided in the preamble of section 107 that states that “purposes such as criticism, comment, news reporting, teaching . . . , scholarship, or research, is not an infringement of copyright.”⁷⁴ If a particular work is used for one of the stated purposes, it creates a presumption that it is a fair use.⁷⁵ For example, a new work could parody some copyrighted work, and although parody is not one of the listed uses in the statute, if the parody is used to criticize or comment, then the new work will be presumed to be a fair use of the copyrighted work.⁷⁶ Additionally, when considering the purpose and character of the use, courts determine whether the use is commercial in nature or for some other non-profit purpose.⁷⁷ Although activities that are almost entirely commercial will not likely justify fair use, the fact that a use has commercial value does not preclude a finding of fair use or even create a presumption of unfair use.⁷⁸ Finally, courts will

73. *Id.*

74. *Id.*

75. *Robinson v. Random House, Inc.*, 877 F. Supp. 830, 840 (S.D.N.Y. 1995) *modified*, *Robinson v. Random House Inc.*, 1995 WL 502525 (S.D.N.Y. Mar. 26, 1995) (“Uses of a copyrighted work for purposes such as ‘criticism, comment, news reporting, teaching . . . , scholarship, or research’ are given more latitude than uses for commercial purposes. Indeed, so-called presumptions aptly illustrate the importance of this distinction between the enumerated favored uses and commercial uses: if a use fits within one of the favored uses, the use is considered presumptively fair” (citations omitted)).

76. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579, (1994) (“[P]arody, like other comment or criticism, may claim fair use under § 107.”).

77. 17 U.S.C. § 107 (2012).

78. *Campbell*, 510 U.S. at 584 (“[T]he mere fact that a use is educational and not for profit does not insulate it from a finding of infringement, any more than the commercial character of a use bars a finding of fairness. If, indeed, commerciality carried presumptive force

also look to the “transformative” nature of the work.⁷⁹ If a new work merely supersedes the original creation, then it will not likely be protected under fair use.⁸⁰ However, if the work “adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message,”⁸¹ the new work will be more likely to be considered a fair use.⁸²

The second factor courts evaluate is the nature of the copyrighted work.⁸³ When considering the nature of the copyrighted work, courts are to determine whether the work is creative or factual.⁸⁴ A use is less likely to be deemed fair when the copyrighted work is a creative product.⁸⁵ Therefore, derivations of works of fiction typically have a harder time proving fair use.⁸⁶ Additionally, courts will also take into account whether or not the work was published or unpublished.⁸⁷ If the copyrighted work is unpublished, the courts will consider it to be a “‘key, though not necessarily determinative, factor’ tending to negate a defense of fair use.”⁸⁸ The reasoning behind this doctrine is that an “author[] [has a] right to control the first public appearance of his expression.”⁸⁹

The third factor courts consider is the amount and substantiality of the portion used in the derivative work as compared to the

against a finding of fairness, the presumption would swallow nearly all of the illustrative uses listed in the preamble paragraph of § 107, including news reporting, comment, criticism, teaching, scholarship, and research, since these activities ‘are generally conducted for profit in this country.’”) (citations omitted).

79. *Id.* at 579.

80. *Id.*

81. *Id.*

82. *Id.*

83. 17 U.S.C. § 107 (2012).

84. *See Stewart v. Abend*, 495 U.S. 207, 237 (1990) (“Applying the second factor, the Court of Appeals pointed out that ‘[a] use is less likely to be deemed fair when the copyrighted work is a creative product.’ In general, fair use is more likely to be found in factual works than in fictional works.”) (citations omitted).

85. *Abend v. MCA, Inc.*, 863 F.2d 1465, 1481 (9th Cir. 1988) *aff’d sub nom.* *Stewart v. Abend*, 495 U.S. 207 (1990).

86. *Stewart*, 495 U.S. at 237.

87. *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 554 (1985).

88. *Id.*

89. *Id.* at 564. *See also Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1167 (9th Cir. 2007) (“Once [a copyright holder] has exploited this commercially valuable right of first publication by putting its images on the Internet for paid subscribers, [the copyright holder] is no longer entitled to the enhanced protection available for an unpublished work.”).

copyrighted work as a whole.⁹⁰ The main question that courts ask when evaluating this factor is whether the amount copied or derived from a copyrighted work was “reasonable in relation to the purpose of the copying.”⁹¹ Therefore, courts look to the restraint used by the copier to determine whether the extent of the copying met or exceeded the legitimate purpose of the copying.⁹²

The final factor courts consider is the effect the use has upon the potential market for or value of the copyrighted work.⁹³ The Supreme Court has stated that this last factor is “undoubtedly the single most important element of fair use.”⁹⁴ This factor requires courts to “consider not only the extent of market harm caused by the particular actions of the alleged infringer, but also ‘whether unrestricted and widespread conduct of the sort engaged in by the defendant . . . would result in a substantially adverse impact on the potential market’ for the original.”⁹⁵ Additionally, courts look not only at the impact that the derivative work has on the market for the original work but also at the impact that the derivative work has on the market for other derivative works created by the copyright holder.⁹⁶ This factor is of particular interest in the modding context because modding arguably increases the market value of the original work while simultaneously decreasing the market value for other derivative works that could be created by the original developer.

If, after weighing these four factors, the court finds that the allegedly infringing action was in fact a fair use, then the use was not a copyright infringement. Once a particular work has been designated as a derivative work, fair use is typically the only affirmative defense allowed under copyright law.

90. 17 U.S.C. § 107 (2012).

91. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 586 (1994); *see also* *Chicago Bd. of Educ. v. Substance, Inc.*, 354 F.3d 624, 629 (7th Cir. 2003) (“The general standard, however, is clear enough: the fair use copier must copy no more than is reasonably necessary (not strictly necessary—room must be allowed for judgment, and judges must not police criticism with a heavy hand) to enable him to pursue an aim that the law recognizes as proper, in this case the aim of criticizing the copyrighted work effectively.”).

92. *Id.*

93. 17 U.S.C. § 107 (2012).

94. *Harper & Row*, 471 U.S. at 566.

95. *Campbell*, 510 U.S. at 590 (quoting 4 Melville B. Nimmer & David Nimmer, NIMMER ON COPYRIGHT § 13.05[A] [4] (Matthew Bender, rev. ed., 2013) (1963)).

96. *Micro Star v. Formgen Inc.*, 154 F.3d 1107, 1113 (9th Cir. 1998).

B. Legal History of Modding

The law that governs modding was developed while modding was in its infancy, long before the full benefits of modding could be seen. In 1990, the Ninth Circuit heard what is considered to be the first modding case, *Lewis Galoob Toys, Inc. v. Nintendo of America Inc.*⁹⁷ Nintendo and Lewis Galoob Toys (“Galoob”) were entangled in a legal battle over Galoob’s Game Genie device.⁹⁸ The Game Genie allowed video game players to alter the features of Nintendo games they were playing on the Nintendo Entertainment System (“NES”) by inserting the normal Nintendo game cartridge into the Game Genie and then sticking the entire combination into the NES.⁹⁹ The Game Genie device intercepted bits of information from the game cartridge, replaced it with information input by the user, and then projected the resulting information onto the TV screen.¹⁰⁰ After inserting the combination Game Genie/Game cartridge and entering a few codes, the game player could choose to give himself unlimited lives, make himself invincible, start at level 20, or make any number of other alterations.¹⁰¹ The Game Genie did not physically alter the original game cartridge in any way, but it did change the electronic representation of the game as well as the gaming experience of the player.¹⁰²

Nintendo argued that the *Game Genie* was a derivative work and therefore a violation of its copyright.¹⁰³ The court, however, refused to classify the *Game Genie* as a derivative work because it did not create an independent work.¹⁰⁴ In the court’s opinion, the original game cartridge, not the *Game Genie*, created the audiovisual representation that was created when a game cartridge and *Game Genie* combination was used.¹⁰⁵ *Game Genie* did not create a work that was embodied in a concrete or permanent form, according to the court, nor did it incorporate any of the copyrighted work into an

97. *Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc.*, 964 F.2d 965 (9th Cir. 1992).

98. *Id.* at 967.

99. *Id.*

100. *Id.*

101. *Id.*

102. *Id.*

103. *Id.*

104. *Id.* at 968.

105. *Id.*

embodied or concrete form.¹⁰⁶ Therefore, the court held that, as a purely electronic audiovisual representation, the *Game Genie* could not be a derivative work.¹⁰⁷

Shortly after the court's decision in *Lewis Galoob*, modding as we know it came into being. As portrayed in David Kushner's article, *It's a Mod, Mod World*, modding first became a widespread activity after the 1993 release of *Doom* by Id Software.¹⁰⁸ At that time, game files were stored in accessible directories, and the Internet was a burgeoning new technology.¹⁰⁹ This combination of factors, coupled with a lack of user licensing for video games, created a perfect storm for modding.¹¹⁰ Id Software felt that modding was beneficial to the gaming community and openly allowed it, but lacked a licensing structure that could control the new phenomenon.¹¹¹ To try to protect itself, Id Software's business manager posted an agreement on the Internet stating that modders did not need to pay any royalties to the company and could even sell their mods, but that "[the mods] MUST not work with the shareware version of Doom; [and a developer] MUST represent that [his] utility is not an Id Software product and Id Software cannot and will not provide support for [the] product, nor for Doom after the data has been changed by [the] product."¹¹² David Kushner tells the rest of the story:

Before long, there were literally thousands of user-created Doom mods flying across the Internet, ranging from a Star Wars mod to one based on a player's high school. At first, such creations were seen as a true win/win scenario: gamers felt vested in the products, and Id Software reaped the profits of a vested fan base.

Then in 1995, the inevitable happened. WizardWorks Group (Minneapolis, Minn.), an independent publisher, released D!Zone, a collection of 900 user-made Doom mods. Though Id Software owned the copyright to the original game, the modifications were up for grabs. Almost overnight, the D!Zone CD-ROM rose to the

106. *Id.*

107. *Id.*

108. David Kushner, *It's a Mod, Mod World*, IEEE SPECTRUM (Feb. 2003), <http://spectrum.ieee.org/consumer-electronics/gaming/its-a-mod-mod-world>.

109. *Id.*

110. *Id.*

111. *Id.*

112. *Id.*

top of the PC games sales charts, surpassing the Doom game itself, and earning millions of dollars for WizardWorks.¹¹³

For whatever reason, whether from lack of foresight or an undying belief in the modding system, Id Software decided not to enforce its copyrights against WizardWorks, as is evidenced by the lack of litigation on the matter. However, other game makers took notice of the issue and prepared to protect themselves. When a similar sequence of events occurred following the release of *Duke Nukem 3D*, *Duke Nukem*'s developer, Formgen, sued Micro Star for a commercial compilation of mods called *Nuke It*. The decision in *Micro Star v. Formgen Inc.*¹¹⁴ established the law regarding modding and continues to govern the practice to this day.

Judge Alex Kozinski penned the decision in *Micro Star* and, after commenting that *Duke Nukem 3D* was a "very cool" game,¹¹⁵ addressed the specific arguments presented by the parties. The mods at issue in *Micro Star* consisted of what are known as MAP files, files that provide instructions to the game engine and tell it where to place artwork and models already contained in the original games art library.¹¹⁶ Thus, the mod program did not contain any of the copyrighted work, but did tell the game engine exactly how to use the copyrighted content.¹¹⁷ Micro Star argued that its compilation of *Duke Nukem* MAP files was not a derivative work because it simply replaced the original game's MAP files in a way similar to the way that the Game Genie in *Lewis Galoob* replaced the bits supplied by the Nintendo gaming cartridges.¹¹⁸ Additionally, Micro Star argued that because the MAP files did not contain any of the copyrighted material from the original work but only told the game how to use the files already present in its art library, that it did not incorporate the copyrighted work in a "concrete or permanent" way and could not be a derivative work.¹¹⁹ The court disagreed:

[W]hereas the audiovisual displays created by Game Genie were never recorded in any permanent form, the audiovisual displays

113. *Id.*

114. 154 F.3d 1107 (9th Cir. 1998).

115. *Id.* at 1109.

116. *Id.* at 1110.

117. *Id.*

118. *Id.* at 1111.

119. *Id.*

generated by [*Duke Nukem 3D*] from the [mod] MAP files are in the MAP files themselves. . . . This raises the interesting question whether an exact, down to the last detail, description of an audiovisual display . . . counts as a permanent or concrete form for purposes of *Galoob*. We see no reason it shouldn't. What, after all, does sheet music do but describe in precise detail the way a copyrighted melody sounds? To be copyrighted, pantomimes and dances may be "described in sufficient detail to enable the work to be performed from that description." Similarly, the [mod] MAP files describe the audiovisual display that is to be generated when the player chooses to play [*Duke Nukem 3D*] using the [mod] levels. Because the audiovisual displays assume a concrete or permanent form in the MAP files, *Galoob* stands as no bar to finding that they are derivative works.¹²⁰

Thus, the court established that if a "concrete or permanent" file created an audiovisual representation, then it could be derivative work.¹²¹

The Ninth Circuit then examined the mods to determine whether they were "substantially copied" from the copyrighted work as would be required by section 106 for the works to be a derivative work.¹²² Specifically, the court noted that to prove infringement, Formgen would need to show that the works were substantially similar in idea and expression.¹²³ Similarity of ideas can be "shown by comparing the objective details of the works: plot, theme, dialogue, mood, setting, characters, etc.," while similarity of expression "focuses on the response of the ordinary reasonable person, and considers the total concept and feel of the works."¹²⁴ The court found that because all of the artwork employed by the mods was artwork from the original copyrighted material, the two works were substantially similar in idea and expression.¹²⁵ Therefore, MAP file style mods were found to be substantially similar and were, therefore, likely to be derivative works.¹²⁶

120. *Id.* at 1111–12 (citations omitted).

121. *Id.*

122. *Id.* at 1112.

123. *Id.*

124. *Id.*

125. *Id.*

126. *Id.* at 1113.

Finally, the court evaluated whether *Micro Star*'s collection of mods was allowed under the fair use doctrine. The court's analysis yielded "straightforward results."¹²⁷ The court found that the mods were assembled for entirely commercial purposes and the original game was creative in nature rather than informative.¹²⁸ Additionally, the content copied from the original work was both important and substantial, and the copying had an adverse impact on the market for new versions of the *Duke Nukem* story.¹²⁹ All of these findings supported the court's decision that the mods were not a fair use.¹³⁰

From *Micro Star* to the present, mods have been considered derivative works, and no cases since have suggested otherwise. Additionally, *Micro Star* dealt with only commercially distributed mods; the issue of whether mods that were not created for commercial gain and were distributed for free are protected under fair use has remained unresolved. As things now stand, mods are not protected under these copyright doctrines, and the only way that they continue to exist is through the consent of game developers.

C. Should the Rules of the Game Change? Proposed Reinterpretation of Copyright Law

Micro Star is the only case to analyze mods directly under the Copyright Act. Because it is the lone court decision, and the facts of the case can be distinguished from many current modding practices (e.g., most mods now are distributed for free and total conversion mods are very different from MAP files), scholars have attempted to argue that mods are either (1) not derivative works or (2) fair uses.¹³¹ However, these arguments fail under the current legal framework, as detailed below in this section, and finding otherwise would require significant adjustments to copyright law.

1. All mods are derivative works

To properly address the argument that mods are not derivative works, it is necessary to address partial conversion and total conversion mods separately. The mods compiled by *Micro Star* in

127. *Id.*

128. *Id.*

129. *Id.*

130. *Id.*

131. See *supra* notes 31–34 and accompanying text.

Micro Star were all partial conversion mods because they merely replaced original *Duke Nukem 3D* MAP files with new modded MAP files.¹³² They utilized the same artwork employed by the original game and were, therefore, substantially similar both in expression and idea.¹³³ This recycling of the artwork led the court to recognize that a finding of substantial similarity was “doubtless.”¹³⁴ Because all partial conversion mods reuse large portions of the original game content, they too would “doubtlessly” be held to be derivative works. No scholar has argued otherwise.

Proponents of modding, however, have argued that total conversion mods should not be considered derivative works.¹³⁵ One proponent, in particular, has argued:

A total conversion is essentially a whole new game, only recognizable as a mod due to its use of the underlying original game. . . . The graphics are new, game play mechanics are altered, and little if any of the surface of the original game remains. A total conversion also has a new storyline. . . . The total conversion will not be substantially similar to the original in ideas and expressions because there is no art in common, and a completely new world is the setting for the mod.¹³⁶

There are two major problems with this argument. First, although total conversions do replace *most* of the original game content, they do not necessarily replace *all* of the original content and may leave substantial portions of the original game content intact.

For example, a recent mod for *Arma II*, *DayZ*, changed a military tactical shooter game into a zombie survival game and was labeled throughout the gaming community as a total conversion mod.¹³⁷ However, while the creator of *DayZ* stripped away the story of the original game, added new models, and changed the gameplay completely, he reused one of the map files from the original game, which included all of the terrain, textures, plants, and building

132. *Micro Star*, 154 F.3d at 1110.

133. *Id.*

134. *Id.* at 1112.

135. *See supra* note 34 and accompanying text.

136. Rosen, *supra* note 31, at 203 (citations omitted).

137. Luke Plunkett, *The Secret Behind the Success of DayZ, the Most Interesting PC “Game” of 2012*, KOTAKU (May 24, 2012), <http://kotaku.com/5912878/the-secret-behind-dayzs-success-the-most-interesting-pc-game-of-2012>.

models.¹³⁸ Therefore, under *Micro Star*, although the ideas and genre for *DayZ* are completely different from those in *Arma II*, the mod is probably “substantially similar” to the original game. This similarity shows that the developers of *DayZ* copied material from the *Arma II*. Therefore, even total-conversion mods, or what we often call total-conversion mods, are, in their very nature, derivative works if they utilize even just a few crucial files from the original game content. To avoid this problem a total conversion mod would literally have to replace *all* of original content files to truly qualify as non-derivative.

Second, mods always utilize one major component of the original copyrighted work, the game engine.¹³⁹ This crucial component to a working video game should not be ignored when discussing copyrightable material. Although many different games utilize the same game engine,¹⁴⁰ commercial game developers are able to customize the engine according to their creative goals because a commercial production license gives the game developer access and permission to alter the game engine as they see fit.¹⁴¹ For example, the game developers may choose to alter the graphics renderer in order to produce more exceptional graphics or may alter the physics engine to give the game a different feel. Thus, the final game engine that is included in the original copyrighted work represents the work of the original game developer with specific artistic values that can significantly affect the way that both the original and the mod looks and plays.¹⁴² Because the game is copyrighted as an entire work, not as an engine and separate content, the game engine should be just as protected as the gaming content.

Once this understanding is applied to the derivative work analysis, it is possible to find substantial similarity based on the game engine alone. Thus, even if all of the content is stripped away from an original work and replaced by mod content, a game’s expression

138. Evan Lahti, *Buy a Paper Map of Day Z’s Horrifying World, Chernarus, for \$15*, PC GAMER (May 30, 2012, 7:07 PM), <http://www.pcgamer.com/2012/05/30/buy-a-paper-map-of-day-zs-horrifying-world-chernarus-for-15/> (noting that *DayZ*, a mod considered to be a total conversion mod, reused the map file from the game that it modded, *Arma II*).

139. *Mod (Video Gaming)*, *supra* note 1.

140. *See supra* notes 44–49 and accompanying text.

141. *Licensing*, *supra* note 47.

142. Differences in game engines can create vast differences in game appearance and feel. *See, e.g., [Comparison] CryENGINE 3 vs. Unreal Engine 3*, YOUTUBE, <http://www.youtube.com/watch?v=NXNvmvaBNiY> (last visited Oct. 24, 2013).

may look and feel substantially similar. The substantial similarity would in turn be evidence of substantial copying, the copying of the entire game engine. Therefore, based solely on the copying of a game engine, mods are derivative works. One proponent of modding has argued that total conversion mods should not be derivative works because “[t]he game’s underlying engine is a purely functional element, embodying no conception of artistic merit or beauty, and as such is not copyrightable.”¹⁴³ This argument, however, fails to take into account the reality that game engines are copyrighted, as evidenced by the licensing requirements for reusing them.¹⁴⁴ Additionally, the game engine for a particular game is also copyrighted as part of the copyrighted game.¹⁴⁵ Copyright law does not cover only some aspects of the work, but the work as a whole. Therefore, copying any portion of the copyrighted work, even if it is just the engine, can and should be infringement.

Modding, by its very nature is taking the work of another to “recast, transform, or adapt”¹⁴⁶ it into something else. By choosing to mod a game, as opposed to creating a stand-alone original work, modders are inherently acknowledging that they are, in reality, deriving something from the copyrighted work. If the modders truly felt that they were not gaining anything from the work they are modding, they would instead create an unrelated, stand-alone game. However, the modder has chosen to mod a specific work and is gaining something from that work. That “something” could be as simple as a model for a tree; something as complex as an entire world complete with textures, models, lighting effects, and geography; or just the game engine. However, something is taken from the work of

143. Rosen, *supra* note 31, at 204.

144. See *supra* notes 44–46 and accompanying text.

145. This fact is evidenced by the reality that the copyrighted work packaged, sold, and installed on a gamer’s computer or gaming console is copyrighted as a whole, not as content software and a separate game engine. See, e.g., the copyright filing for Bethesda’s *The Elder Scrolls V: Skyrim* located in the Copyright Office’s Public Catalog. *The Elder Scrolls V: Skyrim*, UNITED STATES COPYRIGHT OFFICE, http://cocatalog.loc.gov/cgi-bin/Pwebrecon.cgi?v1=1&ti=1,1&Search_Arg=Elder%20Scrolls%20V%3A%20Skyrim&Search_Code=TALL&CNT=25&PID=VSq8myREFYQ_R2ZtXKda3i2T9uNP&SEQ=20131023133259&SID=2 (last visited Oct. 25, 2013).

146. These verbs are taken directly from the definition of “derivative work” in the Copyright Act. 17 U.S.C. § 101 (2012).

another. Therefore, mods should continue to be considered derivative works.

3. *Modding as a fair use*

Whether or not non-commercial mods are protected by the fair use doctrine is a matter that has not been addressed by any court. In addition, academic writing on the topic is extremely scarce. Although some scholars have broadly argued that fan-made fiction, a category that includes video game mods, should be protected as fair use,¹⁴⁷ only two authors argue specifically that mods should be protected as fair use.¹⁴⁸ Of those two authors, only one systematically addresses the four factors courts use to evaluate fair use.¹⁴⁹ In addressing the factors for fair use, that author argues that these factors could support a finding of fair use.¹⁵⁰ However, this section will specifically address each of the four factors of fair use and show that each prong supports a finding *against* fair use.

The first factor of the analysis, the purpose and character of the use, is probably one of the most damning factors when trying to determine whether modding falls within fair use. One author focused her analysis on whether or not the work was transformative, and argued that mods, particularly total conversion mods, were transformative because they replaced the old content with entirely new content.¹⁵¹ This analysis, however, misinterprets the standard. Instead of being whether the *work* is transformative, the true test is whether the *purpose* of the derivative is transformative.¹⁵² For example, in *Campbell v. Acuff-Rose Music, Inc.*, the owners of “Oh,

147. Baldrica, *Cover Songs*, *supra* note 31; *see, e.g.*, McKay, *supra* note 31.

148. Baldrica, *Spare the Mod*, *supra* note 31, at 789 (“This Note argues that total-conversion add-on modifications, even those created for a commercial purpose, should qualify as nonderivative works, or alternatively, as fair use.”); Baldrica, *Cover Songs*, *supra* note 31, at 115 (“[M]ods could more properly be envisioned as expression which makes fair, transformative use of copyrighted material.”).

149. Baldrica, *Spare the Mod*, *supra* note 31, at 806–10.

150. *Id.*

151. *Id.* at 806.

152. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994) (“The central purpose of this investigation is to see, in Justice Story’s words, whether the new work merely ‘supersede[s] the objects’ of the original creation or instead adds something new, with a *further purpose or different character*, altering the first with new expression, meaning, or message; it asks, in other words, whether and to what extent the new work is ‘transformative.’”) (emphasis added) (citation omitted).

Pretty Woman” sued a rap group after it produced a parody of their song without the copyright holder’s consent.¹⁵³ When discussing the first factor of the fair use analysis, Justice Souter introduced the idea of a transformative work as something that adds “new expression, meaning, or message” to the copyrighted work.¹⁵⁴ He then immediately shifted to discuss the purpose of the new work (i.e., parody) and stated that “parody has an obvious claim to transformative value.”¹⁵⁵ This language suggests that it was the purpose and character of the use, the fact that the new work was a parody, that made the new use possibly transformative, not the fact that new content had been added into the work. Accordingly, merely adding or changing content is likely not enough. Instead, the changing of the work must change the purpose of the new work, thereby transforming the copyrighted work into some “new expression, meaning or message.”¹⁵⁶ In *Campbell*, the song as a parody was the “new expression, meaning, or message” because it targeted a popular song that was used primarily for entertainment or cultural value and transformed it into a parody, which was used for commentary or comment.¹⁵⁷

To apply this reasoning to modding, for a mod to fulfill the first factor of fair use, the mod would need to be used for a purpose similar to those expressed in the preamble of section 107 of the Copyright Act, and would need to transform the original game into some other “expression, meaning, or message,” rather than simply being a new game made solely for entertainment. Purposes expressed in the preamble include “criticism, comment, news reporting,

153. *Id.* at 572–73.

154. *Id.* at 579.

155. *Id.*

156. *Id.*

157. *Id.* at 580–81 (“For the purposes of copyright law, the nub of the definitions, and the heart of any parodist’s claim to quote from existing material, is the use of some elements of a prior author’s composition *to create a new one that, at least in part, comments on that author’s works*. If, on the contrary, the commentary has no critical bearing on the substance or style of the original composition, which the alleged infringer merely uses to get attention or to avoid the drudgery in working up something fresh, the claim to fairness in borrowing from another’s work diminishes accordingly (if it does not vanish), and other factors, like the extent of its commerciality, loom larger. Parody needs to mimic an original to make its point, and so has some claim to use the creation of its victim’s (or collective victims’) imagination, whereas satire can stand on its own two feet and so requires justification for the very act of borrowing.”) (emphasis added).

teaching . . . , scholarship, or research.”¹⁵⁸ As far as this author is aware, no video game mods have ever been created for any of these purposes. Instead the mods are made solely for the entertainment of those playing them, which is the same purpose and function of the original game. Therefore, mods, as they are currently utilized, would likely fail to fulfill this first prong. That is not to say that a mod could not be made for a transformative purpose. A mod made for political or social commentary, education, or parody may be labeled as transformative. However, as evidenced by the lack of such mods being distributed, that is not the current focus of the modding community.

The second factor to consider is whether the work is creative or informational.¹⁵⁹ As Judge Kozinski stated in his analysis of fair use in *Micro Star*, “The fair use defense will be much less likely to succeed when it is applied to fiction or fantasy creations, as opposed to factual works such as telephone listings. Duke Nukem’s world is made up of aliens, radioactive slime and freezer weapons—clearly fantasies, even by Los Angeles standards.”¹⁶⁰ One proponent for fair use protection in modding stated that the creative and information factor was neutral for the analysis of whether total conversion mods were a fair use because although game content is fictional, labeling a game engine as either fictional or factual may be difficult.¹⁶¹ However, there seems to be no reason for the court to attempt to analyze the nature of a game engine outside of the context of the game as a whole. Although the video game content files and the underlying game engine are two different parts of the game, they are both necessary to the overall effect and experience of the game; the same content coded for a different engine would likely create a completely different gaming experience. Thus, the fictional content of a game and the engine it utilizes are intertwined and inseparable. In analyzing this second prong of the fair use analysis, courts look

158. 17 U.S.C. § 107 (2012).

159. *Id.*

160. *Micro Star v. Formgen Inc.*, 154 F.3d 1107, 1113 (9th Cir. 1998).

161. Baldrice, *Spare the Mod*, *supra* note 31, at 808 (“This inquiry seems to offer little help to either litigant in the mod context. While the content of games is typically fictional, and thus deserving of greater protection, total conversions do not rely on a game’s story or art. Instead, the nature of the work is a functional game engine. While there is creativity in crafting software architecture, courts may struggle in analogizing an engine to either a fictional work or a factual work.”).

not to the nature of the portion copied by the derivative work, but instead to the “nature of the copyrighted work” itself.¹⁶² In *Micro Star*, Judge Kozinski seemed to have no problem labeling *Duke Nukem 3D* a fictional work deserving of more copyright protection, drawing no distinction between content and game engine.¹⁶³

Additionally, even if courts were to analyze the nature of the game engine as something separate from the original copyrighted work, the game engine should be considered “fictional” rather than “informational” because the engine is directly tied to the creative manner in which the game content is conveyed to the user. As with most other forms of copyrightable works, such as literature and film, the power of the work comes not only through the content, but also in how the content is conveyed. For example, a movie’s cinematography and lighting have a major impact on the overall effect of the work. Those aspects, though “technical” are also extremely creative. Likewise, the way that a game engine renders game content and presents it to a game user is also extremely creative and is directly tied to the content of the “fictional work.” To carry the analogy one step further, just as movie directors seek out different cinematographers depending on their style and artistic abilities, it can be presumed from the many different game engines available to be licensed to game developers that developers, too, seek out game engines according to their style and technical abilities. Although price and ease of use are probably considerations that game developers make when choosing engines, it is also likely that the capabilities and style of the game engine play a major rule in the decision. If all game engines rendered and presented game content in the same way, there would not be so many engines out there, and developers would simply seek out the cheapest or easiest to use. However, that is not the case. Therefore, game engines almost undoubtedly should be categorized as creative work rather than merely being informational or factual. Thus, this factor would likely come out against a finding of fair use even when applied to total conversion mods that only reuse a game engine.¹⁶⁴

162. *Campbell*, 510 U.S. at 586.

163. *Micro Star*, 154 F.3d at 1113.

164. One argument that may be used to try to invalidate this analogy is that movie cinematography is not copyrightable but video game engines are. However, this argument has less to do with the creative nature of game engines and cinematography, and more about the fact that cinematography cannot exist in a physical form outside of the film it was used in. Only

The third factor courts consider is the amount and substantiality of the portion used in relation to the copyrighted work as a whole.¹⁶⁵ For most partial conversion mods, which simply add content to an existing game, this factor would weigh against fair use because most of the original game is copied as part of the mod. Therefore, the portion copied would likely be considered substantial. Even for true total conversion mods that copy only the game engine, a court may find that the portion copied is substantial because a game engine is a major portion of a game, contains complex code that reflects the creative nature of the original work, and, as mentioned above, can be creative in its own right. Additionally, the game engine used in the game has been copyrighted and licensed for the use of the original work only. Because the game engine is so substantial that it warrants copyright protection, “just” using the engine is still using something substantial. Thus, this factor, would likely come down against a finding of fair use for all mods.

The fourth and potentially most important factor is the effect of the use upon the potential market for or value of the copyrighted work.¹⁶⁶ This factor also would likely yield the most interesting court analysis. When evaluating market impact, courts look not only to the impact that the derivative work has on the market for the original work, but also the market for future derivative works that could be created by the copyright holder.¹⁶⁷ Therefore, I will address each market separately. Unlike traditional copyrightable materials, such as

works “fixed in any tangible medium of expression” are copyrightable. 17 U.S.C. § 102 (2012). Unlike a game engine, that can be created and exist independent of any video game because of its physical, concrete form, cinematography cannot exist independent of a film. Until a specific cinematic technique is used on a specific shot in a film, it is intangible and therefore not copyrightable. Thus, it is not because of cinematography’s lack of creativity that is not copyrightable, but that it does not exist until contained in a concrete film. Once a cinematic technique is used in a film, it is then copyrightable as part of that film, but cannot be separated from the work. This distinction does not impact the utility of this analogy, however, because the analogy is simply being presented to show that technical matters outside of the message and content of a work can, and usually should, be considered creative in nature.

165. The Harvard student piece does not add much in the way of argument to this point. It simply says, “This factor is relatively unimportant. If a court perceives total-conversion mods as implicating game engines and not game content, then that court may find that the entirety of the engine is used. However, it seems likely that if the court finds a total conversion derivative, the court would arrive at that conclusion by analyzing a game’s assets in terms of both its engine and its content.” Baldrice, *Spare the Mod*, *supra* note 31, at 808.

166. 17 U.S.C. § 107 (2012).

167. *Micro Star*, 154 F.3d at 1113.

literature or music where derivative works may decrease the market value of the original works,¹⁶⁸ mods have the potential to increase the market value of the original because the original work must be used in conjunction with the mod for the mod to work. For example, the *DayZ* mod, mentioned earlier, increased the sales of the game that it modded by nearly five hundred percent, even though the game had already been released for two years.¹⁶⁹ Therefore, rather than replacing the original work, mods have the potential to supplement them, add new content, and increase interest in copyrighted work. Because of this effect, if only considering the present market, courts could possibly find a positive impact from the mod. However, this is only half of the analysis.

The court in *Micro Star* did not actually analyze the market impact in these terms and, in fact, found a negative market impact. Instead of focusing on the benefits to the market for the copyrighted work, the court focused almost entirely on the market for future derivative works that could be created by the copyright holder.¹⁷⁰ The court noted that Micro Star's mods "impinged on [FormGen's] ability to market new versions of the [Duke Nukem] story."¹⁷¹ Further, it noted that "Only FormGen has the right to enter that market; whether it chooses to do so is entirely its business."¹⁷² This reasoning led the court to find that the fourth factor supported a finding that Micro Star's mods were not a fair use.¹⁷³

Although these two different aspects of the market impact analysis can provide evidence both for and against a finding of fair use, the court in *Micro Star*, in my opinion, got it right. Micro Star's compilation of *Duke Nukem 3D* mods likely led some consumers to purchase the original game, thereby increasing the market value of copyrighted work, but the mod also commercially distributed unauthorized extensions of the *Duke Nukem 3D* universe. FormGen had a choice. It could choose to protect its Duke Nukem brand by seeking a legal remedy and forfeiting possible financial gains from the

168. Consumers may decide that they like the derivative better than the original work and may, therefore, stop reading or listening to the original. Additionally, a person can only physically read or listen to one song at a time.

169. Plunkett, *supra* note 17.

170. *Micro Star*, 154 F.3d at 1113.

171. *Id.* (quoting *Stewart v. Abend*, 495 U.S. 207, 238 (1990)).

172. *Micro Star*, 154 F.3d at 1113.

173. *Id.*

increased interest created by the mods, or it could accept financial gains created by derivative works and cede control of its creative work. To FormGen, protection of the Duke Nukem brand was clearly more valuable. Other game developers have chosen differently.¹⁷⁴ Regardless, the decision concerning the balancing of financial benefits and creative control should remain with the copyright holder, not with a third-party modder. To that end, the court in *Micro Star* appropriately found that, by eclipsing a copyright holder's future right to produce derivative works, mods had a negative market impact.¹⁷⁵ All partial conversion mods should be dealt with in a similar way.

One author has argued that the analysis concerning the market impact of total conversion mods should not lead to the same result as in *Micro Star*.¹⁷⁶ The author suggests that "the lack of the original game content [in total conversion mods] implies that courts will not find harm to potential markets in relation to the game's story, characters, or plot."¹⁷⁷ In essence, because the total conversion mod in no way implicates the world, story, or characters of the original work, no damage is done to the copyright holder's ability to create sequels or derivative works. However, this is not entirely true. The impact of the mod must also be considered on the video game market as a whole. Video game consumers can only play one video game at a time, and, therefore, mods can be direct competition for new games that a copyright holder wishes to develop. Allowing a modder to piggyback on the work of a game developer to create a competing product can thus have adverse effects on the copyright holder's market interests even if the mod doesn't use any of the original game content. Therefore, mods can have a negative market impact on a copyright holder even if they increase the market value of the original copyrighted work.

When combining all of these factors, most mods are not likely candidates for fair use protection. Partial conversion mods likely fail on all four factors of fair use analysis. Likewise, most, if not all,

174. The simple fact that many game development companies have chosen to give up creative control of their product by authorizing others to create derivative works shows that these developers valued the benefits of modding over that control. See *supra* note 22, and accompanying text for a list of game development companies that have made that choice.

175. *Micro Star*, 154 F.3d at 1113.

176. Baldrica, *Spare the Mod*, *supra* note 31, at 809.

177. *Id.*

current total conversion mods also fail. Therefore, until mods are created for transformative purposes such as parody, comment, criticism, or education rather than solely for entertainment, they will likely fail to gain fair use protection.

IV. THE GOVERNING DOCTRINE: CONSENT

A. How to Mod Legally

Despite the lack of copyright protection for mods under the fair use doctrine, modders have no reason to be worried. Although statistics concerning the prevalence of modding are not readily available, the fact that many of the large game development companies openly encourage and give consent for modding lends credibility to the practice.¹⁷⁸ This section briefly examines how consent is given to modders and how modders can make sure that their actions remain legal.

To determine whether a game developer allows modders to mod its game, modders can contact the game developers directly and ask for permission to mod. However, this type of contact is typically not necessary. Instead, the most convenient way to obtain consent to mod is through the game's End User License Agreement (EULA). In the EULA, modders will typically find one of three modding policies. First, they may find a modding provision that expressly permits modding.¹⁷⁹ If a game's EULA contains such a provision, the modder knows that he or she can legally mod the game as long as the modder remains within the terms of the EULA. Second, and more likely, the modder will find a provision similar to the following provision found in Blizzard Entertainment's *Starcraft II EULA*: "You agree that you will not, under any circumstances: . . . [i]n whole or part, copy or reproduce (except as provided herein), translate, reverse engineer, derive source code from, modify, disassemble, decompile, or create derivative works based on the Game."¹⁸⁰ However, despite this seemingly obvious

178. See *supra* note 23, and accompanying text.

179. See, e.g., 2K GAMES, BORDERLANDS 2 U.S. USER MANUAL, LIMITED SOFTWARE WARRANTY, LICENSE AGREEMENT, AND INFORMATION USE DISCLOSURES 35–36 (2012), available at <http://www.2kgames.com/manual/borderlands2/> (giving permission to create derivative works but stating that any copyright interest that arises out of the works is retained by the game developer).

180. *Starcraft II End User License Agreement*, BLIZZARD.COM, <http://us.blizzard.com/en-us/company/legal/sc2eula.html> (last visited Oct. 24, 2013).

language, a modder should not assume that a game does not allow modding. Instead, modders should look to other provisions in the EULA that may provide exceptions. Later in the same *Starcraft II* EULA there is a section dealing with the “Map Editor,” an official modding tool released by the game developer that accompanies the game.¹⁸¹ One of the provisions in that section states, “Map Editors can be used to create games, maps, levels and other content (‘Modified Maps’) that can only be used in conjunction with the Game’s engine that is associated with a particular Map Editor.”¹⁸² This clause gives modders the permission to mod the game despite the previous prohibition as long as the official tools are used. Third, a modder may find a modding prohibition, like that provided above, without any exceptions. These games are not legally moddable without some other form of express permission from the game developer. Therefore, by reading the EULA modders can determine whether a particular developer gives consent to modders to mod a particular game. As long as a modder abides by the terms of the EULA, and the EULA allows modding, they are legally protected through the consent of the game developer. Although many, if not most, game users rarely read EULAs, modders who are considering investing the vast amounts of time and effort required to create a mod should always read EULAs.

In addition to making sure that a game developer gives consent to the modding of its work, modders also need to avoid two other legal pitfalls. First, modders are typically not allowed to sell their work. This restriction is often included directly in the original work’s EULA.¹⁸³ Therefore, any attempt to commercially distribute a mod typically will violate the terms of the EULA and be copyright infringement.¹⁸⁴ Second, modders need to make sure that they do not include the copyrighted work of third parties in their mods. For example, a mod for Bethesda’s *Skyrim* using content from Tolkien’s *The Hobbit* and *The Lord of the Rings* was shut down—not by the game developer but by Warner Brothers, who holds the rights to

181. *Id.*

182. *Id.*

183. *See, e.g., supra* note 60 and accompanying text.

184. However, as will be discussed in Part B of this section, at least one company does allow modders to sell their mods, and current economic factors may lead more companies to follow that company’s lead.

Tolkien works.¹⁸⁵ Therefore, by only modding games that allow it, distributing mods for free, and by not using the copyrighted work of third parties, modders can be assured that their work is legal.

B. Monetized Modding

Although not attempting to sell mods is one of the almost universal maxims of legal modding, one gaming company has created a system that allows modders to sell their work. Valve, one of the game developers most supportive of modding, has created a program known as The Steam Workshop that allows modders to create and submit content for one of Valve's games, *Team Fortress II*.¹⁸⁶ Content submitted through The Steam Workshop legally becomes property of Valve, as indicated by the Workshop's EULA.¹⁸⁷ The content is then evaluated by Valve and gaming community voters, and some of the content is selected for inclusion in the actual game.¹⁸⁸ Once content is selected for inclusion, Valve then works with the modder to integrate the content into the game.¹⁸⁹ After the mod has been refined and implemented into the game, players can purchase the item, and twenty-five percent of the proceeds are paid to the modder while the other seventy-five percent goes to Valve.¹⁹⁰ Valve is excited by this business model, and one developer has said, "we get much more excited . . . looking at how much money contributors make than we do about how [*Team Fortress 2*] itself is performing. Many of us come from modding backgrounds, so we often find ourselves having conversations about how we're building systems we wish we'd had access to when we started out."¹⁹¹ Valve noted that the top ten modders are all making six-figure incomes

185. Omri Petite, *Middle-Earth Roleplaying Project Mod for Skyrim Petitions WB to Revoke Cease and Desist*, PC GAMER (Sept. 6, 2012, 12:06 AM), <http://www.pcgamer.com/2012/09/06/middle-earth-roleplaying-project-mod-for-skyrim-petitions-wb-to-revoke-cess-and-desist/>. Many mods get shut down not by the copyright holder of the video game being modded, but by a third party, such as a movie studio, who own the rights to a character or story that the modder is attempting to incorporate into her work.

186. Pearson, *supra* note 19.

187. *Id.*

188. *Id.*

189. *Id.*

190. *Id.*

191. *Id.*

from modding alone.¹⁹² Additionally, when one developer was asked what his favorite Steam Workshop contribution story was, he shared:

It's hard to decide between two of my favourites. The first is the 14 year old kid who got to present a \$40,000 check to his parents. The second is a fellow who wanted to make models at a games company, but ended up having to do [question and answer] instead. So at nights he contributed models to [*Team Fortress 2*], and ended up earning more doing that than he did at his "official" games industry job.¹⁹³

Although this business model has not been around long, it seems to be a highly logical and highly desirable for both parties. The original game developer benefits by getting new content for its game and by getting revenue from a product that it did not create and for which its only involvement is making sure that it gets integrated into the game. The modder benefits by being able to have a forum to distribute his mod while also being able to make money from his work. It seems like a win-win situation for both parties.

This business model is far from widespread,¹⁹⁴ but a current trend in video gaming, known as microtransactions, may make the mod-selling economic structure even more desirable. Microtransactions are in-game purchases made with real currency, for items or advantages in the game.¹⁹⁵ Microtransactions are used extensively in mobile device (such as cell phone) video games such as the popular game *Candy Crush Saga*.¹⁹⁶ Although paying a quarter to get to continue a game at an arcade may be considered the original microtransaction,¹⁹⁷ the economic format now being seen did not become viable until fairly recently, presumably because of the

192. *Id.*

193. *Id.*

194. To the best of the author's knowledge, only Valve has implemented this system of monetized modding.

195. Dave Thier, *Expect Free-To-Play Games and Micro-Transactions from Both PS4 and Microsoft's Next Console*, FORBES (May 9, 2013, 11:37 AM), http://www.forbes.com/sites/david_thier/2013/05/09/expect-free-to-play-games-and-micro-transactions-from-both-ps4-and-microsofts-next-console/.

196. Billy Canu, *Micro Transactions—The Key to the Candy Crush Saga Success*, PRWEB (July 27, 2013), <http://www.prweb.com/releases/2013/7/prweb10970004.htm>.

197. Matt Peckham, *Why EA's Video Game Microtransactions Do and Don't Bother Me*, TIME (Feb. 28, 2013), <http://techland.time.com/2013/02/28/why-eas-video-game-microtransactions-do-and-dont-bother-me/>.

increase of the use and reliability of the internet.¹⁹⁸ Valve's mod-selling system for *Team Fortress 2* is an example of a microtransaction system that has been very successful and shows the role that modding could have in this new business model.¹⁹⁹ For a microtransaction scheme to be successful, the game developer must provide enough in-game items or options, such as new character costumes, weapons, or abilities, to draw purchases by players.²⁰⁰ Modders could easily provide these types of options if the game developer creates the system to accommodate them. This would save the game developer the trouble of developing the items themselves and could also create a never-ending stream of new ideas for the game. As both modders and game developers are incentivized to work together by economic forces, the goals of copyright protection and individual creativity can be balanced and the needs of all parties can be met. Because of the video game industry's cooperation and encouragement and because of evolving economic structures, a reforming of copyright law is unnecessary.

V. CONCLUSION

Modders make the gaming industry and gaming community a better place. They provide new content for the always-rabid video game consumer and provide a continuous stream of innovation and ideas for game developers. However, despite the value that modders and their products provide, mods are most likely derivative works under copyright law and are not protected by fair use. But that is okay. Instead of being protected by copyright doctrines, mods are protected by the consent of the copyright holders whose work the modders are modifying. Many major commercial game developers have accepted and encouraged modding through allowing mods and even by releasing official tools to make modding easier. Although a modder is not free to mod any game he wants, he can mod many games, including many of the most popular games. The current system allows copyright holders to protect their interests while giving

198. Dave Thier, *New Xbox One Exclusive Will Feature Microtransactions*, FORBES (Feb. 28, 2013, 11:22 AM), <http://www.forbes.com/sites/davidthier/2013/08/23/new-xbox-one-exclusive-will-feature-microtransactions/>.

199. Matt Purslow, *Valve Want to Share Their Microtransaction Success with Other Devs*, PC GAMER (Feb. 28, 2011, 10:14 PM), <http://www.pcgamer.com/2011/02/28/valve-want-to-share-their-microtransaction-success-with-other-devs/>.

200. Peckham, *supra* note 197.

modders express instructions, through End User Licensing Agreements, about how to legally mod. In essence, the video game industry has created a system that meets both the needs of individual creators and the needs of industry. In this case, the old adage, “If it isn’t broken, don’t fix it,” seems to apply.

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