I. INTRODUCTION

While the video game Minecraft was still in beta testing, Jens Bergensten, the lead developer, discovered a new modification (mod) created by one of the game’s users. That user was Hippoplatimus, a fifteen-year-old player who had created and posted online a downloadable mod that added features called pistons to Minecraft. Bergensten was so impressed by this mod that he offered to incorporate it into the official game, but only if Hippoplatimus chose to submit his
mod for that purpose. Hippoplatimus did submit his mod and helped incorporate it into the Beta 1.7 version of the game. His creation as a user of the game is now specifically recognized and credited in the game’s end text.

*Minecraft* itself is a relatively simple game owned by Mojang AB. It is an open-world (or sandbox) game that provides no specific goals for the user. Instead, the user is free to create and explore as they wish. The game world consists of rough 3D blocks that represent different materials (wood, dirt, water, stone) and are arranged in a fixed grid pattern. The main gameplay revolves around placing and breaking blocks.

Hippoplatimus’s addition to the game is evidence of the creative freedom within *Minecraft* and its ability to produce a lively environment for user-generated content (UGC). Within the game, dedicated users have created detailed reproductions of objects and spaces, such as the Enterprise from *Star Trek* and King’s Landing from *Game of Thrones*. Further, users have created a wide variety of mods, which alter the game code to add gameplay changes. These changes add elements such as new blocks, new items to craft (like pistons), new mechanisms of crafting, and new mobiles (mobs).

However, despite the creative freedom available in-game, these user-generated works are not as free from legal liability. *Minecraft’s*
license agreement may allow and encourage these types of works, but under the U.S. copyright regime, many of these works violate derivative works rights. This contrast between copyright and contract rights reveals a grave gap between law and what is desirable and practicable in this new and growing field of creation. The copyright regime would do well to close this gap and catch up to the standard of rights actually at play for UGC.

This Comment will address what copyright rights are available to the UGC creator in Minecraft and what sort of liability accompanies those rights. Part II will give background on Minecraft. Part III will address the contractual approach to UGC in Minecraft. Part IV will contain an overview of copyright and its application to video games. Parts V & VI will cover the copyright regime’s approach to UGC. Finally, Part VII will analyze the differences between and appropriateness of contract and copyright protection of UGC.

II. MINECRAFT, THE GAME

Minecraft is an incredibly popular game. It has sold over twenty million copies since it was first released in PC format in 2009. Due to customer demand, the primarily PC-format game was also released in versions modified for Mac, Android, and Xbox 360. Combined sales of the game have led it to become the sixth best-selling PC game of all time.

Minecraft’s popularity is no doubt due to the freedom available to users within the game. Minecraft allows gameplay in one of three modes focusing on pure creation (Creative mode), survival within the game (Survival mode), or user-created quests (Adventure mode). Users have the further option to play together in a multiplayer system, which connects multiple players on a user-owned server, where users can

---

interact and communicate in a single world.20

Within each mode, the game offers four adjustable levels of difficulty that regulate the number of hostile creatures that spawn.21 These hostiles spawn during the nighttime hours of the game, which cycles every ten minutes of game play.22 The hostiles, consisting of large spiders, zombies, Creepers (explosive creatures), and Endermen (creatures that can teleport), attack the player.23

The game world itself is set up to be as infinite as the user’s imagination. In fact, the game environment is technically limitless (on the horizontal plane) and generates new terrain as the player explores it.24 This expansive game world is divided into “biomes,” each of which has its own topography and ecosystem (e.g., desert, jungle, snowfields).25 The player can explore through these endless biomes; however, the further out the player explores, the more buggy the game becomes.26

The user’s gaming independence demonstrates Minecraft’s status as a sandbox game, a subset of open-world games.27 Open-world games allow a player to roam freely through a virtual world and to choose whether and how to approach objectives.28 In sandbox games, players have the added ability to modify the world itself and decide how they play the game.29 In Minecraft, the sandbox aspects can be seen in the building and crafting abilities given to users.30 Users can collect elements in the game world and rearrange them into structures of their own imagining.31 They can also craft these elements into new elements and

23. Id.
26. Persson, supra note 24 (explaining that “ buggy” is a term meaning that the software is not loading properly or there is some other problem with the software that causes the image to be distorted and the on-screen motions to become slower).
28. Id.
29. Id.
31. Id.
Unlike other popular sandbox games (such as Second Life), 
Minecraft is not a Massively Multiplayer Online Environment
(MMOE). In MMOEs, all content, even content created by a user in-
game, is hosted on proprietary servers. In contrast, when a user buys
Minecraft, a copy of the game’s code is downloaded onto their
computer. The game is then run and hosted solely on that computer.
This difference between Second Life and Minecraft may seem minor;
however, where the material is hosted can have a significant impact in
regard to copyright infringement and UGC.

There are two main forms of UGC within Minecraft: content that
redefines that game (specifically mods) and content that repurposes
the game (specifically architectural creations within the game), and this
Comment focuses on the former.

Mods are another example of user creativity within Minecraft. Mods, or modifications, are made by altering or creating files for the
game engine, one of two parts that make up video games. The engine
is a collection of reusable software modules that can be used as a
platform on which the game runs. The second component of video
games is the game content or code that runs on top of that platform: the
art, sound, characterization, visual style, and game objectives. Mods
alter the game engine in order to create either a total conversion,
drastically changing the rules and mechanics of the game, or an add-on
(or partial conversion). A total conversion is the most extensive type of
mod, because it strips away the game content of the original game and
replaces it with new content that runs on the original engine. An add-on
or partial conversion will usually add one particular element, such as a

32. Id.
33. Greg Lastowka, Minecraft, Intellectual Property, and the Future of Copyright,
34. Dataferret, Basic MMO Architecture, INSIDE THE MAGIC SHOP (May 17, 2012), http://insidethemagicshop.wordpress.com/2012/05/17/basic-mmo-architecture/.
35. Terms and Conditions, supra note 15 (click “Show the full terms”).
36. Lastowka, supra note 33.
38. Id. at 791.
39. Id. at 790.
40. Id.
41. Id. at 791.
42. Id. at 789, 793.
43. Id. at 789.
new weapon, to the game’s content without changing the rest of the
game’s content. Both forms of mod still require the original game in
order to function.

The video game industry largely allows mods due to their ability to
add replay value to the game. A mod creates a new gameplay situation
or objective that gives fresh elements to game users. That additional
gameplay translates to further profits for the game owners by extending
the shelf life of an otherwise outdated game.

Minecraft specifically encourages users to create mods using the
official mod Application Programming Interface (API) that it announced
in November 2012. This software tool allows the game owner to
endorse certain mods and make them available through a central
repository in-game. Within Minecraft, some of the more popular mods
have included the following: TNT Mod (which adds explosive elements
to gameplay), Magic Wands Mod (adding building, mining, and breaking
wands), TheGunMod (to add firearms to gameplay), and Doctor Who
Client Mod (which creates new game objectives based on a storyline
from the television show Doctor Who).

III. DO GAMERS HAVE RIGHTS TO UGC UNDER CONTRACT?

Contracts regarding copyright have been fairly common in the field
of technology. A company can rely on a contract to tailor legal protection
to exactly what it desires. Contracting copyright requires that the parties
obey the rules of contract as governed by the Uniform Commercial
Code. Minecraft uses a form of contractual protection known as
“clickwrap,” which means that a user, attempting to download the
Internet-based product, automatically sees terms and conditions to which
they must agree before they can install the product. Generally,

44. Id. at 794.
45. Id. at 789.
46. Id. at 792-93.
47. Id.
48. Id.
49. Marsh Davies, The Future of Minecraft: What Lies Ahead for the All-Conquering
Sandbox Game?, PC GAMER (Nov. 11, 2012, 10:00 AM), http://www.pcgamer.com/2012/11/11/
the-future-of-minecraft/.
50. Id.
resources/mods/any/?order=order_popularity (last visited Sept. 13, 2013).
52. ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1450 (7th Cir. 1996).
53. Kevin W. Grierson, Enforceability of “Clickwrap” or “Shrinkwrap” Agreements
Common in Computer Software, Hardware, and Internet Transactions, 106 A.L.R. 5th 309, 317
clickwrap is enforceable when the terms and conditions are made readily available to the user (even through a link) before the user agrees.\textsuperscript{54} Even if the user does not read the terms, they are held to a standard of reasonable prudence that finds constructive notice is given to a user who has actual notice of circumstances sufficient to put a prudent man on inquiry notice of the terms.\textsuperscript{55} The main questions raised by clickwrap are whether the party clicking had reasonable notice and whether the party manifested assent to the agreement.\textsuperscript{56} However, courts have found that the standard “I agree/accept” format that Mojang uses provides the party clicking with both reasonable notice and a chance to manifest assent.\textsuperscript{57}

To purchase and play \textit{Minecraft}, the user must first register a new account on the Mojang Web site.\textsuperscript{58} Registration requires agreement (indicated through selection within a dialogue box) to the statement “I accept the Terms and Conditions, including the Privacy Policy.”\textsuperscript{59} The printed words serve as a click-through link to the text of the Terms and Conditions, comprised of Terms of Use for the mojang.com Web site, the End User Licensing Agreement (EULA), the Brand and Asset Usage Agreement, and the Privacy Policy.\textsuperscript{60} Once the user has read through and agreed to these terms, they pay $26.95 to purchase \textit{Minecraft}.\textsuperscript{61} Buying \textit{Minecraft} then subjects the user to two \textit{Minecraft}-specific use agreements: “\textit{Minecraft} Name, Brand and Assets Usage Guidelines” and “Terms of Use.”\textsuperscript{62} These \textit{Minecraft}-specific use agreements are only a summary of the previously agreed-to EULA and Brand and Asset Usage Agreement.\textsuperscript{63}

The main requirements of Mojang’s Terms and Conditions are discussed under the heading “The One Major Rule.”\textsuperscript{64} The major rule requires, generally, that users do not distribute anything that the owner

\begin{itemize}
  \item 55. \textit{Specht v. Netscape Commc’ns Corp.}, 306 F.3d 17, 31 (2d Cir. 2002).
  \item 56. \textit{Id}.
  \item 57. \textit{I. Lan Sys.}, 183 F. Supp. 2d at 338.
  \item 59. \textit{Id}.
  \item 60. \textit{Terms and Conditions}, supra note 15.
  \item 62. \textit{Terms of Use}, \textsc{Minecraft}, https://minecraft.net/terms (last visited Sept. 13, 2013);
  \item 63. \textit{Terms of Use}, supra note 62; \textit{Minecraft Name, Brand and Assets Usage Guidelines}, supra note 62.
  \item 64. \textit{Terms of Use}, supra note 62.
\end{itemize}
has made. More specifically, the user must not (1) give away copies of, (2) make commercial use of, (3) try to make money from, or (4) let other people obtain access to the game and its parts in a way that is unfair or unreasonable. By way of exception, the “Minecraft Name, Brand and Assets Usage Guidelines” allow commercial use of the game, brand, or assets if three requirements are met: (1) that the name is used as a secondary title that describes the game honestly and fairly, (2) that the use includes attribution (Minecraft ®/TM & © 2009-2013 Mojang / Notch), and (3) that any videos or screenshots used must fall under fair use.

A pervasive message throughout the Terms and Conditions is encouragement of user creation. This is seen in the fact that the “Terms of Use” straightforwardly state that users are allowed to adapt the game for their personal use and to create content for the game. The “Terms of Use” also encourage user creation by recognizing a user’s right of ownership in what they create in the game. Thus, any tools or plugins that the user creates belong to that user. There is a limitation on the ownership right if the user makes any content “available on or through [the] Game.” Then, the user must make the material public by giving Mojang and other users the right to use the content. The EULA does not define the phrase “available on or through our Game;” however, it is referred to as an action that a user can take. So, this insinuates that unless the user takes a step to somehow share the content through the game, the content remains private to the user-creator.

This promise of user-ownership for any user-created tools demonstrates not only Mojang’s permission for UGC, but also its incentivization of it through an ownership rights guarantee. This encouragement of user creation within the game is further evidenced by the very wording of the “Terms of Use.” The contract is decidedly free of the legal jargon that normally composes a company’s Terms and Conditions. Instead, the contract is concise, put in simple, direct terms, and delivered in a casual syntax. Similar topics are grouped in clearly

65. Id.
66. Id.
67. Minecraft Name, Brand and Assets Usage Guidelines, supra note 62.
68. Terms of Use, supra note 62.
69. Id.
70. Terms and Conditions, supra note 15.
71. Id.
72. Id.
73. Terms of Use, supra note 62.
titled, straightforward paragraphs. The most important rule is given the large, bolded heading of “One Major Rule.” Such phrasing of the contract encourages Minecraft’s users actually to read and understand their rights within the game. Users who are aware and certain of their rights are more likely to feel encouraged to use their time creating within the game because they know that those creations are protected.

Overall, the Minecraft contract offers generous ownership rights to users whose in-game creations follow the two basic rules of being noncommercial and not being officially associated with the game. These noncommercial, nonofficial user creations, such as mods or in-game architecture, fully belong to the user-creator and, according to the contract, do not infringe on Minecraft’s copyright. However, the rules that the Terms and Conditions set are not the same as those set by the Copyright Act of 1976 (Copyright Act). Despite this disparity in regulations, the contract terms may still control because state contract rights are generally not preempted by the Copyright Act.

IV. COPYRIGHT AND ITS APPLICATION TO VIDEO GAMES

Copyright law exists in its current form under the Copyright Act. Copyright protection extends to works in various media including literary works, musical works, dramatic works, choreographic works, pictorial and graphical works, motion pictures, sound recordings, and architectural works. To qualify for copyright protection, a work must be original (possessing a minimal degree of creativity) and fixed in a tangible medium of expression (“sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration”). Copyright protection affords a bundle of rights such as the right to reproduce the work, to prepare derivative works based on the copyrighted work, and to distribute copies to the
public.\textsuperscript{80} For copyrighted works created on or after January 1, 1978, these rights last for seventy years after the death of the author.\textsuperscript{81}

The computer programming and audiovisual elements that make up video games are both eligible for copyright protection. The Copyright Act first explicitly included computer programming in 1980. Following recommendations of the National Commission on New Technological Uses of Copyrighted Works (CONTU), Congress clarified in its 1980 amendments to the Copyright Act that computer programs are subject to copyright protection.\textsuperscript{82} The amendments included a definition of “computer program” (“a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result”)\textsuperscript{83} and a new section that delineated the exclusive rights for copyright owners of computer programs.\textsuperscript{84} This new section, section 117, allocates certain rights to the owner of a copy of a computer program in addition to those held by the program’s author.\textsuperscript{85} The author maintains the basic rights allocated under copyright law (reproduction, derivative works, distribution, performance, and display).\textsuperscript{86} However, the owner of a copy of the program can make and sell copies and adaptations of the computer program under certain limitations, such as for an essential step in using a computer program or for maintenance purposes.\textsuperscript{87} Since the 1980 amendments, precedent has found that computer programs are copyrightable as “literary works,” and thus are protected under the first category of works of authorship.\textsuperscript{88}

Aside from computer programming, video games are also given protection under copyright for their audiovisual displays. The audiovisual displays are protected as works of authorship under section 102’s subheading for “audiovisual works.”\textsuperscript{89} Courts have recognized that both whole games and particular elements of games are eligible for copyright protection as “audiovisual works.”\textsuperscript{90} Further, video game

\begin{itemize}
  \item \textsuperscript{80} Id. § 106.
  \item \textsuperscript{81} Id. § 302.
  \item \textsuperscript{83} 17 U.S.C. § 101.
  \item \textsuperscript{84} Id. § 117.
  \item \textsuperscript{85} Id.
  \item \textsuperscript{86} Id. § 106.
  \item \textsuperscript{87} Id. § 117.
  \item \textsuperscript{88} Id. § 102. “While computer programs are not specifically listed as part of the above statutory definition, the legislative history leaves no doubt that Congress intended them to be considered literary works.” Computer Assocs. Int’l, Inc. v. Altai, Inc., 982 F.2d 693, 702 (2d Cir. 1992) (citing H.R. Rep. No. 94-1476, at 51 (1976)).
  \item \textsuperscript{89} Midway Mfg. Co. v. Artic Int’l, Inc., 704 F.2d 1009, 1012 (7th Cir. 1983).
  \item \textsuperscript{90} Midway Mfg. Co. v. Bandai-Am., Inc., 546 F. Supp. 125, 139 (D.N.J. 1982).
\end{itemize}
displays satisfy the fixation requirement by having effects that are fixed in a tangible medium of expression and can be “‘reproduced, or otherwise communicated’ for more than a transitory period.”91 Hence, both the underlying computer program and the audiovisual displays of a video game are protectable under the Copyright Act.

V. DO GAMERS HAVE RIGHTS TO UGC UNDER THE COPYRIGHT ACT?

A. Copyrightable or Infringing Copyright

Video games’ components are clearly protected by copyright. However, the rules for content created by users within those games are not as clearly delineated. The specific content at issue consists of mods and architecture built within the game. Both of these creations are composed of legally protectable computer programming or code.92 However, because the user has created the code within Minecraft’s framework, using the platform of the game, does the UGC disqualify itself from copyright protection by copying the game’s expression or being a derivative work?

UGC within video games is composed of the same elements as video games: computer code and audiovisual displays.93 For example, mods are software add-ons that alter how aspects of the game appear on the screen.94 The architecture that a player builds within the game is an on-screen display of a manipulation of the options afforded by the game’s programming.95 If these elements of code and display are copyrightable for video games, it follows that the same elements should be protectable when used for variations on the video game. Despite the application to new forms of content, it is still the same components (programming and audiovisual display) that are falling under copyright protection. Hence, at a base level, the elements that make up UGC would similarly be found eligible for copyright protection.

While the components of UGC may be copyrightable, if the work is infringing on another’s copyright, it cannot be protected.96 To prove copyright infringement, the plaintiff must show evidence of

92. Note, supra note 37, at 790-92.
93. Id.
94. Id.
95. Baldrica, supra note 13, at 700.
(1) ownership of a valid copyright and (2) that the defendant copied protectable expression or violated another right of copyright. Applying this test to Minecraft users, the first element is easily passed as Mojang owns a valid copyright on its work. Second, UGC is also likely to contain evidence of copying. Circumstantial proof of copying can include proof of access and proof of similarities sufficient for the trier of fact to infer copying. Mods and architecture use the building blocks of the game for their creation; hence, users will undoubtedly have access to the game and create work that displays similarities to it.

Aside from basic copyright infringement, UGC also implicates questions of infringement of protectable expression and derivative works.

B. Protectable Expression

The Copyright Act makes a firm distinction between the idea and its expression in a work. Under § 102(b), protection does not “extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery.” So, if UGC copies an idea or procedure, rather than an expression, then no infringement occurred because that copied material was not protected by copyright. Deciding whether source material is an idea or an expression can be difficult. In Lotus Development Corp. v. Borland International, the United States Court of Appeals for the First Circuit found that menu commands in a spreadsheet computer program were not copyrightable because they were an excluded method of operation (an idea). The court reasoned that because the specific words in the menu command were essential to operating the program, they constituted a method of operation. The same approach can be seen in Micro Star v. Formgen Inc. There, the court found that the MAP files (operational code that directs what is displayed on the screen) of a video game were not inherently protected; only the story the files told in the game was subject to copyright.

---

100. 17 U.S.C. § 102(b).
101. Id.
103. Id.
104. Micro Star v. Formgen Inc., 154 F.3d 1107, 1112 n.5 (9th Cir. 1998).
105. Id.
Under this reasoning, the building blocks that operate the game constitute ideas and are not subject to copyright. Mods, however, are generally built to mimic or continue the original game’s story, as were the mods at issue in *Micro Star*. There, the court found that, while the mods would have been allowed to use the game’s MAP files to tell a different story, because the mods in that case continued the same story as the original game, they infringed copyrightable expression. The court analogized the mods to sequels that use the protected content of the original story and violate the copyright owner’s sole right to create sequels. Unlike the game at issue in *Micro Star*, *Minecraft* is a sandbox game with no story that mods follow or mimic. However, even without a core story, *Minecraft* still has elements, like art and audio, that are not essential to operating the program and hence fall under protected game expression. UGC in *Minecraft* purposely imitates and includes these elements of the game’s expression in order to provide more continuity and ease of use. Thus, most *Minecraft* UGC would fall into the same situation as the mods in *Micro Star* of infringing copyright through use of protected expression.

VI. DERIVATIVE WORKS

The greatest controversy surrounding UGC arises over its characterization as either an infringing derivative work or an original expression that merely makes fair, transformative use of copyrighted material in creating something new. Among the exclusive rights granted to copyright holders is the right to prepare and authorize others to prepare derivative works based on their copyrighted works. A derivative work is defined as a work based upon one or more preexisting works. In UGC, users necessarily implicate derivative rights by creating and using the building blocks of another work: the game itself. If UGC is classified as an unauthorized derivative work, it is not copyrightable by the user and the use itself is infringing on the copyright holder’s right. In the controlling precedent on this issue, courts have split over the issue of whether UGC is a derivative of the game.

106. *Id.* at 1109.
107. *Id.* at 1112 n.5.
108. *Id.* at 1112.
109. *Id.* at 1112 n.5.
110. *Id.* at 1112.
111. *Id.* at 700.
112. *Id.* § 106.
In *Lewis Galoob Toys, Inc. v. Nintendo of America, Inc.*, the United States Court of Appeals for the Ninth Circuit found that audiovisual displays created by a video game modification device did not create a derivative work because the device merely enhanced the displays originating in the game cartridges.\(^{113}\) The device at issue, the “Game Genie,” inserted alongside a game cartridge into Nintendo’s game console, allowed players to temporarily alter up to three features of a Nintendo game (increase the number of lives of the character, increase the character's speed, and allow the character to float above obstacles).\(^{114}\) The court found this impermanent status determinative.\(^{115}\) The court stated that a derivative work must incorporate a protected work in some concrete or permanent form.\(^{116}\) Due to the fact that the Game Genie merely enhanced the audiovisual displays that originated in the Nintendo game, its altered displays did not incorporate a portion of a copyrighted work in such a way.\(^{117}\)

The court also distinguished its finding from the precedent of *Midway Manufacturing v. Artic International*.\(^{118}\) In *Midway*, the court found that the audiovisual display created by a commercial modification of a video game (that sped up the rate of play) constituted a derivative work.\(^{119}\) The *Galoob* court distinguished the Game Genie from the Artic chip based on two elements.\(^{120}\) First, the *Galoob* court explained that the Genie lacked the element of physically incorporating the copyrighted work.\(^{121}\) In *Midway*, players inserted the modifying computer chip into the game, and the chip worked by substantially copying and replacing the chip that was distributed by the game’s owners.\(^{122}\) The court in *Galoob* reasoned that by copying and replacing the original game, the chip physically incorporated the copyrighted work.\(^{123}\) Second, the *Galoob* court found that the noncommercial nature of the Genie was a significant difference.\(^{124}\) In *Midway*, the user sold the chip in an arcade and benefited economically from its being used in public (hence removing

\(^{113}\) Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc., 964 F.2d 965, 968 (9th Cir. 1992).
\(^{114}\) Id. at 967.
\(^{115}\) Id. at 968.
\(^{116}\) Id.
\(^{117}\) Id.
\(^{118}\) Id. at 969 (citing Midway Mfg. Co. v. Artic Int’l, Inc., 704 F.2d 1009 (7th Cir. 1983)).
\(^{119}\) Id.
\(^{120}\) Id.
\(^{121}\) Id.
\(^{122}\) Id.
\(^{123}\) Id.
\(^{124}\) Id.
that source of revenue from the copyright owner), while the Genie was instead distributed for private use in a home console (hence not supplanting a demand for the copyrighted work). The Galoob court found these factual differences significant enough to militate against following Midway’s precedent.

Turning from their Galoob ruling, the Ninth Circuit in Micro Star v. Formgen Inc. found that audiovisual displays coming from a modification device did constitute a derivative work. Formgen created and owned the rights to Duke Nukem 3D, a first-person shooter computer game. The basic game came with twenty-nine levels, as well as a “Build Editor” utility that allowed players to create their own levels. With the encouragement of Formgen, players also posted their custom levels online for other players to download. Micro Star, a computer software distributor, downloaded 300 user-generated levels, copied them to a CD, and offered them for sale under the name Nuke It. The court looked at whether the audiovisual display generated when Duke Nukem was run in conjunction with Nuke It was a derivative work.

As previously discussed in relation to mods, a video game is made up of a game engine and game content. The same was true of Duke Nukem. In that game, however, the game content was made up of two levels: the source image library (containing all of the copyrighted images that appeared on the display) and MAP files (that told the game engine which images from the library to display on particular areas of the screen). When a player used Nuke It, the game engine referenced the Nuke It MAP files, but still used the Duke Nukem art library to generate the images.

As in Galoob, the court’s analysis began with an examination of whether the work existed in a concrete or permanent form. The Nuke It MAP files, the court found, (1) provided the audiovisual display, rather

---

125. Id.
126. Id.
128. Id. at 1109.
129. Id.
130. Id.
131. Id.
132. Id.
133. Id. at 1110.
134. Id.
135. Id.
than referring to the original game, and (2) served as a permanent recording of the audiovisual display, not as a temporary adjustment. The court found that this amounted to a concrete or permanent form and, under step one, that *Nuke It* constituted a derivative work.

Next, the court considered the second element of a derivative work: substantial incorporation of protected material from the preexisting work. To determine whether this work made such an incorporation, the court applied the substantial similarity test to the original and to the mod. The substantial similarity test compares the objective details of the works and considers the response of the ordinary objective person. The court found that Formgen would succeed in making the showing of substantial similarity because the audiovisual displays of *Nuke It* came directly out of the *Duke Nukem* source art library. Thus, under step two, *Nuke It* constituted a derivative work. Because *Nuke It* presented both elements of a derivative work, the court found that Formgen would succeed in proving that Micro Star violated Formgen's derivative right and infringed copyright.

Under this precedent, UGC in *Minecraft* is likely to be found infringing as a derivative work. The UGC in *Minecraft* is technologically very similar to that at issue in *Duke Nukem*. Like *Duke Nukem*, *Minecraft* encourages users to create mods, even adding an official modding API. Also, almost all contemporary mods, including those used in *Minecraft*, follow the same basic structure as *Nuke It*. They use the base game engine and some of the game content files to add to and modify the game. Due to the similarities of fact and the recency of the decision, it would follow that the *Micro Star* analysis and holding would apply to any upcoming UGC controversies.

However, there is one major difference that distinguishes most *Minecraft* UGC from *Nuke It*: its commercial nature. While for-profit sale did not hold much weight in the *Micro Star* analysis of derivative

---

136. Id. at 1111.
137. Id. at 1112.
138. Id. at 1111-12.
139. Id. at 1112 (citing Mirage Editions v. Albuquerque A.R.T. Co., 856 F.2d 1341, 1343 (9th Cir. 1988)).
140. Id.
141. Id.
142. Id.
143. Id.
144. Id. at 1114.
145. Davies, supra note 49.
146. Note, supra note 37, at 790-92.
works, *Galoob* did place more emphasis on this fact.\textsuperscript{147} The *Galoob* court found that the distinction between commercial and noncommercial use was nearly sufficient to necessitate a change in the work’s status from derivative to not derivative.\textsuperscript{148} Noncommercial use plays an important role because it prevents the work from possibly reducing demand for the copyrighted work, which is what derivative rights are supposed to protect.\textsuperscript{149} As in *Galoob*, future courts could find the noncommercial nature of UGC significant enough to reject the *Micro Star* precedent. Unless and until they do, *Micro Star* continues to stand as the controlling case on UGC, and it finds UGC to be a derivative work.

A. Exceptions and Defenses to UGC Copyright Infringement

While UGC is likely to be uncopyrightable due to its infringing use of protected expression and its status as a derivative work, it is further denied any possible defenses by the Copyright Act’s section 117 specific use exceptions and section 107 fair use limitation.

B. Section 117

Section 117 of the Copyright Act exempts adaptations of computer programs from copyright infringement if they fall into one of four specified categories.\textsuperscript{150} Under the first and second categories, the owner of a copy of a copyrighted computer program can make or authorize the making of a copy or adaptation only as “an essential step in the utilization of the computer program” or for archival purposes.\textsuperscript{151} The third and fourth categories grant an exception for sale of an adaptation.\textsuperscript{152} UGC arguably qualifies as an adaptation and, hence, is exempt from infringement. According to the National Commission on New Technological Uses of Copyrighted Works, “[T]he right to add features to the program that were not present at the time of rightful acquisition [would fall within this right of adaptation].”\textsuperscript{153} Similarly, in *Foresight Resources Corp. v. Pfornmiller*, the United States District Court for the

\textsuperscript{147} Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc., 964 F.2d 965, 969 (9th Cir. 1992).
\textsuperscript{148} Id.
\textsuperscript{149} Id.
\textsuperscript{152} Kesler, *supra* note 150, at 499-501.
\textsuperscript{153} FINAL REPORT OF THE NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS 13-14 (1978).
District of Kansas found that a computer program enhancement that added five new files to the existing programming only for personal, noncommercial use constituted an adaptation under section 117. However, other courts have added a caveat with regard to adaption status. The Ninth Circuit in MAI Systems Corp. v. Peak Computer, Inc., found that the benefit of adaptation status did not vest in users who are licensing the content. Because the developer retained ownership of every copy of the software and merely licensed the use of those copies, section 117 did not apply. Looking at Minecraft, the section 117 defenses would not apply because the content is licensed. The Terms and Conditions specifically state, “Although we give you permission to play our Game, we are still the owners of it.” Hence, the MAI ruling would apply to any Minecraft UGC and withhold adaptation status and section 117 protections.

C. Fair Use Doctrine

Section 107 codifies the equitable doctrine of fair use that allows use of copyrighted material even without the consent of the copyright owner. The Copyright Act provides four factors to be considered when determining whether the doctrine applies:

(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.

Precedent is split over whether UGC constitutes a fair use of the game. The court in Galoob found that the Game Genie’s use of the original Nintendo game was fair under the first, second, and fourth factors because the use was noncommercial, from a published work, and did not affect sales of the original or a derivative of the copyrighted work (because Nintendo had not issued or considered issuing altered versions of its games, there was no reasonable likelihood of a derivative market).
The court further found that even though the Game Genie used the entire copyrighted work, this did not cause the use to fail the third factor.\textsuperscript{162} Citing \textit{Sony v. Universal}, the court found that, like reproduction of a television show that the viewer has been invited to witness, Nintendo’s audiovisual displays, once paid for, can be viewed as the consumer chooses without infringing on the owner’s copyright.\textsuperscript{163}

The court ruled against fair use in \textit{Micro Star}.\textsuperscript{164} In that case, the court found it determinative that the use was purely for financial gain.\textsuperscript{165} Commercial use is presumptively unfair exploitation; however, the court also looked at factors two and four.\textsuperscript{166} \textit{Nuke It} failed the second factor by copying a fictional work, which is afforded more protection than factual works.\textsuperscript{167} Further, by selling \textit{Nuke It}, the mod infringed on the original owner’s right to market new versions of their material.\textsuperscript{168} Together, these findings strongly militated against a ruling of fair use.\textsuperscript{169}

Under the precedent set by these two cases, UGC in \textit{Minecraft} is not likely to qualify for a fair use defense. \textit{Micro Star} shifts the values in fair use analysis away from \textit{Galoob}'s emphasis on the user’s right to use the work as they wish after purchase, toward protection of the copyright owner’s market at the expense of the user.\textsuperscript{170} This is clear from the finding in \textit{Micro Star} that the owner was the only party allowed to commercialize and market derivative versions, even if that right was not utilized.\textsuperscript{171} Under such a protectionist precedent, UGC in \textit{Minecraft} is likely to function as a derivative that only the owner can market, and, thus, to fail the fair use test.

However, that precedent has serious flaws in its analysis. First, the \textit{Micro Star} ruling placed importance on commercial use in its fair use analysis, yet failed to take into account the very important and positive role that mods play in the copyrighted work’s market.\textsuperscript{172} Mods benefit the copyrighted work because they “require users to purchase and install the

\textsuperscript{162} \textit{Id.} at 971.
\textsuperscript{163} \textit{Id.} (citing \textit{Sony Corp. of Am. v. Universal City Studios, Inc.}, 464 U.S. 417, 449-50 (1984)).
\textsuperscript{164} \textit{Micro Star v. Formgen Inc.}, 154 F.3d 1107, 1113 (9th Cir. 1998).
\textsuperscript{165} \textit{Id}
\textsuperscript{166} \textit{Id}
\textsuperscript{167} \textit{Id}
\textsuperscript{168} \textit{Id}
\textsuperscript{169} \textit{Id}
\textsuperscript{170} \textit{Id.}; \textit{Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc.}, 964 F.2d 965, 970-71 (9th Cir. 1992).
\textsuperscript{171} \textit{Micro Star}, 154 F.3d at 1113.
\textsuperscript{172} \textit{Id}
original game on their hard drives in order for the Mod to operate [and alter the original game’s instructions].” 173 It thus follows that a successful mod would result in an increase in sales of the original game. 174 Further, mods extend the shelf life of the game by adding new levels and adventures for the user to play through. 175 The fourth fair use factor of economic harm is considered the most important of the fair use factors. 176 Therefore, more attention should be paid to the fact that mods can act as a boon to a copyrighted game and that their fair use would not harm the market.

Second, the Galoob and Micro Star decisions also failed to address the element of transformative use in their analysis. Under the first factor of fair use, transformative works “lie at the heart of the fair use doctrine’s guarantee of breathing space within the confines of copyright, . . . and the more transformative the new work, the less will be the significance of other factors . . . that may weigh against a finding of fair use.” 177 Courts have found transformative use in a collage incorporating another artist’s work, 178 as well as in parody. 179 In determining whether a work is transformative, the court should consider whether the use “‘adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message.’” 180 There is a viable argument that UGC constitutes transformative work. Even though most UGC will directly copy some aspects from either the original game or third party works, it is also creative work that incorporates independently created scripts, soundtracks, images, and virtual actors. 181 As such, UGC does add something new, with a different character that adds new meaning, and should therefore constitute a transformative use.

VII. ANALYSIS

It is clear that users receive far more protection for their creations under the contractual rights of the Minecraft Terms and Conditions than they do under the copyright regime. Minecraft’s contract allows its users

173 Baldrica, supra note 13, at 708.
174 Id
175 Note, supra note 37, at 790-92.
176 Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc., 964 F.2d 965, 971 (9th Cir. 1992).
178 Blanch v. Koons, 467 F.3d 244, 253 (2d Cir. 2006).
179 Campbell, 510 U.S. at 589.
180 Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1164 (9th Cir. 2007) (internal quotation marks omitted) (citing Campbell, 510 U.S. at 579).
181 Baldrica, supra note 13, at 712.
to adapt the copyrighted content into new creations\textsuperscript{182} and encourages users to do so by promising them ownership of their new works.\textsuperscript{183} This contractual approach was exemplified in Hippoplatinum's case.\textsuperscript{184} There, a Mojang employee was excited that users were creating new additions to \textit{Minecraft's} content.\textsuperscript{185} The game owner did not punish the user.\textsuperscript{186} Instead, he respected the user's rights to the content and only added it to the game with the user's permission.\textsuperscript{187} Copyright law, in contrast, actively discourages such creation. It punishes users by finding a violation when users employ the game's expression and by making the content that users create an infringing derivative use.\textsuperscript{188} Further, UGC is denied any possible defenses to infringement that come from section 117 or the fair use doctrine.\textsuperscript{189}

This disconnect between the two systems is partly a function of the type of technology at issue. Video gaming is a rapidly changing industry, and UGC is a relatively new phenomenon. Contracts are more adaptable due to their ease of creation and their application to only the parties involved. Hence, contracts are more easily able to reflect the current state of technology and the creations it entails. Copyright law is, instead, a heavier, slower machine due to its bureaucratic requirements and its more general application to changes. As such, it will, by nature, be the more conservative mechanism.

Despite copyright's limitations, it still has a responsibility to protect the rights of creators. In regard to UGC, it is failing. Copyright law derives from Article I, Section 8, Clause 8 of the United States Constitution, which grants Congress the power “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”\textsuperscript{190} The Constitution does not specify that only established forms of expression or only commercial forms of expression should be protected.\textsuperscript{191} Exclusive rights are to be granted to all authors

\begin{itemize}
\item \textsuperscript{182} \textit{Terms and Conditions}, supra note 15.
\item \textsuperscript{183} \textit{Id}
\item \textsuperscript{184} Bergensten, supra note 1.
\item \textsuperscript{185} \textit{Id}
\item \textsuperscript{186} \textit{Id}
\item \textsuperscript{187} \textit{Id}
\item \textsuperscript{188} Micro Star v. Formgen Inc., 154 F.3d 1107, 1112 n.5 (9th Cir. 1998); Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc., 964 F.2d 965, 969 (9th Cir. 1992).
\item \textsuperscript{189} MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511 (9th Cir., 1993); \textit{Micro Star}, 154 F.3d at 1113.
\item \textsuperscript{190} U.S. \textit{Const}. art. I, § 8, cl. 8.
\item \textsuperscript{191} \textit{Id}
\end{itemize}
for their respective creations. This broad scope of application should encompass UGC as an authored writing. Further, UGC is not appreciably different from what copyright law already recognizes and protects. The use of another’s work to inspire further creation is the principle behind the long-standing doctrine of fair use. Past precedent has found UGC to constitute a fair use as well as a nonderivative, noninfringing use. Further, copyright law has protected the elements that make up UGC (computer programming and audiovisual displays) since 1980. It seems clear that copyright law can and should protect UGC. However, at present, rulings such as Micro Star are preventing that from happening.

This lack of copyright protection leaves game owners to create their own rights through contracts. Minecraft’s contractual rights are built around the gaming-world reality that UGC possesses worth. UGC has value for the game owner as a way to increase the challenges and capabilities of a game and, thus, to prolong its shelf life. UGC has value for other players as a way to improve their gaming experience. And UGC has value for the content creator as a creative work of his or her own. To capture that value, the game owner is left to do what copyright law is supposed to do: incentivize creation by allotting ownership rights to the content’s creator. Despite the contractual rights that games like Minecraft accord, UGC will continue to be a second-class form of expression until protected by copyright law. Copyright law is a respected institution that has the power to define what a work of authorship is; it truly looks out for the rights of the creator (rather than the game owner who creates the contract), and, as a federal law, it can preempt state contract law. However, until there is a change in copyright law to secure these benefits, UGC will continue to be legally unappreciated and, more importantly, unprotected.

192. Id.
196. Micro Star v. Formgen Inc., 154 F.3d 1107, 1112 n.5 (9th Cir. 1998).
198. Id. § 201.
199. Id. § 301. But see ProCD Inc. v. Zeidenberg, 86 F.3d 1447, 1453-54 (7th Cir. 1996) (holding that state contract rights do not grant a right equivalent to copyright, and hence, copyright law does not preempt state contract law).