

# Mods as Lightning Rods: A Typology of Video Game Mods, Intellectual Property, and Social Benefit/Harm

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## Abstract

Video game modification, or ‘modding’ – nonprofessionals altering or adding to games – is, in some interpretations of US law, copyright infringement or a violation of end-user license agreements. However, though mods are roughly all equally (il)legal, the industry only sometimes uses its legal power to stop them. In this article, we explore the economic and social factors that impact how video game corporations employ the law in relation to modding, revealing a symbiotic relationship. We argue that the specific content of a mod matters for how it’s assessed and whether rightsholders attempt to stop it. We propose a new model where structural analysis of the modder–industry relationship is supplemented with textual analysis that asks of specific mods who they benefit and harm. We argue that this will enable a better understanding of when and how the industry takes legal action.

## Keywords

Copyright, fan studies, intellectual property, media convergence, modding, modifications, user-generated content, video game studies

Initiating a new playthrough of Bethesda Softworks’ role-playing game (RPG) *Skyrim*, a gamer finds their character headed for execution. The protagonist is miraculously spared when the dragon Alduin arrives to wreak destruction. Yet this playthrough is different. Alduin is nowhere to be found. Instead, the great evil that has befallen the virtual world is

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professional wrestler Macho Man Randy Savage (FancyPants, 2012). When this video game modification – or ‘mod’ – is activated, dragons in *Skyrim* don Macho Man’s cowboy hat, sunglasses, tassels, and boots, and players are serenaded with some of his most famous one-liners. What was once a serious scene foreshadowing events to come suddenly becomes sidesplittingly funny. Welcome to the world of video game modifications.

Video game modding – the practice of nonprofessionals altering or adding to games – is by some measures presumptively illegal. Because modding uses intellectual property to which modders don’t hold the rights, it could be argued that it’s copyright infringement; others might argue ‘mods’ transform the original text and therefore constitute fair use under US law.<sup>1</sup> In addition to potential copyright infringement, mods frequently violate the Digital Millennium Copyright Act (DMCA) and/or Computer Fraud and Abuse Act (CFAA): modders must usually circumvent copy protection technology on the source game and/or violate the end-user license agreement (EULA). That is, *how* modding happens technologically is often illegal regardless of whether *what* modders do textually would otherwise be legal – regardless of whether, for example, the content may be commentary or criticism protected under the US fair use doctrine. However, though mods are roughly all equally (il)legal, the industry only sometimes uses its legal power to stop them.

Accordingly, while modding is often approached either through its risks for rightsholders or its expressive benefits for users, we contend that each of these approaches, alone, is incomplete. As Loren (1997), Sunder (2012), and others have compellingly argued, sociolegal analysis should take into account broader questions of benefit and harm in determining the legitimacy of intellectual property reuse by those other than the rightsholder. Therefore, we argue that the specific content of a mod matters – changing a game to contest its violence against women is very different than changing it to increase violence against women, for example.

In this article, we explore the economic and social factors that impact how video game corporations employ the law in relation to modding, revealing a symbiotic relationship. We engage US law specifically. We do this partially because the existing conversation about modding in which we intervene is US-focused. Additionally, following Tushnet (2007: 141), we focus on US law because it ‘is unusually open-ended, whereas many other countries have limited exceptions to copyright for which fan creations are less likely to qualify’ – like fair dealing more often found in the Commonwealth of Nations – and ‘U.S. copyright owners, like many other U.S. entities, are relatively swift to threaten lawsuits when they perceive an interference with their rights’. Moreover, US-based multinationals are large and well-resourced enough that they can (and do) lean on legislation and enforcement globally.

To understand how the video game industry’s responses to modding are shaped by not only legal but also economic and social factors, we begin with a literature review examining both the legality of modding and patterns in fan–industry relationships around modding. We then argue that the relationship between the industry and modders is symbiotic, predicated on perceived benefit and harm to both parties, and specifically that the content of a mod matters for how it is assessed. Therefore, we propose a new model where structural analysis of the modder–industry relationship (examining the

underlying structures that allow texts, discourses, and cultures to develop) is supplemented with textual analysis that asks whom specific mods benefit and harm (interrogating the content and meaning). We explore these perceptions through a four-part typology detailing who benefits and who is harmed by video game mods: mutual benefit, no one benefits, benefit only to the industry, and benefit only to fans. We argue that this will enable a better understanding of when and how the industry takes legal action. We conclude our article by presenting three predictions for the future of video game modding as well as opportunities for empirical research to expand and refine our theoretical model.

## Modding: Between Industry and Fans

Previous work on the legality of modding has come to varied conclusions. Mainstream legal approaches to intellectual property reuse, as Gordon (1992) notes, have tended to consider only harm to the initial copyright holder. Analysis of modding from this approach is similar. Under a traditional US copyright model, mods tend to be seen as derivative works of commercial games, and copyright includes an exclusive right to make or authorize derivative works. Exemplifying this approach, Wallace (2014) flatly argues that mods are derivative works and most don't qualify as fair use. Additionally, the DMCA renders mods illegal in cases where they involve breaking the locks of digital rights management (DRM) encoding that protect games from copying. Lockpicking is illegal even if it's not done to make illicit copies at a mass or even single scale, and so is the production or distribution of anything that might be used as a lockpick, even if it has other uses, as was decided in *Universal v. Reimerdes* (2000). Third, mods are interpreted as presumptively illegal when they violate terms of service (TOS) or EULA, because this is prohibited under the CFAA.<sup>2</sup> This rightsholder-focused approach is consistent with Kow and Nardi's (2010) description of games company Blizzard, which has encouraged modding through releasing application program interfaces (APIs), but also uses its legal and technological power to shut some mods down. Blizzard treats mods as derivative works they own by default.

On the other hand, 'Spare the Mod' (2012) argues that total conversion mods (which rely on a game's underlying engine but produce a seemingly new game) aren't derivative but rather transformative and therefore typically fair use.<sup>3</sup> The author adds that 'the outcome of the test is far from certain, as courts may examine the game either holistically or as comprising both game content and a game engine' (p. 810), and accordingly come to different conclusions. The note concludes that greater rights for modders 'could shift the innovation paradigm of the enormous gaming industry, stimulating user creativity and broadening the digital canon' (p. 810). Similarly, Landau et al. (2006) argue that modding suggests DRM should be *less* restrictive, because allowing user contributions benefits the industry; they advocate that the film industry adopt a more permissive model like that of games, giving up control in return for the economic gain it would bring. Such interpretations dovetail with Baldrice's (2009) argument for a right for modding similar to the compulsory license for cover songs in music, such that if there is a market failure and no fair license exists, mods would be fair use. These arguments highlight that the

relationship between video game companies and modders can be either cooperative or antagonistic.

For this reason, mods need to be analyzed at the intersection of the industry and gamers, which hasn't been addressed by legal studies research. Therefore, we bring to bear media studies literature that has long operated at this intersection. Political economy approaches argue that modding should be seen as labor exploitation to make more content for games (Banks and Humphreys, 2008; Hong and Chen, 2014) or fix shoddy production (Hong and Chen, 2014; Zhang and Fung, 2014) without paid employees (Banks and Humphreys, 2008; Dyer-Witherford and de Peuter, 2009; Postigo, 2003). This scholarship foregrounds modding's harm to users and benefit to corporations. Authors taking this approach argue that game fan activity extends the shelf life of games (Kücklich, 2005; Landau et al., 2006; Newman, 2005; Poderi and Hakken, 2014; Postigo, 2003, 2007), and gamers may even outright buy games in order to get access to mods (Hong and Chen, 2014; Postigo, 2007). Conversely, modding can increase modders' emotional commitment to a game, franchise, or company, paying more indirect dividends (Banks and Humphreys, 2008; Kow and Nardi, 2010; Kücklich, 2005). Modding can also serve as outsourced research and development, where modders take on any and all risk of innovation (Kücklich, 2005; Poderi and Hakken, 2014; Postigo, 2003; Zhang and Fung, 2014). The industry can then incorporate modded content as official add-ons (Kow and Nardi, 2010), spin it off into a new game (Postigo, 2003, 2010), or include it in future games (Banks and Humphreys, 2008; Poderi and Hakken, 2014; Postigo, 2003). In all cases, under this analysis, the industry accrues far more value than modders.

By contrast, the convergence culture tradition, named for Jenkins' (2006) foundational book of the same name, emphasizes media engagement's benefits to consumers (both modders and otherwise). These authors argue that everyone now has access to publication and can bypass traditional media industries or gatekeepers (Benkler, 2007; Howe, 2009; Lessig, 2004; Shirky, 2008). In this framework, modding is self-expression that lets modders tell new stories (Nardi and Kallinikos, 2007; Postigo, 2007, 2010). More strongly, modding and convergence culture in general can be seen as a way people demand the right to participate in culture (Banks and Humphreys, 2008; Jenkins, 2006; Murray, 2004). The most assertive iteration of this argument is that in convergence culture, users are seizing the products of capitalist-produced mass culture (Dyer-Witherford and de Peuter, 2009) and talking back (Consalvo, 2003). Players can also benefit from mods when they act toward inclusion, whether by representing marginalized people or through modding for accessibility like increasing contrast for those with low vision (Merritt, 2017). This tradition sees modding as not derivative of the commercial game but rather transformative, because it doesn't simply duplicate but builds on the game. Accordingly, this argument goes, modding doesn't impinge on the exclusive rights reserved by US copyright, but rather resides in the exceptions to copyright carved out to serve free speech and the public good. As Loren (1997) argues, some uses of copyrighted material carry substantial benefits to society, which should be (but isn't) taken into account as a positive externality in determining whether they should be allowed as fair use.

This issue of positive externalities and nonmarket measurements of benefit and harm is where we take our point of departure. Fiorido (2013) suggests that ethical

ramifications of mods must be foregrounded, calling attention to harmful content on one hand and total conversion mods on the other. Baldrica (2007: 685) similarly argues for what he calls a 'Spectrum of User Contribution' that would account for both how much users contribute quantitatively and how different the new experience is qualitatively to assess whether a modder should have ownership rights in a mod. Given these tensions between the industry and audience and the variations in responses to mods, we argue that the specific content of a mod matters.

While research on games themselves frequently uses textual analysis, textual approaches to modding are relatively uncommon. Engeli (2008: 162) describes how 'what started as a hacker attitude of writing patches to modify shooter games has developed into a genre of artworks, artistic endeavours that use shooter games in a variety of critical ways or that contextualize them in novel variations'. An example of this is Frasca's (2003: 232) argument that 'reskinning' – adding a different aesthetic overlay to – the opposing factions in *Quake* with Israelis and Palestinians would change the entire ideology of the game. Haynes (2006: 92) calls for examining 'game modding for critical/social purposes, in addition to how others have studied its aesthetics'. While US law doesn't typically foreground the moral rights Fiorido (2013) discusses in the Canadian context,<sup>4</sup> the kinds of cases that might violate moral rights are what's interesting to textual analysis. For example, an author might feel their moral rights are violated by a mod that allows sexualized violence, or one that removes sexualized violence from their game, or indeed, one that exposes that developers built sexualized violence into the game and later technologically suppressed it, as in the *Grand Theft Auto (GTA)* 'Hot Coffee' mod. Cultural contestations and moves toward inclusion are also the sorts of positive externalities Loren (1997) emphasizes should make fair use more likely. These questions, therefore, are integral to examining the relationship among modders, the industry, and the use of legal force.

## Beyond Good and Evil: Rethinking (Im)Permissible Mods

In some sense, all of the earliest video games could be considered mods or hacks, since they were unofficial (mis)uses of research computers devised by users. However, modding in the contemporary sense arose in the early 1980s. '*Castle Smurfenstein* (1983), a total conversion of the video game *Castle Wolfenstein* (1981)' that not only replaced Nazis with Smurfs, but also the game's text, graphics, and sound, 'is usually considered the first mod' (Poderi and Hakken, 2014: s. 2.5). Since then, the relationship between modders and the industry has been extensive and contested. Companies' approaches to modding include permitting users to make and sell mods or full games, providing modding tools, allowing donations to support mods, tacit permission though turning a blind eye, strict legal and technological controls, and outright legal action to prohibit the production and distribution of some or all mods. Importantly, these different responses to mods arise from cases that are often quite legally similar, indicating that law serves as a tool rather than the only factor.

Since the formal legality of any given mod doesn't tell us how the industry will react to it, we argue, we need to ask how law interacts with economic and textual factors. Whether a particular mod is beneficial to the industry, fans, both, or neither is what

**Table 1.** Video Game Modification Benefits and Harm Typology.

	Industry benefits	Industry ‘threatened’
Consumers benefit	Popular mods recognized by both consumers and the industry. <i>Example: Arthmoor’s contributions to Skyrim</i>	Fan-generated content that can enhance user experience or revive a dormant franchise, but done without permission. <i>Example: Streets of Rage Remake</i>
Consumers harmed	Industry profits, but players are exploited or harmed. <i>Examples: Body mods that encourage objectification; reposted mods where designer isn’t credited</i>	Mods that threaten company profits or reputation as well as user experience. <i>Examples: Cheat mods, rape mods</i>

shapes legal intervention. Taking mods seriously as transformative works that (for better or worse) build on games raises questions such as those raised when someone other than the author of a literary text writes a sequel or a later author recenters a story on a marginal character. Sometimes these sorts of literary adaptations have been seen as uncreative or money-grubbing (as in the ‘Jane Austen, but with monsters!’ work *Sense and Sensibility and Sea Monsters*). At other times, such works are hailed as exposing and correcting faults in canonized literature, like recentring stories to give voice to marginalized people in *Wide Sargasso Sea* (1966, transforming *Jane Eyre*) and *The Wind Done Gone* (2001, transforming *Gone with the Wind*). What matters in making these assessments of retellings in general or mods in particular are (a) the values of the critic (e.g. whether they think decentering plantation owners is good) and (b) the values of the text (whether in its initial version it contests or supports social inequality). In terms of video game modifications, as Kow and Nardi (2010: n.p.) note, ‘it is imperative that we continue to examine intersecting ethical sets and to encourage actors with shared interests to probe beneath the surface of the products to the systems of production and their ethical sets’.

Video game modding, while often perceived as parasitic by detractors, can also be a complex symbiotic partnership between the corporation and modders. The company benefits through longer shelf lives for their products and continued consumer loyalty, and the consumer benefits through increased enjoyment and status in the modding community, and this is often independent of the legality of any given mod. It could be argued that consumer harm or benefit matters to the industry only insofar as harming or benefiting players translates to increased or decreased sales, but we both find that the causality of sales isn’t so direct and wish to assert modders as stakeholders whose benefit and harm matters. Although there are certainly cases when modding can be seen as wholly positive or negative for both companies and gamers, probing the ‘gray areas’ of video game mods produces new insight about this relationship (see Table 1). Next, we will use selected cases to explain each of the four mod categories.

*Mods as Mutually Beneficial*

There is a long tradition of mutually beneficial relationships between modders and the industry. As long ago as the 1980s, Poderi and Hakken (2014: s. 2.5) point out, ‘a few

software companies provided development tools or construction kits to help players customize game characters and levels. An example is *The Shoot 'Em Up Construction Kit* (SEUCK) available for Commodore 64 video games'. These early precedents are a useful corrective to narratives about modding and its acceptance as new, as such official tools enabled and encouraged the production of what could be interpreted as infringing derivative works.

Later, a series of positive interactions followed on the release of id Software's game *Doom*. Although *Doom* was already popular without modifications, id released the source code in 1997 (Poderi and Hakken, 2014; Postigo, 2003).<sup>5</sup> This enabled mods as long as users adhered to the EULA and didn't use it for commercial gain.<sup>6</sup> *Doom* became 'the first popular modifiable game' (Hong and Chen, 2014: 292). Although EULAs (Kücklich, 2005) and company policy (Kow and Nardi, 2010) commonly explicitly say that modders cannot profit from their products, which is notably not what the fair use doctrine would require, opportunities for commercialization have arisen from modded video games. In part due to the popularity of the release of *Doom*'s source code, id published subsequent titles *Quake* and *Quake II* with level editors (Kücklich, 2005; Poderi and Hakken, 2014). As a result, *Quake*'s game engine was used to produce what became Valve Corporation's *Half-Life* (Poderi and Hakken, 2014; Postigo, 2007). *Half-Life* in turn gave rise to the most successful commercial modded video game of all time: *Counter-Strike* (Kücklich, 2005; Poderi and Hakken, 2014; Postigo, 2003, 2010). Rather than shutting *Counter-Strike* down, Valve bought the rights and offered the developers, Minh Le and Jess Cliffe, careers with the company (Kücklich, 2005) – whether this is related to *Half-Life* itself beginning its existence as a mod is unclear. Valve subsequently created Steam, an online platform to distribute both commercial and fan games; user-generated content can be sold through Steam for a license fee plus royalties on sales (Postigo, 2003, 2007). This, then, is a two-decade-long streak of choosing not to interpret mods as derivative works or use the law against them.

Encouraging mods (though often with strict rules) is relatively common, with many companies now releasing source code, software development kits, APIs, or other tools as a matter of course (Hong and Chen, 2014; Kow and Nardi, 2010; Postigo, 2007, 2010). Similar to Valve's Steam, Postigo (2010) cites 'Epic Games' release of the Unreal Development Kit or UDK', which is 'a complete set of developer tools using the Unreal Engine 3' that's free to download and use, but requires a license fee and royalties for commercial games. In fact, modding is so commonly encouraged that 'when it was announced that *Battlefield 3*, the third in a popular first-person shooter franchise, would not support modding, fans accused the game development studio of being mercenary and ignoring the benefits which modding can have' (Hong and Chen, 2014: 293); this reinforces that symbiosis is a common baseline. Blizzard, maker of *World of Warcraft* (*WoW*), has 'employees answer modders' questions in the official Blizzard UI&Macros Forum and provide[s] an Addon folder in which players place the mods they download so that they will be read by the game on login', as well as giving modders access to beta – prerelease, not yet finalized – versions of the game (Kow and Nardi, 2010: n.p.). Blizzard is also renowned for laying the foundation for the popular multiplayer online battle arena title *Defense of the Ancients* (*DotA*), which began as a mod from *Warcraft III*'s world editor. Blizzard allowed the mod and even reached a trademark agreement in 2012,

allowing Valve to use *Dota* commercially while Blizzard continues to provide noncommercial service to player-created maps in their own games (Reilly, 2012). Here again, what a strict legal reading would classify as derivative works that infringe on exclusive rights are not only allowed but also at times encouraged.

Bethesda has a particularly symbiotic relationship with modders of *Fallout* and *The Elder Scrolls* RPG series. In RPGs, players explore a virtual world, complete quests, collect artifacts, and encounter enemies. Other common features of RPGs include a reliance on narratives and ‘leveling up’, which occurs after a player’s avatar acquires experience points. These two Bethesda franchises are open-world, ‘sandbox’ RPGs, meaning that a player is free to navigate the virtual world at their leisure. While most sandbox games have a main story or objective, there are also subquests that can take dozens – sometimes hundreds – of hours to complete. Unsurprisingly, with such colossal worlds, glitches, bugs, and errors are bound to impact the gaming experience. Sometimes these are fixed with official patches, but often modders take matters into their own hands and create add-ons that rectify problems.

Although creating the next *Half-Life* or *Counter-Strike* is unlikely in the present era of modding, comparably positive relationships between companies and players can be observed when high-quality mods prompt even the company to offer public praise. Such is the case of Robert Libiez, who has developed several popular *Skyrim* mods and released them on the official [bethesda.net](http://bethesda.net) website under the moniker Arthmoor. Arthmoor was responsible for the mod ‘Open Cities Skyrim’, which removes loading screens, preserving immersion in the game world as the player doesn’t have to wait through a black screen interlude to enter a city. Libiez also created several mods that enhance blacksmithing, providing players more opportunities to create weapons and armor. One of Libiez’s most ambitious mods is titled ‘Alternate Start: Live Another Life’. With this mod, players can completely bypass the game’s starting point and instead be placed elsewhere on the map, removed from the main story. Players aren’t even required to initiate the primary quest if they would just prefer to explore the world. Although not ideal for an initial playthrough, ‘Alternate Start’ allows *Skyrim* to be played differently on subsequent attempts, providing two (or more) experiences for the price of one.

The popularity of these mods resulted in exposure for Libiez, who was interviewed for the official Bethesda site in November 2016. The company had just released *Skyrim Special Edition* for multiple platforms, which included modding tools first made available to some modders during a closed trial. Libiez was the first modder interviewed by Bethesda following the launch of the modding tools. In the interview, Bethesda asked how it felt to work with *Skyrim* mods after the release of *Skyrim Special Edition* as well as about mods in progress (Grandstaff, 2016). Bethesda appeared to applaud Libiez on its official website for creating mods that improved the life cycle of its game. This preserved shelf life wouldn’t have been possible without the contributions of modders, and Bethesda’s official interview can be viewed as an expression of goodwill between a video game company that holds the rights to some intellectual property and those who modify that intellectual property.

Of course, the interview does little to allay concerns that financial benefits are unfairly distributed among companies and modders, since it wasn’t Bethesda but Libiez who devoted time, energy, and resources to modifications that many players enjoy.



Barring undisclosed financial compensation, the reward in this partnership is exposure through a venue operated by Bethesda. Bethesda certainly benefits if such mods mean more players buy and play their games, but a public acknowledgment of contributions demonstrates that companies and players can value one another. This, then, approaches the best-case scenario for the relationship between the modder and the company – there is no legal intervention and the content is beneficial to all.

### *Mods Without Benefit*

By contrast to the first cell of our typology, other mods benefit neither the video game company nor other players. In 2006, Blizzard released an update for *WoW* that ‘disabled many mods to which World of Warcraft players had become accustomed’ (Nardi and Kallinikos, 2007: 15). This patch was designed to retain the difficulty of the game because Blizzard believed mods were making it less challenging (Nakamura, 2009; Nardi and Kallinikos, 2007). This was a scenario where the industry perceived that neither they nor players benefited. The mods were removed and ‘the software was rather easily brought back into alignment with Blizzard’s desires’ by technological means, without the need to involve a court (Nardi and Kallinikos, 2007: 15).

Cheating mods in multiplayer games are common examples of mods that benefit no one. Though even cheat mods are creative endeavors, many believe they negatively impact gameplay. That is the contention in an ongoing international legal dispute between Blizzard and German video game cheating company Bossland. Bossland cheats advantage certain players over others. Meier (2016: 7) notes that Bossland ‘sells subscriptions to services that allow players of several popular Blizzard games to “circumvent or evade (the company’s) anti-cheat technologies.”’ Multiplayer games rely on the experiences of multiple users, such that mods and cheats for multiplayer games affect more than the player who uses them. This could ‘give players an unfair advantage and compromise the experience of other gamers in online play who may grow frustrated with the game, and ultimately with the developer and publisher’ (Fiorido, 2013: 749). This is the claim of Blizzard executives, who have demanded millions in damages as well as banning users of the service. Although Blizzard won a California court case in early 2017 against Bossland, the dispute hasn’t been resolved, and there are even allegations that Bossland has completely stopped responding to Blizzard (Grayson, 2017).

Because of this harm to both sides, TOS often forbid cheating mods. The Steam Subscriber Agreement, for example, says: ‘You agree that you will not create Cheats or assist third parties in any way to create or use Cheats’, which it defines as

software or hardware processes or functionality that may give a player an unfair competitive advantage when playing multiplayer versions of any Content and Services or modifications of Content and Services (‘Cheats’). You agree that you will not directly or indirectly disable, circumvent, or otherwise interfere with the operation of software designed to prevent or report the use of Cheats. (Steam Subscriber Agreement, n.d.)

Additionally, the consequences for cheating can be severe. In the case of the popular video game *Overwatch*, players caught cheating can be permanently banned from the

game – this is lauded by many while, unsurprisingly, accused cheaters are unhappy (D’Anastasio, 2016). Although not directly related to intellectual property, TOS, as contracts, are one key way the industry uses the law as a tool to keep their customers in line.

Some mods allow even more nefarious acts than cheating. One infamous example appeared in *GTA Online*. While previous mods in *GTA Online* gave users an unfair amount of in-game money, this mod was more destructive, bypassing the game so that the avatars of other players could be manipulated into committing actions against their will (Hernandez, 2014). In an echo of Dibbell’s famous account of ‘A Rape in Cyberspace’ (1993), several players reported that an avatar they’d never seen before appeared in their session and forced them into nonconsensual virtual sex. Since 2014, there have been several YouTube videos discussing the problem.<sup>7</sup> Those supporting or unconcerned by the mod describe it as mere trolling – as described by Phillips (2015), acting in an outrageous way for the purpose of being amused by making people upset – but the *GTA* community as a whole appears to condemn it. Not only are players’ gaming experiences compromised because someone else gains control over their avatars, but also they are forced to experience a simulation of a traumatic event. Such mods demonstrate rather dramatically why TOS often forbid harassing other players; in Rockstar’s case, this is explicitly stated as the player ‘will not restrict or inhibit any other user from using and enjoying the Online Services (for example, by means of harassment, hacking or defacement)’ (Rockstar Games, 2013).

These mods also damage Rockstar’s brand image, as allowing them to continue seems to imply approval. For these reasons, Rockstar removes such mods and can even ban players who abuse them, although it’s worth noting that there doesn’t appear to be a public response from Rockstar about virtual rape in *GTA Online*. Unfortunately, as hackers become increasingly adept at manipulating the source code, modifications like these will inevitably continue to trouble both video game corporations and their consumers. When no one benefits, it seems obviously legitimate to disallow a mod.

### *I Got Mine: Benefit Only to Industry*

Although modders are sometimes universally lauded or condemned, there are many more instances when one party benefits at the other’s expense, or social concerns are murkier, and these edge cases are where the industry’s interpretation and deployment of the law become most interesting. One complicated case is the relationship between Bethesda and the third-party modification site Nexus Mods. Founded by Robin Scott in 2001, Nexus was originally a fan modification site for *The Elder Scrolls III: Morrowind*. Since then, Nexus has become one of the most popular online modding communities, boasting 10 million users by November 2015 (Storm, 2015). Bethesda hosts its own modification community on *bethesda.net* (which served as the venue for Arthmoor’s interview), but official downloads comprise just a fraction of the mods in the *Skyrim* community.

Importantly, there is a consensus among mod sites that using extant intellectual property is forbidden. For example, *bethesda.net*’s TOS state that users ‘may not contribute, provide, post, upload or otherwise submit any UGC that is copyrighted, protected

by trade secret law or otherwise subject to third party intellectual property rights' (Bethesda Game Studios, 2016). In particular, ZeniMax, Bethesda's parent company, 'will terminate the Account of any user who is responsible for any or repeated acts of intellectual property infringement' (Bethesda Game Studios, 2016). Nexus also says that 'posting of any copyrighted material, unless the copyright is owned by you or you have consent from the owner of the copyrighted material, is strictly prohibited on any Nexus site' (Nexus Mods, n.d.).

Despite seemingly universal agreement on corporate copyright, fan work is often poorly protected. Mods from Nexus are sometimes reposted on other sites without the modder's permission. Although modders rarely commercialize their mods out of the popular (though mistaken) belief that noncommercial use is always fair in US law, they do receive status and recognition for popular mods, which is denied when someone else takes credit for their work. In 2016, Nexus site owner DarkOne publicly condemned Bethesda for not doing enough to police mods stolen from Nexus and reposted on its official website, even going as far as to accuse Bethesda of operating like online illegal media index The Pirate Bay (DarkOne, 2016) – that is, of contributing to intellectual property infringement. Such incidents are a stark reminder of the often contentious relationship between companies and modders, rooted in how the law intersects with social, cultural, and economic factors.

There is similar variable concern about impacts on players of content like nudity or overtly sexualized mods. Distributing nudity mods is expressly forbidden on Bethesda's net: 'Do not upload mods featuring nude or sexually explicit material' (Bethesda Game Studios, 2016). Players seeking such mods have to go to Nexus and affirm they are older than 18. Nexus' TOS around nudity are somewhat different: 'Rear-view images of topless female characters are tolerated as long as they are tagged as adult and the pose does not expose a full or partial side view of the breasts'. If these mods are accurately cataloged as 'adult' and their advertised images don't violate the TOS, users can do whatever they wish with these explicit alterations.

One of the most popular mods (of any type) is 'Caliente's Beautiful Bodies Edition' (CBBE). Although creator Caliente describes CBBE as a body modification tool for games like *Skyrim* and *Fallout 4*, many who have downloaded it did so to create nude or sexually explicit female characters. On one hand, Caliente's mod shows commitment to detail, dedication to her project, and an expert level of video game programming. On the other hand, the benefit of constructing all anatomical features of a female character is not clear, and it reinforces concerns from players and critics alike that video games pander to heterosexual male demographics. Additionally, in games like *Skyrim* and *Fallout 4*, players can control camera angles in order to observe their avatars, allowing a high degree of scopophilia (the pleasure of looking).<sup>8</sup> For many critics, a mod like CBBE is further proof that women are portrayed as sexual objects in video games, emphasized by the fact that players are invited to manipulate breasts, rears, hips, thighs, abdominals, and faces. Such mods are no more or less legal than any other mod, but they carry greater social consequences.

Though such mods are potentially socially harmful, Bethesda appears to turn a blind eye toward nudity mods on personal computers so long as their TOS aren't violated. It can be suggested that Bethesda benefits because such mods are popular – CBBE alone

has been downloaded at least 8.2 million times (Hernandez, 2016). Assuming those players purchased the requisite game legally, the implication is that mods like CBBE contribute to the selling power of games. It's worth noting that such mods are policed on other platforms. Nudity mods violate both Sony PlayStation's and Microsoft Xbox's TOS; they are usually deleted shortly after first reports of downloads and the responsible parties are suspended or banned. This makes it clearer that Bethesda has chosen to benefit. This quadrant of the model suggests that as long as a company benefits it may be indifferent to who else is harmed by a mod and decline to use its legal remedies.

### *Illegal but Beneficial?*

In the fourth quadrant of our model, what happens if fans benefit but the industry sees none for itself – even if there's no actual harm? One famous and early court case, *Lewis Galoob Toys, Inc. v. Nintendo of America, Inc.* (1992) – while dealing with a cheat device (the Game Genie) rather than a video game mod or add-on – nevertheless addressed allowing players to modify video game data. This case clearly demonstrates that the pure legality of a modification is often not the deciding factor, as the two video game juggernauts of this era, Nintendo and Sega, had opposing reactions to a product that acted on their intellectual property in the same way. Sega was receptive and gave Galoob's product the Official Sega Genesis Seal of Quality, provided that Game Genie could not be used to manipulate save data (Higgins, 2012). Nintendo, on the other hand, sued Galoob, arguing that the Game Genie created derivative works and therefore violated their copyrights. The Ninth Circuit Court of Appeals established that Galoob didn't violate copyright, since, much like an individual would use a VCR to pause or fast forward movies, players 'similarly may use a Game Genie to enhance a Nintendo Game cartridge's audiovisual display in such a way as to make the experience more enjoyable'. Galoob won the lawsuit and US\$15 million to compensate for lost sales during an injunction requested by Nintendo.

Before citing this case as a victory for both players and modders, it's important to note that Galoob, like Nintendo, was a large corporation, subsequently purchased by Hasbro in 1998 for \$200 million. Galoob had the resources and the financial incentive to challenge Nintendo's suit. Additionally, a question that emerged from the case was whether players, not Galoob, were guilty of infringement for using the add-on device (Kent, 2001: 391). This suggests modders are in a different position than Galoob; as Jenkins (2006: 190) notes:

under the current system, because other companies know how far they can push and are reluctant to sue each other, they often have greater latitude to appropriate and transform media content than amateurs, who do not know their rights and have little legal means to defend them even if they did.

Video game corporations often stop mods either by technologically disabling them or through a legal threat that modders aren't able to contest.

In the 2006 Blizzard incident discussed previously, it could be argued that neither modders nor the industry benefited from *WoW* cheat mods; however, a further

controversy arose in 2009, when Blizzard altered their modding policy more dramatically. In this new agreement, Blizzard mandated that add-ons would have to be free, and donations couldn't be requested inside the game (Kow and Nardi, 2010).<sup>9</sup> The legality of paying for mods hadn't changed – commercial transformative works have less of a claim to fair use, but not none – but Blizzard's policy did, again showing how the relationship to law is essential but often indirect. For modders, this violated what they had perceived to be their social contract with Blizzard allowing them to create and control their own work as well as solicit monetary support (Kow and Nardi, 2010). This case shows that the ethics of modders and of video game corporations often don't match up.

A similar mismatch arose with free 2011 fan game *Streets of Rage Remake*. Originally conceived as *Bare Knuckle* in Japan, Sega's *Streets of Rage* series is a trilogy of 'beat-em-up' games about a team of vigilantes who seek to end the reign of a crime syndicate. The series (notably the first two games) is also renowned for its techno-inspired soundtrack from famed video game composer Yuzo Koshiro. The series was generally held in high regard by the Sega community, but the final game was released in 1994. While Sega no longer manufactures video game consoles, the company remains a prolific game developer, so they could have chosen to make more installments, but haven't. *Streets of Rage* appeared defunct until it was revived by a modder called Bomber Link, who spent years developing a painstaking retelling of the entire series titled *Streets of Rage Remake*. *Streets of Rage Remake* had responsive gameplay, the narrative remained true to the spirit of the game, and the music was remixed in a manner that both appealed to nostalgia and provided unique interpretations of classic themes. It also included all characters from the series (including hidden characters), special 'power-ups' that weren't available in the original trilogy, and even, in the final release, bonus levels, a shop to purchase in-game items, and a 'choose-your-own-adventure' style narrative inspired by existing locales in the series. The final product was well received by various publications and the gaming community.

The fanfare for *Streets of Rage Remake* was short-lived; Sega issued a cease and desist order to Bomber Link just days after launch and he had to remove all links from his website that could lead to the game's download. Although the speculation had been that Sega was complacent about or even supportive of the game, they released a statement saying they had to protect their intellectual property (Brown, 2011). Did the creators of the *Streets of Rage Remake* have a justified argument for fair use under US law? Where did they get the idea that Sega was fine with its creation? These questions are currently unanswerable since there was never a trial, presumably because Bomber Link did not possess the resources to put up a fight, which is how situations like these often end. Nevertheless, the saga of the *Streets of Rage Remake* is an interesting example of the evolving relationship between modders and video game corporations. Sega certainly can protect its intellectual property, and *Streets of Rage Remake* was highly dependent on Sega's extant trilogy and thus could be considered an infringing derivative work.

However, *Streets of Rage Remake* could just as easily have been in our mutual benefit category. A common argument about why mods and fan games are illegitimate is that the integrity of the game should be retained. *Streets of Rage Remake* not only accomplished this, but many fans felt the game improved on prior versions despite being an unofficial project. Additionally, given that Sega seemingly has no plans to produce an official

*Streets of Rage* installment, the *Streets of Rage Remake* was the best option for fans of the series to play a game reminiscent of the original trilogy, responding to that market failure. In this respect, the *Remake* benefited players and potentially served as market research to demonstrate the game's ongoing viability, even 20 years later. If the *Streets of Rage Remake* was a popular project, based on download counts and promotions from video game publications, Sega might have considered an official reboot of the series. In turn, this could have led to other indie developers modding different series owned by Sega to gauge interest. Sega could also have benefited from player goodwill by being supportive. It is even plausible that fans would be more likely to purchase games from the company in the future.

The end of the *Streets of Rage Remake* was abrupt given how much work went into the project over several years. It might be easy to say that Bomber Link wasted his time since the project was based on a game protected by copyright law, but this depreciates the creative endeavors of many modders and ignores that sometimes they are allowed. This story demonstrates that some game companies suppress modders and unofficial developers as intellectual property infringement. In this case, it worked, and Sega alienated the one group that perhaps most appreciated the original series. In the future, both video game corporations and players might consider the *Streets of Rage Remake* as they weigh the legal and ethical ramifications of user-generated content. After all, if both parties could find common ground, the opportunities for video game creativity and growth could be extensive.

## The Future: Where Do We Go From Here?

The future modding landscape will be refashioned by the relationship between the video game industry and modders. Which party benefits depends on how video game mods are evaluated in relation to not only legal forces, but also economic and cultural ones. Ultimately, we project three potential futures of modding. First, nothing could change. If mods are seen as mutually beneficial, like *Doom*, *Counter-Strike*, and Arthmoor's *Skyrim* mods, modding will continue to thrive despite intellectual property infringement so long as modders adhere to TOS, and the only compensation they might receive will be validation for their efforts. If this is the case, certain mods will continue to be promoted and others will face legal action when the industry perceives them as a threat. Occasionally, each party might attempt to wrestle away some power from the other, but the baseline will remain the same.

The remaining two possibilities are more divergent. It is perhaps unsurprising that video game corporations view mods primarily through an economic lens. As with Bossland's cheat mods or rape mods in *GTA 5*, corporations can and will go after modders if they feel their selling power is threatened. While one may be sympathetic to video game corporations when they disable mods that aren't beneficial to their interests or those of their fans, present trends suggest corporations are testing ways to assert even more power over modding. In June 2017, Rockstar's parent company, Take-Two Interactive, issued a cease and desist order to modder GooD-NTS, the lead developer of the popular OpenIV modding tool used in *GTA*. Take-Two argued that the tool could be used to alter the online experiences of other players, which GooD-NTS conceded was true (Maiberg and

Johnson, 2017). Nevertheless, as OpenIV is used almost exclusively for single-player gaming, many players felt Take-Two's decision could lay the groundwork to ban mods. Fans were outraged and Rockstar ultimately allowed the mods to stay, provided that anything that could impact online gaming was removed (Biery, 2017). Nevertheless, as the game industry increasingly shifts from a single-player, upfront-cost model to an online, recurring-fee subscription model, such restrictions are likely to proliferate, making modding collateral damage to the industry's desire to extract more profit from players.

Another trend suggests that the video game industry is pondering ways to commodify mods. As their name suggests, paid mods have been suggested to compensate modders for their creative contributions. Valve, believing modders deserve to be paid, is a supporter of paid mods through their Steam platform. However, it wouldn't be the video game companies that would pay modders, but rather players who would have to pay to download mods (Lahti, 2017). This strategy hasn't been accepted by modding communities as this would maintain disproportionate benefit to game corporations at the expense (literally) of users of fan-generated content. If the push toward paid mods is successful, it would imperil traditional video game modding (Schreier, 2015). Yet despite this pushback from players and modders alike, paid mods may be coming. In recent months, Bethesda launched the Creation Club, which 'features new items, abilities, and gameplay created by Bethesda Games Studios and outside development partners including the best community creators' (Creation Club, n.d.), again encouraging what might otherwise be seen as derivative works. Bethesda denies that the Creation Club is a paid mod service, but the creators are paid for their efforts after proposals are accepted, revealing that the controversy of commodified mods is far from over.

Although this second outcome certainly benefits the video game industry, a third possibility could shift the playing field toward players who yearn to participate. Aligning with scholars like Henry Jenkins and Lawrence Lessig, who argue that media convergence will continue to grant producers and consumers of various user-generated content more power as technology evolves, it's possible that modding communities and US intellectual property laws could be altered to benefit players more than the video game industry. This would require resisting the current trajectory Lessig (2004: 13) describes:

Rather than understanding the changes the Internet might permit, and rather than taking time to let 'common sense' resolve how best to respond, we are allowing those most threatened by the changes to use their power to change the law – and more importantly, to use their power to change something fundamental about who we have always been.

Getting back to 'who we have always been' through more permissive rules about reuse of intellectual property would certainly be difficult to achieve, but there is potential for players and attorneys who understand US law, video games, and how these two fields intersect via mods to find common ground, allowing, for example, fan-made video games to exist.

As this analysis has demonstrated, there is no shortage of complications to a simple legal analysis of video game modding. Economic factors include whether or not a mod

can enhance a game or increase its shelf life, as in Arthmoor's contributions to Bethesda's *Skyrim*. These factors benefit video game companies without much cultural resistance. 'Caliente's Beautiful Bodies Edition' mod has similar qualities to Arthmoor's mods on the surface since both increase demand for *Skyrim*, but the demand for mods like CBBE suggests that the market for objectification may also increase if both the game and the mod are popular, raising social and cultural issues. Finally, cheating mods are discouraged for their deleterious impact on user experience. The fate of many mods can be decided if the video game company feels threatened and takes legal action (Blizzard and Bossland), if the modder can't afford legal representation (Bomber Link), or if a company happens to possess the resources to push back against another large corporation's lawsuit (Galoob's Game Genie). Of course, our approach is very much situated in American interpretations of the law. Future research is required to gain additional insights on modding in international legal contexts.

The typology we present here is only a first theoretical attempt at untangling the complex factors impacting modding using selected cases for illustrative purposes. Future studies may wish to empirically test and refine our categories. For example, studying professional video game developers and/or executives may elucidate legal enforcement of video game intellectual property and the motivations for shutting down certain mods. Further research may reveal how games workers feel about the popularity of controversial mods like 'Caliente's Beautiful Bodies Edition' in blockbuster titles or fan projects like the *Streets of Rage Remake*. However, our model could be valuable to research on modders as well. Research bolstered by our typology could reveal why modders create varieties of mods addressed in our quadrants as well as describe how modders feel about legal enforcement against their craft and their perceived relationships with video game corporations.

These questions matter because any of the three aforementioned outcomes could shape the future of video game modding. Until one side draws a definitive line in the sand and makes a move that rattles this already complex and sometimes contentious relationship, our typology suggests when legal action might be taken or when it might not from the standpoint of who benefits, suffers, or is otherwise impacted by video game mods. For now, sit back, relax, and enjoy replacing dragons in *Skyrim* with Macho Man Randy Savage.


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## Notes

1. The fair use doctrine, found at 17 U.S.C. § 107, indicates: ‘In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include – (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’. Because this is a complex test that requires assessment case by case in a courtroom, even a finding of fair use can be prohibitively expensive, and many cases are settled out of court.
2. In March 2018, the United States District Court for the District of Columbia ruled in *Sandvig v. Sessions* that some violations of terms of service may be protected under the First Amendment; while the case focused on scraping websites for academic research, the weakening of the Computer Fraud and Abuse Act would potentially also benefit modders.
3. As Scott (2011: 32) notes, the fact that derivative works are formally an exclusive right is one reason why ‘transformative’ has been ‘widely adopted in fan communities as both a descriptive term and a legal defense to distance fan texts from a classification as ‘derivative’ works and protect them under fair use’. *Campbell v. Acuff-Rose Music, Inc.* (1994) established ‘transformative use’ – in that case, parody – as potentially fair use.
4. As a signatory of the Berne Convention, the United States does in theory protect moral rights, but they are not commonly considered as a factor in copyright infringement cases.
5. The source code is still available. See <https://github.com/id-Software/DOOM/commit/4eb368a960647c8cc82d721d0183629ae10759d1>
6. This insistence on strict legal control in end-user license agreements is particularly ironic given that, as Kücklich (2005) notes, video game companies turn a blind eye to the fact that the mods are largely made on pirated software.
7. See, for example, [https://www.youtube.com/watch?v=p5EcGim\\_IWU](https://www.youtube.com/watch?v=p5EcGim_IWU)
8. On scopophilia, see Mulvey (1988 [1974]).
9. Patreon has stepped into this void in the economy of modding in recent years, allowing modders to solicit donations to support their work, but it is notable that a third-party solution was required because the capacity to solicit support is not allowed internal to most game platforms.

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