

Who Wrote the Elder Scrolls?: Modders, Developers, and the Mythology of Bethesda Softworks

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Abstract

This paper considers the part played by modders in shaping Bethesda Softworks' *The Elder Scrolls* series of roleplaying games. It argues that Bethesda's stewardship of the franchise over the course of its twenty year history has been characterised less by an unwavering creative vision than a willingness to make use of the resources to hand - not least the inventiveness of modding communities. Charting how Bethesda employees and the games' modders have performed and discussed their respective roles, we track shifts in the tools, vocabularies, aims and approaches of both parties. We find that while the practices and priorities of modders and developers have, in many respects, converged over this period, crucial legal and conceptual distinctions continue to separate professionals from amateurs. Valve's abortive attempt to introduce paid mods to *The Elder Scrolls V: Skyrim* threw this division into stark relief, emphasising the need for studies of modding which address the performativity of intellectual property, showing how conceptions of authorship and ownership develop over time within specific studios, cultures and publics.

Author Keywords

Modding; Skyrim; Bethesda Softworks; Media Archaeology; Performativity

Introduction

In this paper we explore the history of Bethesda's *The Elder Scrolls* (TES) franchise and the modding communities that have sprung up around it. Modding is the production of software plug-ins that alter, augment or otherwise modify a digital game. By and large, it is a fan-driven process of production, distribution, and consumption, with the end users of commercially released games producing mods either for their own personal use or for other players to download and install. We argue that modders have played an important role in shaping not just

the direction of the *Elder Scrolls* series, but also Bethesda's development, distribution, recruitment and public relations strategies over the past 20 years. In many ways, this history has seen Bethesda's priorities and those of modders becoming more closely aligned: tracking variations in modding technique and discourse, we can see a tendency toward in an increasingly centralized, streamlined, and legally-sanctioned experience for mod-makers and mod-users alike. We also note that that the distinction between amateur and professional content creators has become increasingly fuzzy. Yet we only need to look at Valve's disastrous attempt to introduce paid mods for *The Elder Scrolls V: Skyrim* (2011) to their Steam Workshop platform – a decision fervently opposed by many modders and quickly reversed – to see that modders do not always see eye-to-eye with those who own the properties they transform (nor, for that matter, with each other). We hold that to understand such disputes it is not enough to address the legal, technological and economic aspects of modding; we also need to consider the way that authorship and ownership are narrated and performed by developers, modders and intellectual property holders, and to look at the values, assumptions and rhetorics that underpin practice and policy.

Methodology

Studying mods poses numerous methodological problems. It remains difficult to determine how many mod users are modding experts themselves, and whether this proportion has changed over time, for example. We can say though that platforms like the Steam Workshop have made using mods much more straightforward than it was in the past, while the release of in-house tools and editors such as the Skyrim Creation Kit have simplified the process of creation. Such shifts suggest that modding may be moving closer to the mainstream – gaining recognition both as a practice and as a source of "added value" for developers and players alike. There is, however, no adequate system of metrics or data tracking available to us that might help us distinguish levels of expertise or areas of overlap between mod users and producers.

One of the reasons this information is so difficult to trace is that modders typically use aliases or pseudonyms. Online records of their activities, whether collected on fan-run mod-hosting websites such as Skyrim Nexus or corporately controlled platforms like Valve's Steam Workshop, also tend to be transient when they are available at all. The system overhauls, version updates, and admin edits that are part of the everyday upkeep of digital communication channels often result in information being lost or garbled. Fan sites, in particular, tend to fall into disarray or disappear altogether as personal commitments, families, day jobs, or illness take precedence over the passion project of managing a modding forum.

This history becomes even more difficult to trace when the mods in question have not been officially sanctioned. To lay claim to a hack or mod of a game that the publisher has not granted permissions for is essentially an admission of copyright infringement unless fair use criteria can be demonstrated. Publishers have access to an extensive arsenal of tools – from cease and desist orders to Digital Millenium Copyright Act (DMCA) complaints – that they can use to make sure certain mods disappear, meaning unsanctioned modders will tend to be guarded about their activities. How can we track modders and their products if such individuals and their creations operate in shadow? While this question might seem trivial – a concern only for the subset of video game scholars undertaking work on modding – it does in fact have serious consequences,

both for our understanding of video gaming's past and for the development of ideas and conventions of ownership going forward. For, as we will see, when histories of amateur production are repressed or recast it makes it much easier for companies to propagate versions of history which (further) skew the terms in their favour.

As Postigo (2010) observes, there have been two broad currents in academic accounts of modding: on the one hand, analyses which see modding as a fulfilling and potentially subversive form of "participatory culture"; on the other, critiques of corporate exploitation, such as Kuchlich's (2005) classic account of modding as a form of "precarious playbour" whereby the industry offloads risk onto a "modding multitude" whose efforts go uncompensated. In the last few years, however, scholars have increasingly sought to transcend or at least complicate this binary framework, rejecting the idea of there being a typical modder or a monolithic "modding community" (Sotamaa, 2010), analysing how modding is blurring distinctions between users and developers (Scacchi, 2011), and framing modding in terms of assemblages of human and nonhuman actors engaged in the generation of different kinds of social, cultural and economic capital (Kerr, 2011, 26). Similarly, our own approach is less about celebration or condemnation than it is mapping the circuits within which modders, developers and publishers alike are implicated.

Our study is grounded in an examination of online texts and interviews, archived websites and forums, printed paratextual materials, the TES games themselves, and a selection of mods for each title. While we have surveyed a number of fan-run sites, the TES modding scene is currently dominated by the two distribution channels we have already mentioned: The Nexus, and Valve's Steam Workshop. The Nexus, also known as Nexus Mods, is a network of modding websites owned and operated by Robin Scott (alias Dark0ne), and connected through a central database and The Nexus Forums. Originally established under the name TESNexus, the network has grown over the years to support a number of games outside the TES series. All told, The Nexus hosts over 100,000 files for 124 games, with Skyrim Nexus topping the list at just over 36,000 files (Sept. 3, 2014). Steam Workshop, meanwhile, is an outgrowth of Valve Corporation's digital rights management and distribution platform, Steam. The Workshop allows Steam users to submit, download, and rate user-generated content for games they have purchased through Steam. As of May 2014, over 1,100,000 maps, items, and mods for 109 different games have been uploaded to the Steam Workshop (Kroll, 2014).

In analysing these platforms and materials we have taken our theoretical and methodological cues from two main sources: on the one hand, Herman, Coombe and Kaye's (2006) claim that intellectual property is inherently performative; on the other, media archaeology's mode of conceptualizing the history of technology. What these approaches share, and what makes them so relevant to our investigation of TES modding culture, is an insistence on thinking beyond reductive causal chains or meliorist rhetorics of technological "progress" to consider the communities of discourse and practice from which digital technologies emerge and within which they are used, discussed and refunctioned. Given the importance of these approaches for the analysis that follows, a brief overview is in order here.

For Herman, Coombe and Kaye, academic analyses of IP too often resemble a "Manichean morality play" in which a heroic axis of fans, creatives, campaigners and programmers is pitted

against a corrupt corporate hegemony bent on maintaining and extending their legislative stranglehold on popular culture (p. 185-6). In order to escape this reductive framework they prescribe attention to "the *performativity* of intellectual property as both a social form and a cultural process in digital contexts" (p. 186, emphasis original). At the crux of their argument is the claim that:

"What is at stake in intellectual property as performativity is not simply the expansion of corporate control over cultural goods and resistance to such expansion, but the production of a particular social imaginary regarding the identity, rights, and responsibilities of corporate producers and consumers of cultural goods."

Herman, Coombe and Kaye (p. 186)

These assertions, made apropos of multiplayer online games like *Second Life*, resonate with our own conclusions regarding the history of Elder Scrolls modding, in which we have found that questions of legality and economic value are inextricable from the ways in which (and the platforms and technologies by way of which) authorship and ownership are understood, discussed and enacted. If critical analyses of modding tend to foreground the economic, the technological and the legal, we hold that these must be considered alongside the aesthetic, affective, narrative and semantic dimensions of mod cultures. It is for this reason that we pay close attention to strategies of self-representation, shifting vocabularies, and the role of anecdotes, analogies and examples in the discourse around modding.

This ethos aligns well with the aims of media archaeology, which Parikka (2012) defines as a mode of inquiry into "the conditions of existence of... the multiple media(ted) practices with which we live" which encompasses the "political, aesthetic, economic, technological, scientific and more... refus[ing] attempts to leave out any of the aspects [of media history]" (p. 18). For Parikka, the important qualities of media archaeology are its emphasis on the material and the discursive, and this has informed our own investigation into mods, the sites that support them, and the discursive practices of Bethesda and the TES community. We have been informed too by Siegfried Zielinski's (2006) theorization of "variantology", which holds that "the history of the media is not the product of a predictable and necessary advance from primitive to complex apparatus" and that "instead of looking for obligatory trends, master media, or imperative vanishing points, one should be able to discover individual variations" (p. 7). These claims are borne out by Bethesda's strategies for handling content generation and community involvement, which have neither followed a single track nor necessarily "evolved" to become more efficient over time. The question becomes not one of temporality ("where in the timeline does this fit?"), nor of progressive evolution ("how is this an improvement?"), but of variation without judgment ("how are these different from each other?").

Here, too, there is crossover with Herman, Coombe and Kaye's (2006) approach, which draws on Judith Butler's celebrated theorisation of performativity. For Butler, cultural norms (like the binary sex and gender model on which she focuses) are constituted through the repetition of discursive and corporeal gestures that "reiterate and reinforce the authority of one of the dominant ideological narrative contexts" (200). One of the virtues of this theoretical approach is its assertion that there is nothing inevitable or immutable about today's cultural status quo; precedent informs without determining the way that, say, masculinity or ownership may be enacted tomorrow. As such performativity theory is a useful analytical tool for understanding the discursive, technological, and cultural shifts that have characterised the history of The Elder Scrolls – and for addressing the fragmented and ephemeral qualities of Elder Scrolls mods and their publics.

For many gamers Bethesda's Elder Scrolls games have acquired a near-mythic reputation as a lauded and beloved series that has changed the nature of the genre. In what follows, we attempt to offer a more nuanced account of the *Elder Scrolls* franchise's development, and of the way different parties, platforms and philosophies have shaped the TES series and its modding ecosystem. Having laid out our methodological framework, the next section offers a synopsis of the series' history. After that we will address Bethesda's performance as official steward of the TES "property", highlighting the importance of Bethesda's creative director Todd Howard in both propagating and incarnating particular framings of creativity, professionalism and the relationship between modders and professional designers. This section is followed with an account of how modders themselves understand their contribution to the franchise, and of how such understandings have developed alongside certain platforms and projects. In particular, we look at the emergence of the Nexus - which, insofar as its infrastructure reflects its commitment to maintaining a space for amateur mod production, presents an intriguing case study in the inextricability of ideology and technology.

The Elder Scrolls: A Short History

Bethesda Softworks was founded in the mid 1980s by Christopher Weaver, a former MIT technologist. Throughout the late 1980s and early 1990s, Bethesda's portfolio mainly consisted of hockey games and titles based on licensed box-office franchises like The Terminator and Home Alone. However, in 1994, the company released The Elder Scrolls: Arena, its first foray into the world of role-playing games. The title was initially envisioned as a battle game with some side quests that would allow Bethesda's designers to combine their knowledge of sports games with their passion for pencil and paper fantasy games like *Dungeons and Dragons*. In practice, Arena's development saw the project embrace the D&D side until the finished product was definitively an open-world, first-person, fantasy RPG. The game was extremely ambitious in terms of scope and detail, leading to a late and buggy initial release that was nonetheless well received by players willing to grind through its difficult opening levels. Fans and reviewers alike praised the game's visual details and mechanics, while condemning the frequent glitches and bugs and lamenting the shallow and derivative storytelling and characterisation (Gann, 2006; PC Gamer, 2014). As these critiques suggest, the appeal of the Elder Scrolls series has never been about relatable characters, memorable plots or a unique aesthetic sensibility. Indeed, for such a lauded and lucrative franchise. The *Elder Scrolls* series is, in many respects, rather generic, closely following the template laid down by Tolkien - something which is true of the fantasy role-playing genre more generally (Tresca, 2010). Mechanically, meanwhile, designer Ted Peterson readily concedes that Arena was "derivative of a lot of games. Our experience system was straight out of Dungeons and Dragons and the Goldbox games from SSI... Between the influences of Ultima Underworld and Legends of Valour, we weren't doing anything too new" (Morrowind Italia, 2006). There are, however, respects in which the series has set itself apart: today TES games are known for their interlocking systems and simulations, their expansive

gameworlds, the degree of autonomy they afford players, their bugginess, and increasingly, their moddability. Indeed, the series' lack of a distinct stylistic personality has arguably become an asset, leaving modders more room to set their stamp on the fictional world of Tamriel, so much so that the identity of TES today arguably reflects the efforts and interests of modders and fans as much as it does those of the series' official stewards.

Even in the days of *Arena*, certain players were beginning to treat glitches and logical quirks as emergent opportunities rather than obstacles, enthusiastically uncovering new ways to exploit bugs to their advantage. Some went further still, hacking the executable and other files with hex editors and altering key components of the code in order to acquire additional gold, levels, spell effects, and so forth. These techniques were passed along to others through FAQs, Usenet newsgroups, and other online sources, a small selection of which have been preserved by fans and reposted on websites such as the Unofficial Elder Scrolls Pages, offering a valuable glimpse of the prehistory of TES modding.

Encouraged by the success of *Arena*, Bethesda continued to develop the *Elder Scrolls* franchise. *Daggerfall*, released in 1996, was also well received and, more importantly for our purposes, gave rise to further developments in the *Elder Scrolls* modding scene. While players continued to swap hex editing tips, the process of altering game files was made much easier by the creation of save game editors like 'DaggeD', developed by 'theKILLER' in 1999. Other mods (like Gavin Clayton's 'Daggerfall Explorer' and Dave Humphrey's 'DAGPIC', which allowed users to view and edit assets from the game in programs like Paintbrush) enabled modders to insert custom graphics and text into the game, altering or replacing Bethesda's assets. Perhaps the most ambitious project was Andrew Polis' 'Andyfall', a tweaked version of *Daggerfall* which incorporated new enemies, graphics, gameplay systems and interface elements, anticipating the more complex mods that were to come ("The Unofficial" 2014; Polis, 2004).

Daggerfall was quickly followed by two spin-off games, *The Elder Scrolls Legend: Battlespire* (1997), and *The Elder Scrolls Adventures: Redguard* (1998). But while these games outperformed *Daggerfall* graphically, each was also buggier and more troubled. Though *Daggerfall* in particular had attracted a niche following of fans and modders, the series began to suffer commercially as consumers tired of muddling through the games' bugs. This, combined with missteps like *The Tenth Planet* (a sci-fi epic that never made it to stores) and *Zero Critical* (a point-and-click adventure game released once the genre's popularity had waned), saw Bethesda nearly bankrupt by early 2001.

The company was saved by two events. First, it was acquired by ZeniMax Media Inc. (another game company founded by Chris Weaver and Robert Altman), giving it a much-needed influx of cash. Then, in 2002, the studio released *The Elder Scrolls III: Morrowind*. An immediate hit, the game launched on Microsoft's then-new Xbox console as well as the PC, increasing the series' exposure and fan base. Significantly, Bethesda crafted the entire world of *Morrowind* by hand, rather than procedurally generating content. To streamline the process they created The Elder Scrolls Construction Set, an editing toolkit that would later come to define the series as a mod-friendly franchise.

While *Morrowind* exceeded critical and commercial expectations on both PC and console, the PC version of the game also came bundled with the Construction Set, further differentiating it from other open-world fantasy fare. The (comparative) ease with which the Construction Set enabled players to alter and extend the base game also seems to have catalysed a shift in modders' aims, and in the terms upon which they understood their status in relation to Bethesda. While many *Morrowind* modders were content with simply adding quests and dungeons, some of the most enduringly popular mods were more ambitious, moving beyond offering supplementary content and seeking to improve on or update the base game and the technology underpinning it. With mods like Psychodog Studios' Better Bodies (which replaced Bethesda's awkwardly angular character models with smoother, better articulated ones), Liztail and Timeslip's Morrowind Graphics Extender (which made various advanced rendering techniques available to those with hardware capable of supporting them), and HotFusion's Economy Adjuster we arguably see a more concerted and widespread effort on the part of TES modders to not only emulate Bethesda's designers, artists, and coders, but to surpass them.

Morrowind helped to put Bethesda back on the map, creating a massive culture of anticipation for all subsequent *Elder Scrolls* titles. After pushing out two expansions in late 2002 and early 2003, the company would not release another *Elder Scrolls* title until *Oblivion* in 2006. Both *Oblivion* and its 2011 successor *Skyrim* enjoyed record-breaking sales and critical acclaim, in spite of the bugs that players were now coming to expect. Each also included an updated version of the Construction Set for the PC, providing a further boost to existing modding communities and spawning new ones.

Indeed, while we have often found it expedient to talk in general terms of the "modding scene" or "modding community" in this article, it is important to acknowledge the heterogeneity of contemporary TES mod cultures. As with the Operation Flashpoint modders studied by Sotaama (2010), TES modders are neither solitary nor static, often moving between activities and roles and participating in different groups and teams over the course of a modding "career." The whys and hows of modding will, as such, vary not just from modder to modder but from project to project. Those TES players who use mods (and again, it is difficult to ascertain how much overlap exists between users and makers of mods) also do so in various ways and for various reasons, composing "cocktails" of software that will vary according to mood, playstyle, technical expertise, and hardware capacity. Some Skyrim players might want more quests, items and dungeons in keeping with the tone and lore of the original game. Others may be interested in improving the game's graphics using high resolution texture packs or geometry mods. Players who like to roleplay their characters will often use mods that increase options for avatar customization and extend the game's simulation in ways felt to render it more "realistic" (by making it a requirement that avatars eat and sleep regularly, for example, or by ensuring that they will contract hypothermia if they spend too long in the snow). By contrast, other players will try to add as many wackily incongruous elements into the gameworld as possible, running mods that turn the game's dragons into WWE wrestlers or cause steam locomotives to rain from the sky. So-called "screenarchers," meanwhile, devote themselves to capturing striking still images of the game and distributing them online via forums and Flickr profiles. Many screenarchers use "ENB" packages, which facilitate graphical niceties such as depth of field effects, bloom and enhanced shadows but can slow framerates to a crawl. Perhaps inevitably, there is also a sizeable traffic in "adult" mods which turn avatars and non-player characters into hypersexualized

caricatures or allow players to choreograph elaborate erotic fantasies – indeed, one of the important differentiators between the Steam Workshop and the Skyrim Nexus is the latter's willingness to host such material.

Modders' motives, in short, are many and various. From Bethesda's perspective, too, there are many reasons to support modding - none of them entirely selfless. Most mods can only be played alongside the original games, forcing players to purchase or otherwise acquire a copy of the game in order to gain access to the slew of fan-created content. Popular mods can therefore serve to attract new customers and boost sales well beyond a game's initial release date. Modding communities are also used as recruiting pools, providing companies with a selection of highly skilled and well-trained workers at little or no cost. Bethesda's creative director Todd Howard even suggests that modding forms part of Bethesda interview process: "most of our level designers here had to make a plug-in that we played even if they had some experience - 'go ahead and make something that we could ship. Our tools are out; make something that could have come out with Oblivion or Fallout' and it's a very easy way for us to see this person has it" (Hanson, 2011). Mods can also serve as a source of inspiration for developers. While large-scale game studios and publishers are often unwilling to take risks due to the high financial stakes involved in AAA game development, modders have proven to be much more open to experimentation (Sotamaa, 2007; Kücklich, 2005). Modders' penchant for "fixing mistakes" might also be seen as affording a safety net that allows developers to make ambitious or potentially controversial design decisions in the knowledge that perceived missteps and bugs can be rectified or repealed by the fan community.

One area in which we see this is *Skyrim*'s user interface, which was widely criticized by PC players who saw it as a step backward from the systems found in earlier *Elder Scrolls* games. These players felt that the interface had been designed with console controllers, rather than the PC's mouse and keyboard setup, in mind (e.g. Schwarz, 2011). SkyUI, an overhaul of the interface intended to make it friendlier to mouse and keyboard users, remains the most downloaded mod on Skyrim Nexus. SkyUI highlights the fact that if Bethesda likes to frame modders as committed creatives whose innovations help them to push the series "forward", this misrepresents the extent to which modders and developers may have incompatible notions of just what "progress" means – a tension which became particularly evident during Bethesda and Valve's initial attempt to introduce paid mods to the Skyrim Steam Workshop.

Nor is it necessarily true that Bethesda themselves have a clear and consistent vision of what progress entails. While one can certainly discern tendencies and trends emerging and developing over the course of successive *Elder Scrolls* games, Bethesda's approach is better seen as one of continuing experimentation rather than straightforward refinement. Speaking "variantologically", we see a number of different strategies, factors and agencies in play across different games, each of which has its own virtues and frustrations depending on who we ask.

Performing Professionalism

While this history is necessarily somewhat sketchy, hopefully it has shown that the hierarchical distinction between "professionals" and mere modders is increasingly open to question. According to Bethesda, the Construction Set's "entire system is built on a 'plug-in' architecture.

Each file created in the Construction Set is a modification to the world" (*SynTax*, 2004). Such statements highlight the similarities between modding and game development, which are distinguished more by their respective cultural, financial, and legal frameworks than they are by any qualitative difference in the creative work that takes place. Modders essentially perform the same type of labour as Bethesda's employees using many of the same tools; the difference is that one group is directly compensated for their work while being subject to corporate organizational structures and disciplinary techniques, and the other is not.

At one point, however, Bethesda teamed with Valve to attempt to subsume modding culture (or at least the appearance of mod culture) into a model of capital without explicitly indicating that modding was a professional practice. This was the aforementioned Steam Workshop paid mods fiasco, and its incidence speaks to the intersectional difficulties of coordinating between communities and ideologies. An initiative launched April 2015, the Curated Steam Workshop was announced by Valve as a way for its users to potentially profit from the creation and distribution of their mods: modders were tapped by Valve and Bethesda to work with them to build unique new mods, setting their own prices and splitting the proceeds with the two corporations (Purchese 2015a). It is worth mentioning here that *Skyrim* mods were only intended as the first pieces to be included in the curated workshop; eventually, Valve intended to partner with other developers and other modding communities to monetize mods from all sorts of games.

What followed was disastrous for both Valve and Bethesda. Within a day of launching their first selection of mods on April 23rd, a flood of discussion ensued due to the use of content from another mod being included in the paid fishing mod Art of the Catch. The mod was created by user Chesko with some art by Aggh, but in order to function optimally it relied upon the download of a separate animation package with a FNIS behaviour file developed by a user named Fore (Chesko, 2015). While Chesko had been working with the Curated Workshop for the previous several months, Fore disapproved of the entire concept of paid mods (Purchese, 2015b). In what unfolded over the following several days it came to light that Chesko had been prohibited from contacting Fore about the project by Valve and offered assurances that it would be fine to use Fore's content. When the controversy hit, Chesko discussed the issue with Fore and removed Art of the Catch from the curated workshop and refunded all the money collected through PayPal transactions (however, the mod remained available to users who had already paid for it and Valve did not initially offer refunds). The incident ended with Valve indefinitely cancelling paid mods from the Steam Workshop only a few days after the Curated Workshop was launched (McWhertor, 2015). In a Reddit thread, CEO Gabe Newell said that "pissing off the Internet costs you a million bucks in just a couple of days" (Newell qtd. in Smith, 2015) and that the company's intent all along had simply been to make modding better for the authors and gamers (Newell, 2015).

The controversy speaks to the sharp and potentially irreconcilable division between the ideologies and ethics of modding on the one hand and the corporate logics and value systems of capitalism on the other. In the paid mods model, Bethesda and Valve attempted to subsume various modding practices while leaving others aside. By being invited to participate, the modders involved were being told that their work was valuable on a professional and commercial level, but that the terms of that professionalization were ostensibly temporary and non-negotiable. The modders were positioned in a halfway place where their status as modders

constituted part of the product being sold, and was commodified alongside the fruits of their labour. Meanwhile, the corporate interests involved could position themselves as gatekeepers and further distinguish between the concepts of the professional developer and the amateur (and aspirational) modder.

That the implicit privileging of the professional is accepted and naturalized is no accident. Embedded in existing cultural assumptions, it is also continuously reproduced through capitalist market relations. From the perspective of developers, whose livelihoods depend on their ability to sell themselves on the market as skilled labourers, it is in their interest to maintain the perception that their work is much more valuable than that of modders or hobbyists, whether or not they actually believe this themselves. Game publishers may also play a role in promoting this assumption, as it allows them to distinguish their products from the creations of amateur gamemakers, and thus limit competition. Empowering people to make mods may help to increase sales, but empowering people to make games that are seen as equivalent to the products these companies are trying to sell would likely have the opposite effect. Studios like Bethesda must therefore walk a fine line between supporting an active user base that is able and willing to produce content for their game, and fostering direct competition or, perhaps worse, delegitimizing the very notion of games as commodities. This is why the Curated Workshop held so much potential for Valve and Bethesda: it allowed for the studios to find another, more direct way to profit from the work of modders while simultaneously maintaining a distinction between the novelty of mods and the work that legitimate developers undertake. It even further reified the power dynamics of professionalism by positioning the studios as the arbiters of taste and quality. However, both Valve and Bethesda seem to have failed to account for the aspects of modding culture that didn't fit with professional game development, such as openness, sharing, crediting, and casual collaboration, and this is where they ran into trouble.

While the game industry in general may reinforce the amateur-professional divide, blurring this distinction can also work to a company's advantage when trying to foster a relationship of trust, loyalty, and mutual goodwill with fans. This may be one of the reasons why Bethesda often chooses to emphasize certain similarities between the game developers that work for the company and an imagined audience of hardcore RPG players. Although currently a wholly owned subsidiary of a multinational corporation, the company has done an excellent job of maintaining the impression that it remains, at heart, a cadre of RPG fans whose ambitions are wont to run away with them. If a love of fantasy roleplay was central to Bethesda's culture in its early years (*Arena* was set in "the fantasy world created by a few members of the staff for use in their weekly [Dungeons & Dragons] campaign" ("Arena - Behind the Scenes", 2007)), then Todd Howard, Bethesda's current creative director, insists that this ethos continues to define the studio today. Indeed, Howard describes his job in terms of living out childhood dreams inspired by the *Ultima* RPG series: "this is what I wanna do, the kind of games that I'd ultimately like to make y'know when you're sitting there younger dreaming... the fact that we get to do it now – y'know, you still wanna pinch yourself" (Hanson, 2011).

Howard has played a particularly important role in cementing the idea that Bethesda understands fans because the people that work there are fans themselves. Beyond his role as director and designer of the original Construction Kit, Howard has essentially become Bethesda's public face, an avatar of sorts for the studio's values and culture in interviews with journalists, addresses to

fellow developers, and vernacular histories of the company. Usefully for a studio with a vested interest in keeping modders motivated, Howard's career trajectory – from fan, to bug tester on the CD-ROM version of *Arena*, to project leader on the three most recent *Elder Scrolls* games – encapsulates the implicit promise that passion can be rewarded and fandom can lead to a dream job. This is not to say Howard's passion or his story are false; merely that his biography has proven an asset to his employers, providing an example of how, in contemporary workplace culture, employees' cultural identities, biographies, and social networks become "cultural or stylistic resources… that can be managed for the benefit of the organisation" (Lury, 1998, p. 24-25).

Howard's performance (and, again, this word is not meant to imply artifice or disingenuousness) as fan, creative and professional is also symptomatic of the discursive strategies whereby Bethesda constructs parallels between the activities of modders and "real" developers. As we've seen, one way of understanding this overlap would be to argue that modders are doing the work of developers for free (certainly, this is how critical theorists such as Julian Kücklich (2005) implore us to understand it); Bethesda, however, nudges us toward another reading of the situation. Rather than viewing modders as underpaid developers, we are encouraged to see development teams as being made up of particularly lucky, talented, or passionate fans. This slight but significant difference in emphasis sponsors a very different understanding of labour, whereby a "proper" job becomes a reward for those amateurs committed and talented enough to make the transition.

As Grimes (2006) reminds us, *both* of these modes of framing the relation between the professional and amateur spheres obscure the fact that "digital games are also the product of the painstaking efforts of a primarily female labor force that constructs game consoles and cartridges within the enterprise zones of the developing world... jeopardizing our ability to comprehend fully the multifaceted and often abstracted labor processes involved in the global digital game industry" (p. 983-984). The story of Todd Howard is so appealing in part because it supports the idea that games are the product of lofty, immaterial ideals such as passion and creativity. This gendered concept of games as pure form permits a disavowal of their material (female) base, along with the messy politics of resource extraction, colonialism, and globalization, the uneven transnational flows of pollution and wealth, the violent repression of labour movements, and the human suffering that results.

What is rehearsed and affirmed in their place is a neoliberal construction of creativity. Crucial to this discourse is its levying of individualist rhetoric in the service of an economic model ever more dependent on "crowdsourced" and volunteer labour. McRobbie has highlighted the way that neoliberal discourse returns to notions of "individual creativity as an inner force waiting to be unleashed" – a return notable for "sweeping aside writing and scholarship on the social and collective processes of creative production" in order to "resurrect a traditional notion of tapping into talent" (McRobbie, 2011, p. 80). This revival of the Romantic "figure of the artist as exceptional creator of innovations in modes of production, notions of authorship and forms of living" is undertaken in the service of an agenda of individual responsibilization, deregulation, outsourcing and diffused risk, underpinned by a conviction that creativity will flourish if "provided with the right kind of support" and "unhindered by bureaucracy and red tape" (ibid.).

Howard taps such notions in hailing the efforts of his team, describing them as "ninjas" while reflecting that

"in our group and throughout the industry...dev[elopment] teams are getting more experienced...We have found we can have a lot less structure; we're getting more "ninjas" in the team – guys, or women, who can do a lot of stuff, and we let them run wild and we're getting a lot of features and giving them the keys to the creativity and saying "well make something cool, here's the vibe, here's what we want."

Bethesda Blog (2012)

These comments advocate the removal of barriers and the flattening of hierarchies as a means of facilitating innovation and making work fun and fulfilling, even as they also hint at the precarity and cut-throat competitiveness of the contemporary video game industry, an industry in which only overqualified and intensely committed "ninjas", willing to endanger their health and jeopardise their personal relationships, survive (Dyer-Witheford & De Peuter, 2006, p. 611-612). The same logics are apparent in Howard's promotion of Bethesda's post-release mod "jam", which saw employees being invited to do "whatever they want for a week... [and] run wild" thinking up new ideas for Skyrim – a process which spawned various features that subsequently found their way into patches and downloadable content (DLC) packs (ibid.). If scholars have argued for the radical potential of game jams (events where participants are given a short span of time within which to produce a game based on a particular theme or concept) as a means of experimenting with procedural representation, making political stands, and giving hitherto marginalized groups access to the knowledge and tools necessary to make games (Danilovic, 2014), the format has also proven ripe for co-option by corporations looking to squeeze more effort and ideas out of employees already all too familiar with the culture of meeting deadlines by way of intensive "crunch" periods (De Peuter & Dyer-Witheford, 2009, p. 59).

With the game jam – essentially a form of rapid prototyping – we can see how a discourse of innovation grounded in a quasi-Romantic notion of individual creative sovereignty shades into the affirmation of distributed, collective, and collaborative forms of creativity. This understanding of the creative process, typified by popular handbooks on corporate innovation like Schrage's influential Serious Play (2000), suggests that relying on the passionate and prolonged labour of exceptional individuals is far less efficacious - and far more expensive than an iterative approach based on playing with prototypes and levying the (unpaid) efforts of communities of interested amateurs. Howard evokes such an approach when talking about redistributing development time in order to get to the stage of "playing our game sooner," and a similar logic underpins both the design of the Construction Set and Bethesda's view of the modding community: get the tools into the hands of modders as quickly as possible and let them do their thing (or, at least, certain kinds of things sanctioned by EULAs and informed by the capabilities of the tools Bethesda distributes) (Bethesda Blog, 2012). Enabling modders informs Bethesda's approach to development, from the software they use ("we still use the nif file format, because it worked fine for what we're doing and our modders know it well" (Onyett, 2011)) to the ideas they incorporate into games (Howard admits that an archery mod for Oblivion became the basis for Skyrim's system - though his failure to specify which archery mod disappointed many modders (Gamespot, 2011)). Such faux pas notwithstanding, Howard's

profile and popularity (even critiques tend to be leavened with a degree of affection) are undoubtedly assets for Bethesda. His performance as steward, creative and fan underscores the value for IP holders of maintaining "goodwill" – a nebulous "legal fiction" that nevertheless has very real economic implications, "enabl[ing] corporations to claim as economic value consumers' affective relation to the corporation as the only legitimate source of what they desire in the commodity form" (Coombe, Herman and Kaye, 2006, p. 186).

Modders' Roles and Rhetorics

Of course the discourse around modding has not remained static in the 20 years since Arena's release. In at least some instances there appears to be an interesting correlation between changes in Bethesda's internal structure, the resources the company provides to its fans, and the ways in which fans talk about their relationship to the company and its products. As Bethesda's production model has shifted from small teams relying on procedural generation to a large group of developers and modders producing reams of hand-crafted content, there has been a corresponding shift in the language used by fans to discuss modifications of TES games, from hacking and cheating to modding. This change in terms reflects a fundamental difference in the way game modifications are produced: whereas hacking involves directly manipulating the game files, plug-in mods created with the Morrowind Construction Set and its successors are layered on top of the game's original code. In a number of ways, the creation and release of the Construction Set significantly lowered the bar in terms of what players were required to do in order to make changes to an *Elder Scrolls* game. For most users the Construction Set improved accessibility, but also, importantly, provided a comfortable cushion of legality and legitimization. The limited legal permissions granted by the End-User License Agreements (or EULAs) that accompanied the tool removed some of the perceived risk associated with violating copyright, trademark, and patent laws. It also allowed fans of the *Elder Scrolls* series to use and create mods while still remaining "loyal" to the company.

This is not to suggest that mod communities are devoid of cynicism, critique or oppositional sentiment, however. Most modders are well aware of Bethesda's motives for supplying them with modding tools. As DrakeTheDragon notes, "Bethesda is known for making use of their non-exclusive license to reuse mods created with their tools... That's part of what modding is for them, an unlimited source of ideas, in exchange for allowing us to do whatever we want with their games, as long as it's within the necessary rules of legality, of course" (2014). In such discussions modders articulate an understanding of their relationship with Bethesda similar to the portrait of "user co-creation" offered by scholars like Banks and Humphreys (2008). They suggest that we might see platform holders and content creators as engaged in a "non-zero sum game whereby different motivations and value regimes co-exist" (ibid. p. 413) - albeit a game that, as Andrejevic insists, is ultimately skewed in favour of rights holders, whose "control over productive resources provides [them] with disproportionate power in setting the terms of access" (Andrejevic, 2011, p. 93).

As DrakeTheDragon's comments demonstrate, modders are reflexive about their role, the perceived value of their efforts and Bethesda's motives. While the community's commitment to the TES games is unwavering, both Bethesda's stewardship of the franchise and their handling of the modding community are subject to suspicion and critique. Modders essentially operate as a

"recursive public" in Kelty's (2005) sense, moving beyond "discursive argument" to actively revise and augment Bethesda's software so that it will align more closely with their values, preferences and priorities. Mods become a vehicle for criticism, historiography, or feedback, as modders alter the original games in ways that implicitly posit or challenge particular narratives about the *Elder Scrolls* series' history (Kelty, 2005, p. 186). In particular, modders often subscribe to narratives of nostalgia, decline, "casualization" and dumbing down. While such stories help to challenge, or at least complicate, Bethesda's attempts to frame each TES game as bigger, better, and more sophisticated than prior entries in the series, they also play a part in fostering a modding culture (and by extension, a PC gaming culture) that is prone to elitism and exclusivity. Emotionally invested in the TES series, modders nevertheless remain skeptical regarding Bethesda's treatment of them, calling into question moves like the decision to integrate *Skyrim* modding into Valve's "Steam Workshop" venture.

But while players have criticised Bethesda's handling of its intellectual property rights, few seem to have questioned whether those rights ought to exist in the first place. As Grimes (2006) observes, players *and* game designers currently remain within an IP paradigm, so that "while the players and game owners compete for the right to claim ownership over game content, an alternative to the continued expansion of intellectual property laws across cultural forms and forums has yet to be adequately articulated," with "player resistance to the corporate appropriation of online game culture... consisting of little other than the internalization and legitimization of the processes of commodification" (p. 988, emphasis original).

Thus while Valve, for example, has allowed content creators to sell their work (with a portion of the money from sales going back to Valve), this move merely extends and reshapes the extant IP paradigm. Though paid mods are frequently represented as a means of compensating modders for their labour, tapping into a long tradition of struggle for economic justice, this representation conflates two very different forms of monetary compensation. The first is the wage relation, whereby employees receive money from their employers in exchange for their labour-power (their ability to perform work), which is then combined with other forms of capital to produce commodities that can be sold on the market. The second is the exchange of commodities for money, which again takes place through the mechanism of the market. Paid mods involve the latter but not the former, since modders never enter into a wage relation with the companies that own the games they mod. Instead, they are encouraged to sell their mods on the market. The money they receive thus comes from consumers (i.e. other players), not from the companies that exploit their labour, while those same companies profit from every transaction by virtue of their ownership over the technological platform (in this case Steam) and/or the original IP. In this way, a demand that originated in the tensions produced by the wage relation, where the employer seeks to reduce wages and the employee seeks to increase them, is recast as a struggle between producers and consumers, allowing companies like Valve and Bethesda to generate new revenue streams while simultaneously avoiding any moral or financial responsibility for the well-being of modders. If, under this new arrangement, modders are not being compensated for their work, then the responsibility can be said to lie with the consumers who are refusing to pay for their mods, or with the modders themselves, who are creating products that no one will buy. Modders are then encouraged to invest their energies in the expansion and enforcement of IP regimes and market relations. In this sense, the switch to paid mods is very much in keeping with the

neoliberal project of individual responsibilization and the development of the entrepreneurial self that we touched upon earlier.

This transition has the additional effect of introducing market pressures and competition into a creative process that was previously driven largely by personal interest, collaboration, and the needs of the community as a whole (or at least its more vocal components), rather than the desires of a select group of players who can afford to pay for mods. By cutting off access to mods that were previously available to anyone with a copy of the original game, and introducing a condition of artificial scarcity, paid mods further the process of capitalist enclosure whereby common rights are lost and replaced by a system of private ownership aimed at realizing profits (May, 2015, p. 13). Since mods are frequently built on top of one another, this not only reduces people's capacity to play what others create, it also limits their ability to create mods themselves by separating them from a crucial part of the means of production: other mods. If preexisting patterns hold true, then commodification and enclosure are likely to make modding, as a practice, less accessible overall, while also undermining its collaborative elements as moders are pressured to fight one another for space in a limited market.

Skyrim modders, for their part, have mostly focused their critiques on the specific terms of the agreement rather than its underlying economic, social, and moral foundations. Though the introduction of paid *Skyrim* mods generated a great deal of protest from players, eventually forcing Valve and Bethesda to cancel the project altogether, the nature of the complaints that were raised indicate that, in many cases, modders agreed with the notion of paid mods in principle, if not in practice. The two main issues that emerged in online discussions were: the share of revenue allocated to modders (25%) versus Bethesda and Valve (75% in total) (Chesko, 2015); and concerns about quality control and the long-term functionality of mods, which frequently rely on other mods in order to work correctly and may only be compatible with specific versions of the game (meaning that an update to the base game could render the mod unusable). Additionally, Bethesda and Valve's claim that they were acting in the interests of modders was undercut by the lack of compensation or credit extended to Fore, who came to symbolize the many modders who would be left out in the cold by a system premised on exclusive ownership and cutthroat competition.

At least some individuals, however, have expressed fears about the potential impact of paid mods on the culture and long-term survival of modding communities, with some users suggesting that the success of paid mods might incentivize Bethesda to shut down free mods through DMCA complaints or other coercive methods (photographic mammory, 2015). Robin Scott, the owner and administrator of NexusMods, has also voiced concerns, noting that although he believes the decision about whether or not to sell a mod should ultimately lie with the mod authors,

"Even if there was a good way of implementing paid for mods, or a system where all mods remain free of payment but the mod authors are paid (like a YouTube-style ad sharing system, or a voluntary subscription system) there's still a whole slew of potential issues that get introduced in to [sic] modding when significant money enters. We've seen some of those issues already; permission issues with mods that use assets from other mods, a reduction of authors releasing "modders resources" (open source resource packages that all modders can make use of), increased resentment, rivalries, drama, bickering and arguing within the mod author community are some of the issues that spring to mind. Irrespective of how paid for modding is introduced, those issues are a serious concern. I don't know if there's a good way of doing it. I do know there's no way of doing it without fundamentally changing the dynamic of the modding community."

Scott quoted in Smith (2015)

Scott's comments highlight the difficulty of maintaining those aspects of modding culture that Valve and Bethesda consider "desirable" and seek to appropriate for their own benefit, including novelty, experimentation, personalization, and the cultural cachet that comes with a dedicated fan-run community, while still imposing capitalist structures (including market pressures, wage relations, non-disclosure agreements and IP regimes). The result is the appropriation of both the language of modding and many of its products and the implanting of them into a market-driven system. The problem for them was that some of these practices speak to values fundamentally at odds with values from the modding community they had carelessly thrown away when attempting to achieve this neoliberal transition.

Although we might expect a more critical response from modders working within a noncommercial, open source framework, even those involved in open source projects such as OpenMW and OpenCS, which involve recreating the *Morrowind* engine and Construction Set entirely from scratch, encourage users to purchase a copy of the original game in order to make use of Bethesda's assets. Though the project is effectively a lengthy work-around necessitated by IP laws and closed source software, it remains firmly embedded within the logic of modding as extension or 'added value,' rather than a challenge to intellectual property rights. From an ideological stance, the shift from hacking to modding means that mod users and creators are no longer positioned in direct opposition to the concept of ownership over digital information, but are instead encouraged to see themselves as allied *with* Bethesda. What might seem like a small, even arbitrary shift in terminology thus has important implications for how IP is performed – and enforced. It is testament, as such, to "the extra-linguistic effects of linguistic practice" (Coombe, Herman and Kaye, 2006, 200).

Tools and Platforms

Naturally, such shifts in jargon and self-definition have both informed and been informed by the nature of the tools and platforms available to modders. By shaping the field of possibilities, tools such as the Construction Set inevitably influence how players imagine their role as designers, including what sort of alterations or additions to the game they prioritize, and which ones they neglect. The Construction Set is designed in order to streamline certain operations, such as laying out a dungeon or changing weapon statistics, while rendering other tasks, such as the creation of lengthy dialogue or complex quests, much more difficult to accomplish.

From Bethesda's perspective it makes sense to create a tool that improves the efficiency and ease with which its development team can carry out routine tasks. However, the fact that these priorities are hard-coded into the toolkit means that the tool also encourages modders to adopt the company's approach to game design, prompting the creation of more dungeons to explore, more enemies to fight, and more loot to collect, while dissuading attempts to change the modes by which characters and objects interact with each other and their environment (there are few mods, for example, which explore the emotional impact of childbirth, the perils of court intrigue, or the politics of resource extraction, despite the widespread presence of children, courts, mines, and mills in *Skyrim*). Though the CS can certainly help to bring new modders into the fold and significantly reduce the time it takes to produce most mods, the assumptions underlying its design also constrain the possibilities for creative production.

The online platforms used to share mods, tutorials, and so forth also have an important impact on the type of mods that are produced, how they are understood and the ways in which they can or cannot circulate. In the last 20 years the internet has transitioned from a system of small-scale, localized networks to a globalized and commercially-driven enterprise. Bethesda's controversial decision to partner with Valve for the release of *Skyrim* is exemplary of the ongoing centralization of sites for user-generated content, and of a growing emphasis on quick and efficient access. The Skyrim Steam Workshop allows players to "subscribe" to mods with the click of a button, automatically installing updates and removing the hassle of having to manually copy and paste files into the correct directories. Community-run websites such as the Nexus have also moved in this direction, providing a mod management tool and a centralized location for browsing, uploading, and downloading mods for multiple games. Such developments can have both positive and negative consequences; if they render modding more accessible and inclusive, they also require modders to surrender a degree of autonomy and flexibility.

Despite the fact that the Steam Workshop may be simpler and more convenient for most players, Skyrim Nexus is currently the most popular source for Skyrim mods, boasting over 30,000 files to date. While it would be a radical oversimplification to frame the current situation as a battle between a corporate giant and a plucky fan-run underdog (both the Nexus and the Steam Workshop are a far cry from the ephemeral, loosely affiliated, and individually run fan sites of vore), there are nevertheless important differences between the two, both functionally and philosophically. Steam, for example, automatically downloads and installs updates, potentially leading to conflicts between mods that could be avoided by sticking with an older version. And while files exported from the Creation Kit to Steam are packaged and uploaded automatically, some mod creators and users prefer to be able to package files themselves in order to optimize their mods and reduce clutter. Steam Workshop also imposes a limit on the number of mods that users can subscribe to at any one time, as well as a maximum file size. Censorship may also be an issue, as Steam prohibits sexual "adult" content. While a number of these issues would only be apparent to mod-users who run more than 50 or so mods at a time, modding guides and tutorials often emphasize optimization, efficiency, and compatibility as core values, perhaps influencing those who are new to modding to adopt these principles, even before they reach the prescribed limits of these platforms (Headbomb, 2012).

We can see already, then, how difficult it can be to separate purely technical concerns interfaces, upload limits, and file packaging - from values and ideologies. This is also evident in Robin Scott's attempts to demonstrate to Nexus users that his commitment to maintaining a space for fans goes beyond mere rhetoric. Scott's periodic blog posts offer insights into how this philosophy informs things like server architecture, hiring policy and advertising strategy – insights that cast light on the logistical issues and economic interests at stake in modding. In particular, Scott highlights his reasons for:

"Limiting the stakeholders in the Nexus...If I seek private investment, or start directly selling the Nexus site ads then my biggest stakeholders become the shareholders and the advertisers on these sites. My focus gets shifted from serving and pleasing you, the users, to serving and please people who have no interest in you. And the point of the site changes from being about modding to being about making money."

Dark0ne (2013)

His emphasis on the need to achieve durability, stability and a 'future proof' infrastructure, meanwhile, reflects the Nexus' status as one of the few survivors from what was once an array of *Elder Scrolls* modding sites (DarkOne, 2012). If earlier phases in *Elder Scrolls* mod culture are at risk of being forgotten, this is attributable less to the culture's active erasure at the hands of IP holders than the fragile and ephemeral nature of online communities and networks. Shifting technological standards, hosting fees, and the changing priorities and availabilities of volunteer webmasters, modders, and fans all contribute to a situation where sites without some manner of official support have tended to slip into obscurity, disrepair, or obsolescence – though of course official support is no guarantee of survival either.

Conclusion

Whatever the next phase in modding entails, there is good reason to suppose that Bethesda will attempt to turn the situation to their advantage. For what emerges from our study of the history of the *Elder Scrolls* is a studio defined not by visionary foresight or a unique creative sensibility but a willingness to manage and mobilise the creative resources at hand – from algorithmic generation routines and intellectual property laws to modders' innovations, employees' biographies, and partnerships with platform holders to monetize fan communities. In this respect Bethesda are exemplary of a reactive flow of cultural production. But where a more traditional approach to media history might frame this fact as evidence of the 'evolution' of more efficient modes of game development, media archaeology primes us to see not a progressive refinement but a shifting terrain in which the formation of new conjunctions and constellations generates certain affordances and opportunities while foreclosing others. By reading between the lines we are able to see just how many parties have a hand in creating intellectual property - and to imagine modes of understanding authorship and ownership based on acknowledging and affirming this plurality.

References

- Andrejevic, M. (2011). Social network exploitation. In Z. Papacharissi (Ed.), A networked self: Identity, community and culture on social network sites. New York: Routledge.
- Arena Behind the scenes. (2007). Retrieved from <u>http://web.archive.org/web/20070509175304/http://www.elderscrolls.com/tenth_anniv/tenth_anniv/tenth_anniv-arena.htm</u>
- Banks, J., & Humphreys, S. (2008). The labour of user co-creators: Emergent social network markets? *Convergence*, 4, 401-418.
- Bethesda Blog (2012). Watch Todd Howard's DICE keynote. Retrieved from http://www.bethblog.com/2012/02/08/watch-todd-howards-dice-keynote-live-ongamespot
- Chesko. (2015, April 24). The experiment has failed: My exit from the curated workshop. *Reddit.com.* Retrieved from http://redd.it/33qcaj
- Coombe, R. J., Herman, A., & Kaye, L. (2006). Your Second Life? Goodwill and the performativity of intellectual property. *Cultural Studies*, 20 (2), 184-210.
- Create your own Morrowind Adventures. (2004). *SynTax*, 89. Retrieved from <u>http://www.syntax2000.co.uk/issues/index.html</u>
- Danilovic, S. (2014). The personal is procedural: The game jam as storytelling platform. *CHI* 2014 Game Jam [4research] workshop.
- DarkOne (2012). Blog piece, Nexus development and expansion philosophy, #1. Retrieved from http://forums.nexusmods.com/index.php?/topic/814062-blog-piece-nexus-development-and-expansion-philosophy
- DarkOne (2013). Blog piece: Nexus plans for stability and infrastructure improvements, #1. Retrieved from http://forums.nexusmods.com/index.php?showtopic=899960
- De Peuter, G. & Dyer-Witheford, N. (2009). *Games of empire: Global capitalism and video games*. Minneapolis: University of Minnesota Press.
- DrakeTheDragon (2013). Did Skyrim mods make an impact on ESO and could it happen in TES6?, #2. Retrieved from http://forums.nexusmods.com/index.php?/topic/1600358-did-skyrim-mods-made-on-impact-on-eso-and-could-it-happen-in-tes6
- Dyer-Witheford, N. & de Peuter, G. (2006). 'EA spouse' and the crisis of video game labour: Enjoyment, exclusion, exploitation, exodus. *Canadian Journal of Communication*, 31 (3), 599-617.
- Gamespot (2011). The hotspot 11 02 11 and there are dragons, obviously. Retrieved from http://www.gamespot.com/videos/the-hotspot-11-02-11-and-there-are-dragons-obvious/2300-6343823
- Gann, P. (2006, 15 April). The Elder Scrolls: Arena. *RPGFan*. Retrieved from http://rpgfan.com/reviews/tesarena/index.html, accessed 10 September 2014.
- Grimes, S. M. (2006). Online multiplayer games: A virtual space for intellectual property debates? *New Media and Society*, 8 (6), 969-990.
- Hanson, B. (2011). Road to Skyrim: The Todd Howard interview. Retrieved from http://www.gameinformer.com/b/news/archive/2011/01/13/road-to-skyrim-the-toddhoward-interview.aspx
- Headbomb (2012). How to make a successful mod. Retrieved from http://www.nexusmods.com/skyrim/mods/6882/?

- Kelty, C. (2005). Geeks, social imaginaries, and recursive publics. *Cultural Anthropology*, 20 (2), 185-214.
- Kerr, A. (2011). Player production and innovation in online games: Time for new rules? In G. Crawford, B. Light and V.K. Gosling (Eds). *Online gaming: Production, play & sociality*, pp. 25-39. Oxon: Routledge.
- Kroll, A. (2014, May). 100 games now using Steam Workshop. Retrieved from http://steamcommunity.com/games/SteamWorkshop/announcements/detail/14988826815 92861148
- Kuchlich, J. (2005, December). Precarious playbour: Modders and the digital games industry. *Fibreculture*, 5. Retrieved from http://five.fibreculturejournal.org/fcj-025-precarious-playbour-modders-and-the-digital-games-industry, accessed 26 August 2014.
- Lury, C. (1998). Prosthetic culture: Photography, memory and identity. New York: Routledge.
- May, C. (2015). *The global political economy of intellectual property rights: The new enclosures* (2nd ed.). London: Routledge.
- McRobbie, A. (2011). 'Everyone is creative': Artists as pioneers of the new economy? In M.J. Léger (Ed.), *Culture and contestation in the new century* (pp. 77-92). Bristol: Intellect.
- McWhertor, M. (2015, April 27). Valve kills paid mods on Steam, will refund Skyrim mod buyers. *Polygon.com*. Retrieved from

http://www.polygon.com/2015/4/27/8505883/valve-removing-paid-mods-from-steam. Morrowind Italia (2006). Ted Peterson Interview. Retrieved from

- http://web.archive.org/web/20060202020212/http://italia.planetelderscrolls.gamespy.com/I
- Newell, G. (2015, April 25). MODs and Steam. Reddit.com. Retrieved from http://redd.it/33uplp
- Onyett, C. (2011). The Elder scrolls evolved: What's new in Skyrim. Retrieved from http://uk.ign.com/articles/2011/03/31/the-elder-scrolls-evolved-whats-new-in-skyrim
- Parikka, J. (2012). What is media archaeology? Cambridge: Polity Press.
- PC Gamer. (April 2014). The Elder Scrolls: Arena review June 1994, US edition. *PC Gamer*. Retrieved from http://www.pcgamer.com/review/the-elder-scrolls-arena-review-mayjune-1994-us-vol-1-no-1
- Photographic_mammory (2015). MODs and Steam. Retrieved from https://www.reddit.com/r/gaming/comments/33uplp/mods_and_steam/cqosft5
- Polis, A. (2004). Daggerfall mods: Andyfall. Retrieved from http://www.svatopluk.com/daggerfall
- Postigo, H. (2010, September). Modding to the big leagues. *First Monday*, 15 (5). Retrieved from http://firstmonday.org/ojs/index.php/fm/article/view/2972/2530
- Purchese, R. (2015, April 24). Steam Workshop now allows modders to sell their work. *Eurogamer.net*. Retrieved from http://www.eurogamer.net/articles/2015-04-23-steam-workshop-now-allows-modders-to-sell-their-work
- Purchese, R. (2015, April 25). A paid Skyrim Steam Workshop mod has already been pulled. *Eurogamer.net*. Retrieved from http://www.eurogamer.net/articles/2015-04-24-a-paid-skyrim-steam-workshop-mod-has-already-been-pulled./
- Scacchi, W. (2011). Modding as a basis for developing game systems. Proceedings from GAS '11: *The First International Workshop on Games and Software Engineering*.
- Schrage, M. (2000). *Serious play: How the world's best companies simulate to innovate*. Boston, MA: Harvard Business School Press.

- Schwarz, E. (2011). *Skyrim*, or how not to make a PC game. Retrieved from http://www.gamasutra.com/blogs/EricSchwarz/20111111/90590/Skyrim_or_How_Not_t o Make a PC Game.php
- Smith, D. (2015, April 28). Valve CEO: 'Pissing off the internet costs you a million bucks in just a couple of days.' *Business Insider*. Retrieved from http://www.businessinsider.com/valve-ends-paid-skyrim-mods-2015-4.
- Smith, G. (2015). Nexus mods on paid mods: This would have caused a rift in Skyrim modding no matter how it was done. Retrieved from
 - https://www.rockpapershotgun.com/2015/04/28/nexus-mods-on-paid-mods/
- Sotamaa, O. (2007). On modder labour, commodification of play, and mod competitions. *First Monday*, 12 (9). Retrieved from http://firstmonday.org/article/view/2006/1881
- The Unofficial Elder Scrolls Pages. (2014). Retrieved from http://www.uesp.net
- Tresca, M. J. (2011). The evolution of fantasy role-playing games. Jefferson, NC: McFarland.
- Zielinski, S. (2006). *Deep time of the media: Toward an archaeology of hearing and seeing by technical means*. Cambridge, Mass: MIT.

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