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ENG 730: Game Studies
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All Your Base Are Belong To Us: Videogames as sites of critical inquiry in the participatory composition classroom

I: Project Overview

In their *On Multimodality* Alexander and Rhodes comment “when we think of engaging students in discussions about technology and the new media, such as gaming, we have tended to think in terms of issues” (158). These discussions with students tend to focus on social issues with games (violence and gender representation for instance), often overshadowing important discussions about medium history, textuality, and modality. Turning again to Alexander and Rhodes, suggests that the best ways to make use of games within compositional practice is to focus on “acknowledging, critiquing, and taking advantage of the rhetorical capabilities of computer and online games as interactive, collaborative, and compositional spaces” (169). While I do not oppose these important potentialities, I wonder if such a composition course might be better served by attending to some of their broader suggestions for approaching new media: “our move to historicize is to invite a more robust consideration of multiple contexts – including the sociocultural, political, pedagogical, and affective – that inform, structure, and condition how we compose with new media” (21). Like film before them, videogames possess a rich history, one ripe with the aforementioned contexts; if we want students to make the best use of videogames as a medium we need to provide spaces for students to critically engage with them.

While the recent enthusiasm for multimodality is often reflected through the perceived drastic, new affordances of new media, it remains important to realize that all media, even print-based media, has always been multimodal. Rather than fundamentally changing compositional practice, new media instead elicits features in old(er) media that have largely been taken for granted. This is not to deny the importance of new media, for, if anything, new media provides important accessibility to composing

that challenges our relationship with the media we consume and produce. For example, videos (the like of which proliferate on the social media site YouTube) seem to grant a new visual aspect to media when compared to the printed word; however, we must remember that printed text is undeniably a visual experience. One cannot extract the information stored in traditional printed-text without engaging with it visually. Moreover, having a text read back to you reveals yet another modality inherent in the printed word. Again, this is not to diminish what video allows us to do that print alone cannot, it merely asks that we consider how new technologies for storing and presenting information do not actually push us towards multimodality, we have always already been there. No, what new media, like video, changes is our relationship to our production and consumption, and it asks that we pay attention to a fundamentally more complicated relationship. As Enzenberger posits in “Constituents of a theory of the media”:

The new media are orientated towards action, not contemplation; towards the present, not tradition...That does not mean to say that they have no history or that they contribute to the loss of historical consciousness. On the contrary, they make it possible for the first time to record historical material so that it can be reproduced at will. By making this material available for present-day purposes, they make it obvious to anyone using it that the writing of history is always manipulation. But the memory they hold in readiness is not the preserve of a scholarly caste. It is social. The banked information is accessible to anyone and this accessibility is as instantaneous as its recording. It suffices to compare the model of a private library with that of a socialized data bank to recognize the structural difference between the two systems...The contradiction between producers and consumers is not inherent in the electronic media; on the contrary, it has to be artificially reinforced by economic and administrative measures. (21)

What is particularly helpful is Enzenberger’s view of new media’s potential to refocus our attention on the important, overlooked dimensions of media’s circulation (new and old alike), complex power

structures and all. While it is true that the multimodality of old(er) media is arguably overlooked, this neglect has caused us to accept other features as a given as well; we don't question why one text is created, replicated, and distributed over another because we have relegated replication and circulation as affordances granted to us, the masses, through new media. Essentially, prior to new media we accepted a diminished role in contributing to the dissemination of knowledge, we did not question who dictates what gets distributed nor whose interests this distribution actually serves. More to the point, it is easier to see new media as affording unprecedented distribution capabilities than it is to see that new media asks us to challenge distribution systems themselves. In attending to these rhetorical dimensions of new media, I suggest that we re-examine the relationship between producer and consumer roles we envelope in our composing; that a composition classroom may better serve students who value their everyday production as a contribution to a community as opposed to content for passive consumption. This is not to devalue consumers but, much like how new media changes how we view old(er) media, I suggest we help students to see the important ways they are already important critical producers contributing important knowledge to a participatory community of learners. In order to attend to the aforementioned complex web of relations inherent with any media asks that we provide students a sustained focus; to which I think videogames as a medium is well suited to fill.

In "Do Artifacts Have Politics," Langdon Winner suggests that we examine the "arrangements of power and authority in human associations as well as activities that take place within those arrangements" (123). Not unlike Enzenberger, Winner argues that no matter how dramatic the difference between the original purpose of an artifact and how it is (re)conceptualized, traces of the former persist in the latter. When we examine videogames as new media, a medium rife with its own distinct history, we can expect to find traces of its earliest incarnations despite its growing mainstream appeal. Moreover, to more fully utilize videogames in a composition classroom means attending to its humble beginnings as the playful tinkering of government researchers, its growth into a cultural force and major industry, its economic collapse as an industry, and its resurgence as a billion-dollar

commodity. Equally important to these larger socioeconomic movements of the medium, for videogames as a medium has uniquely always been swept up in capitalistic forces, is the rather tumultuous relationship between the industry and its players, or more specifically the modding communities who ingratiate themselves in the creative potentialities of the videogames within which they are invested. In attending to the compositional practices of these active modding communities, I seek to identify important insights and potential best practices for theorizing a rich(er) multimodal composition classroom, one that not only engages students with new media but also requires that they apply important discoveries and new perspectives to equally important and relevant old(er) media.

II. The History of the Medium

While the modern videogaming industry is a multi-billion dollar sociocultural force, the current prosperity was almost not so. The videogame industry crash of 1983 remains a significant moment in the history of videogames; the infamous *E.T. the Extraterrestrial* Atari cartridge burial remaining a verified and humorous anecdote. Moreover, the crash is often attributed to Atari's overzealous production of an inferior product to a market over-saturated with videogames of similar ilk; that there was a considerable lack of demand on the players end was genuinely understandable. However, outside of an impressive comeback often attributed to the onset of the *Nintendo Entertainment System (NES)*, the industry collapse is often relegated to a blip on the upward trajectory of videogames taking its rightful place of significance alongside the novel and film before it. Observing the advancement of the medium in such a way cannot help but feel incomplete. To move past this gross simplification asks that we complicate this history, to not only identify far more complexity in causes for the industry collapse and its subsequent recovery, but to examine the progression of the industry's relationship with its players, how the industry interacts with and is supported by its important consumer base. More to the point, what was the relationship between players and the industry before it was an industry? How did it develop and what changed in these relationships that lead to the crash? What changes were made that lead to videogames' rise as a social, cultural, and economic force? What does this relationship look like

today? In examining the important minutia between players and developers we can not only examine important insight between consumers and producers but also, in considering the relatively compact history of the medium thus far, consumers and producers' relationships to a medium's development over time.

That Atari is often synonymous with videogaming makes it a logical starting point, however, the important genesis of videogames goes back even further. It is common within a historiography for specific figures to emerge that help anchor the narrative in place, and while Nolan Bushnell, Atari's founder, was certainly in the picture, its best not to let his later importance obfuscate an important aspect of the medium's early history. As Montfort and Bogost explore in one of the earliest videogames, *Spacewar*:

As an electrical engineer educated at the University of Utah, [Bushnell] discovered *Spacewar* at school in 1962. That game ran on the PDP-1 minicomputer and displayed simple graphics on an oscilloscope. Steve Russell, an MIT student, had created *Spacewar* earlier that year. The game quickly spread to the few institutions fortunate enough to have a PDP-1. Given the price tag of more than \$100,000, these were usually universities and laboratories. (Montfort and Bogost 7).

Bushnell may have been someone who knew how to sell the technology as entertainment, but Russell was a pioneer in its establishment. An important facet of his creation of *Spacewar* is that it was developed as a side project, tinkering that he completed in addition to the computer science research he was conducting at the university. Moreover, Russell worked on his project open source, leaving this early videogame open for community authorship, allowing other programmers to modify and add features (Dyer-Witherford and de Peuter 8-9). As Dyer-Witherford and de Peuter further explain, early projects like *Spacewar* were "an integral expression of the culture of computer-science 'freaks' - a culture often at odds with the military institutions that funded it" (8). While true that the project was not yet viable as a consumer product considering the hefty pricetag for the equipment required to run it (let

alone its accessibility outside of research laboratories), regardless, Russell's project existed as a participatory activity for a community of government researchers. Essentially, *Spacewar* embodied an important aspect of play, what Sutton-Smith would refer to in his *The Ambiguity of Play* as a *rhetoric of play as frivolous* or "the opponent to the seriousness of the other rhetorics" (201). Concerned with "mundane" play as frivolous often represents play that resists seriousness and structure, and while frivolity might seem in stark opposition to work, such play is "obviously very serious to its participants; they strive very earnestly and with great effort at their play...their efforts produce important personal and social outcomes that cannot be gotten easily in any other way" (201-202). What remains important for Russell and his computer "hacker" participatory community is that they viewed their play as valuable in so much that it was a separate act of resistance to the research they were mandated to do; the necessary pushing at the boundaries of what was possible or even expected of their time and labor remains a crucial component of videogames creation in the first place. Returning to Winner's conception of artifacts being embedded with the purpose(s) of their creator despite what directions their development may take, we may say that from the onset of their creation videogames have been embedded with a playful resistance, a frivolity that encourages playful critical thought and experimentation.

Videogame creation as a frivolous practice would seem to resist the structuring of a budding industry, and yet this is ultimately what leads to the medium's expansion. As much as these early modders resisted the commoditization of their labor through their frivolous programming, the efforts of Bushnell to establish a new and viable industry meant simplifying hardware to the extent that he could put said innovations in the hands of a paying public: "To make a breakthrough, Bushnell needed to merge his experience as an electrical engineer and as a midway barker" (Montfort and Bogost 7). What is important to note here is that as much as Russell's aforementioned frivolity is embedded in videogames, so too are Bushnell's capitalistic aspirations; the tensions between these two integral ideologies remain woven in the medium. Moreover, as the videogame industry grows, it will continue

to demonstrate elements of both: “As tavern culture gave way to the video arcade...Arcades had more in common with casinos...Bushnell, ever the entrepreneur, recognized this as a market opportunity and decided to create an arcade space...one that would appeal to broader audience” (Montfort and Bogost 8). Not unlike other old(er) mediums, videogames straddle the line between boundary crossing innovation leading to advancement and yet a dependency on constant advancement that renders older technology obsolete. When things are going well it is hard to see cracks in the solid foundation to which the videogame industry was no exception. Such rapid growth for the industry in the beginning makes the proverbial blind spots understandable; however, videogames were hardly a sustainable medium, and one can only wonder what it would take for them to teeter off the edge.

To attribute the videogame industry crash of 1983 as a resulting from overestimation of unchecked advancement would not be far from the truth; however, examining the aforementioned foundational issues from a production/composer standpoint may provide more insight into the industry’s inevitable, and arguably necessary, collapse. Gratzner and Stiefel identify three important contributors to the crash: disruptive technology, delimited differentiation, and decreased entry barriers and destructive liabilities of newness and smallness (165). Essentially, there were so many different videogaming technologies in circulation that it dissolved a consistent consumer base; companies were so invested in their products that they did not take necessary risks causing an over-saturated market of far too similar products and on increasingly aging hardware; and the price of entry for hopeful companies, those that were willing to experiment with new potentialities, were so steep and the development processes so distinct and complex system to system that only the established videogaming giants had the necessary resources. Moreover, pushing these smaller companies out meant a lack innovative experimentation, the playful tinkering that led to videogames in the first place, which made for an industry that suffered from severe stagnation and a rapidly declining user base. To say the industry was increasingly out of touch with its players would be an understatement, in short videogames had become an empty commodity subjected to the whims of Atari’s doomed monopoly

(187). That is not to say that Atari did not try to innovate, the great success of titles like *Space Invaders* (1978) and *Pac-Man* (1980) further motivated Atari to move beyond porting said titles to their console and toward developing a successful new title of their own.

Maze Invaders (1981) was an odd title for two reasons. First, it was a title that progressed rather far in its development cycle and yet was never released; only two functioning machines are said to exist. Second, the game exists as a mash-up of several existing titles from other competing companies – namely Taito’s *Space Invaders*, Namco’s *Pac-Man*, and Stern Electronics’s *Beserk*. In contrast to the early community-driven tinkering, we might read this ultimately failed attempt by Atari as an example of top-down industry driven experimentation, one that attempts to commoditize the very act of modification itself in such a way that it is divorced from the important influences of the player community itself. As evident in Atari’s focus group research for the game’s development, the player base they were consulting was largely consumers who had very little knowledge of what the platform was capable of doing; their feedback suggesting more aesthetic alterations such as brighter colors and nebulous gameplay observations such as the gameplay being “too predictable” (Atari Incorporated). The programmers annotations to these comments, an understandable “What?,” demonstrates a glaring disconnect between player expectations and programmer capabilities. That is not to blame the consumers and their feedback for the inevitable scrapping of the project but rather to draw attention the limitations of market research conducted in this way: innovation in videogames cannot be reduced to aesthetics alone. If anything, the other feedback these focus groups provided function as a poignant reminder of the lack of differentiation in the market, namely that consumers followed Atari’s mash-up in kind by suggesting that *Maze Invaders* become more like other successful titles rather than coming into its own (Atari Incorporated).

While project’s like *Maze Invaders* epitomize many of the conditions that Gratzner and Stiefel identified as causes for the crash, that is not to say that said failure was not instrumental to the health of the industry. As Gratzner and Stiefel explain further:

Driven by a rapid pace of new technological innovations in the industry, a constantly new and differentiated playing experience was necessary for growth in the industry. It was by constantly creating special markets on their own through real as well as putative differences that firms could avoid commoditization...In many regards, the crashes were a necessity for the industry to return to a pattern of growth. (189)

Essentially the health of the industry is to resist commoditization, to resist the three aforementioned primary factors for the crash; if differentiation is limited, whether by disruptive technology or barriers to production to smaller risk takers, we can expect a negative impact to the community. To resist this commoditization is to embrace the *frivolous play* that tinkerers and modders engage with to push at the boundaries of the medium, for while we cannot remove games from their capitalistic enmeshment that also means we cannot ignore this other important pole in gaming culture. Kline, Dyer-Witford, and Petuer suggest that in order to tease out this tension in the medium we would benefit from attending to the “technology circuit” of videogames development or the “complex path by which inventions and technological possibilities pass from initial experimentations through the market and into mass consumption” (56). What is important to note in this trajectory is that initial experimentations are not instantly democratized and made accessible to the public, it must pass through cultural and economic systems (for videogames that means a capitalistic system). As best demonstrated in Kline et al’s diagram, “The Three Circuits of Interactivity in the Mediatized Global Marketplace” (figure 1) we can observe the larger cycle we have already explored through the industry crash, a movement from production (initial experimentation) to commodity to consumption (the industry) and then back again to a new production cycle (additional modding). What is important about the smaller cycles that move this larger cycle forward is the overlap between them: that technology, marketing, and culture continuously influence each other is an important feature of any medium and one that videogames have thus far served as an effective case study. That being said, an even closer examination of the relationships

between players, designers, and the games themselves in creating gaming culture could provide us with an entry point for composing within the medium.

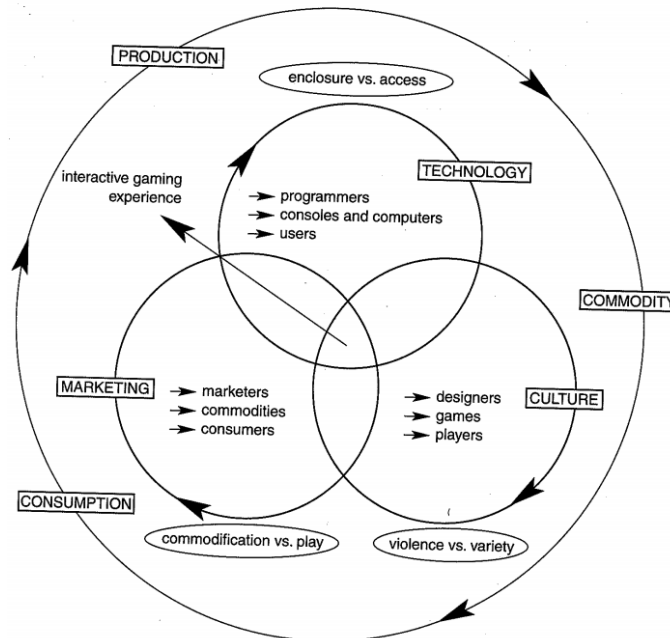


Figure 1 (Kline et al 58)

III. The Modding Modder

While the coming of the *Nintendo Entertainment System (NES)* in the mid-1980s ushered in a resurgence for videogame consoles well into the 1990s, it was not exactly the messiah it seems to be. As suggested in the previous section, while detrimental, the industry crash was necessary in order for videogames to return to a period of growth, but what does this new dynamic between players and designers look like? Consoles by their nature are a rather closed off systems, so where exactly are the boundaries broken down enough for experimentation to happen? What has been neglected in the larger trajectory is the growing PC gaming community, a community that filled a void for consumers disinterested in the decaying Atari console and who enthusiastically embraced the participatory capabilities that came with a more open platform. As Dyer-Witherford and de Peuter explain in “Immaterial Labor: A Worker’s History of Videogaming”:

As the console side of virtual play became a carefully guarded proprietary oligopoly, the open architecture and networked connection of the PC fostered a culture of enthusiasts who prototyped, modified, circulated, and repurposed games for free. This volunteer activity, generated from adolescent experimentation plus cheapening technology, was initially a highly autonomous, semi-illicit activity...[it] was soon recognized by game capital as a source of ideas that could be harvested, and by the turn of the century it was reaping these fields with increasing thoroughness. (23)

Essentially, the PC gaming market offered an important alternative to a siloing industry; rather than restricting access to resources for contributing to game development as Atari had done, PC gaming opened up important approachable means for the necessary experimentation to occur. While this certainly ensures the important differentiation that resists commoditization, thereby greatly reducing the likelihood of another industry crash, it also introduces another interesting symbiotic relationship between game developers and players.

The role that modders play within the PC gaming structure fulfills the important frivolous experimentation that we observed with Russell and his community project *Spacewar*, albeit there is an important distinction between the two practices. While both do seek to resist a commoditization of their labor, Russell's tinkering was not contributive to his government research responsibilities whilst PC modders tinkering not only contributes to the development of games but has become a pivotal component of videogame development. This is what Dyer-Witherford and de Peuter refer to as *playbor*, the immaterial labor that game modders partake in which greatly contribute to the production, expansion, and notoriety of videogames (23). More importantly, those early PC games that had active modding communities tended to be the more successful: "But these successes rose out of an invisible, seething ferment of immaterial micro-innovation in which most projects crashed and burned, perishing only to provide an emergent industry with a critical mass of free creations from which a handful of winners could be picked" (24). If both developer and player-modder are responsible for the success and

continued development of a videogame, where do we draw the lines of authorship? Even though companies like id Software release Software Development Kits (SDKs) to their player communities, should that mean they retain ownership over the game itself? As far as the industry itself is concerned, the developers reap the fiscal returns on their product but that does not mean they retain absolute control over the game. While the relationship seems downright exploitative, and arguably developers are relying on the continued participation of their games' players, that is not to say that modders do not have ownership over the game; if anything, the collective gaming community exhibits far more influence than one would assume.

In "Modding to the Big Leagues," Postigo comments that "Modding culture can be thought of as a point of articulation between the industry and participatory cultural practices" (1). Modders are often seen as mere fans with the technological know-how to add aesthetic components that fit their preferences. What Postigo asks that we challenge with modders and gaming culture is to view modding as an "important site for critical analysis of the relationship between participatory audiences and media industries" (2) which is not unlike Alexander and Rhodes's conception of *prosumerism*, or composers who expand beyond the consumption and analysis of texts toward engaging in critical making (106). Prosumers are involved and knowledgeable about the mediums they compose within, their act of making not replacing analytical skills but rather complementing them: prosumers not only know where the boundaries for their mediums lie but they also know how to push at these boundaries because they have practiced doing so. Turning to the modder or hacker, the important frivolous character for modern gaming culture, we begin to see their behavior less as a form of mean-spirited destruction but rather as a critical, creative impulse that playfully and importantly resists the same overbearing structures that led to problems for Atari in the 1980s. In "From Rule Breaking to ROM Hacking" Will Jordan explains modders' important revelatory function in gaming culture, "When we conceive the hacker as a critical subject formed in antagonistic relation to the systems of intellectual property, one who challenges and interrupts the cohesion of rule systems embedded within technological commodities, these systems are

finally brought to our full attention” (709). Essentially, a hacker or prosumer mindset is one that considers, engages, and challenges complex power relations within a particular medium; prosumers’ composing can be taken as frivolous rhetorical acts which push back on medium expectations and genre boundaries thereby revealing problematic systems of relations very much in the need of challenging. Again, this is not to privilege acts of production over consumption per se, but rather to challenge the notion that a composer must be one or the other, to challenge a common held belief that “non-serious” or “mundane” acts of composing are less important. Not all composers will become professional writers or programmers, nor should they have to imagine such career possibilities in order to see value in their everyday composing practices.

Perhaps the most important lesson we can take from the critical making mod communities is their loyalty to participatory cultures; as with other new and old(er) media, videogames’ participatory cultures are ones where you compose not for financial gain but credibility within the community. Moreover, in “Creative User-Centered Design Practices,” Sotamaa directly addresses this prosumer stance by suggesting that gaming, modding in particular, is an example of a practice that resists traditional passive consumption going as far to refer to early hacking culture as “play” or actions done for the sheer enjoyment of it. All of the frivolous tinkering and experimentation make for “innovative gamers, who rework and develop further products of the games industry, [and] share characteristics with fans of other media texts...their productivity often takes a textual and material form: they create things” (111-112). The user-centered design that Sotamaa observes accentuates a focus on user experimentation that transitions producers away from researching the needs and wants of consumer communities because users themselves are discovering, communicating, and enacting these needs. That being said, we can think of the actions of these modders and other composers as rhetorical, that even the seemingly mundane composing that prosumers engage with has the power to disrupt the traditional top-down communication style we saw with Atari’s *Maze Invaders*. When we think of all acts of composing as rhetorical, even the most mundane, we see an important disruption in the

traditional relationship between consumers and the products made for them by producers. Returning to the “The Three Circuits of Interactivity in the Mediatized Global Marketplace” diagram (figure 1) we can now observe the important nuance between designers and players, that being involved with gaming culture is far more active than we may at first realize.

It is a common misconception that modders tinker with videogames to build the necessary skills to eventually enter the industry, a pathway that privileges game development as a much more desirable form of composition; however, we must keep in mind that prosumers may have other aims in mind for their critical making, modders being no exception. As we have explored previously, many modders do what they do to resist commoditization, not to work towards actively contributing to it. It comes as no surprise that after interviewing active modders for the game *Operation Flashpoint*, Sotamaa found that the original interest these tinkers had in modding stemmed from other activities that they did in the “real world,” the realm of the mundane. While some modders ultimately viewed modding as a way to break into the industry, the more experienced modders paradoxically sought employment outside of the videogame industry (Sotamaa “When The Game Is Not Enough” 13). This suggests a certain ethos with modders, that part of what keeps the practice meaningful is the unrestrictive nature of it. What Sotamaa’s findings describe is the benefit of frivolous play, that while it is an act of resistance it is also a source of enjoyment and an important site of connection to a larger community that builds upon each other’s work. While there is certainly some sense of ownership, many mods are collective authorship projects and these participatory cultures, rather antithetical to the industry, are more concerned with building the best ideas that they can. As Sotamaa explains, “Reworking someone else’s work is not regarded as theft but more as paying homage to a good job” (12). Moreover, these participatory communities are rather democratic in the sense that not every member has to possess the same level of skill or perform the same kind of community labor.

Postigo finds in “Of mods and modders,” that a participatory community has different tiers of involvement, some modders use developer provided map-making tools whilst others with more

programming knowledge perform more extensive modifications. Many modders mod “to identify with the games and thus [increase] their enjoyment of game play” and to provide an important service to the larger gaming community (309). Returning to our notions of prosumers and their practices, we know that prosumers possess the knowledgebase and means to more fully engage with the affordances of new media because they have experience working with these particular mediums. What the behavior we see with modders suggests, then, is that prosumers also work to create environments where less experiences prosumers can build important skills. If anything, we might say that modding communities seek to encourage and support the continued intellectual development of its community members – a democratization of knowledge – to provide support for the community at large is therefore a highly sought after reward onto itself. This stands in fairly stark contrast to the over-protective practices of the videogame industry of the 1980s where the same exact practices would have been seen as devastating to fiscal stability – which is ironic provided that said isolationist practices are arguably what lead to the crash. Furthermore, Postigo suggests that developers work closer with modders, even going as far to suggest that developers provide resources (such as high end computers) to modders provided how much labor modders save gaming companies, the longevity modders provide their games, and how willing modders are to experiment: “Because modders are likely to take creative risks that game companies are not, consumers will have available to them a wide selection of genres and themes in gaming that may not have been available if production of games were cloistered within institutional frameworks of a business” (312). Coming full circle a bit here, we can say that modders have less interest in joining the industry than expected because modding, or critical making for that matter, cannot provide monetary fulfillment alone; once it becomes a financial endeavor for the modder the practice is instantly tainted, the impetus to create in the first place has been lost. The best way, therefore, to keep modders and other prosumers fulfilled in their composing is to create and then to maintain the participatory communities where they thrive.

IV. Prosumers in the Composition Classroom

As we have theorized thus far, properly integrating videogames into the composition classroom means more than just assigning a videogame as a text; that would be akin to only assigning readings in a writing class. In order to seize all that the medium offers means exploring what the medium affords, not in isolation but in relation to other media; to tease out the complex relations within any medium's development over time may best serve students as they situate their own composing practices across these same relations. While any new media would certainly serve as an appropriate focus, my selection of videogames is derived largely by the relatively short history that the medium has (in comparison to say print based media) but also with the hidden complexity that the medium actually possesses and that remains below the surface of its mainstream appeal. My hope is that in learning with and through videogames as a compositional space students will be able to transfer this knowledge to other contexts: in learning the medium's development over time students might question similar issues with old(er) media that have been taken for granted and yet still very much affect their composing and rhetorical agency.

Learning the history of the medium is important, but not just for the chronological details and historical figures. A multimodal composition classroom would benefit from learning the practices and rhetorical moves that that figures who have shaped and been shaped by the medium exhibit over time. As we observed with the genesis of videogames, the *rhetoric of play as frivolous* is of great importance to the videogame medium as it continues to develop: boundary crossing and sociocultural/capitalistic resistance are moves that composers should embrace in working within the medium. To encourage this prosumer stance in working with videogames, I suggest we invoke a modder-mindset as a way to teach students practices that prepare them to be critical meaning-makers in this new(er) compositional space. Considering modders' heightened awareness of the tensions/benefits that the gaming industry reaps from their compositional labor may serve to better guide student's engagement with other media; to see the "mundane" writing they do in the classroom as itself situated in larger mechanisms and to which they have far more importance than they assume. Moreover, this modding mindset need not be

dependent on highly technical skills but rather student's examination of how we modify systems created for our everyday consumption (i.e. Twitter, Facebook, and YouTube). In a sense we are all already "web modders" and "When we are invited to participate with tools made by others we ought to ask how our contributions are shaped through technological affordances" (Postigo "Modding To The Big Leagues" 9). If invoking a modder-mindset encourages prosumers to experiment and differentiate, then new media functions as a disruptive technology that decreases barriers for these contributions – coincidentally all three factors of the crash have effectively been counteracted.

While the history of the medium certainly provides broader goals, we can also glean other potential best practices from game studies. Returning to Montfort and Bogost's *Racing the Beam* suggests that innovating with videogames, or any medium for that matter, happens best when developers consider the affordances *and* limitations of the medium: "When the work being developed is innovative, it is often enabled by new exploration of a platform's capabilities, by reconceptualizing the platform's limitations, and by attending in new ways to how and why people use it" (97). I would then argue that as with other media, videogames draw attention to the importance of knowing the limitations of your medium – even in old(er) media – but not as a restriction so much as an opportunity to embrace creative problem solving and composing. Another important affordance, or awareness for that matter, that videogames facilitate is what Bogost coins in his *Persuasive Games* as *procedural rhetoric* or the use of processes that structure behavior. Bogost notes that new media forms necessitate new rhetorics to address their capabilities. For instance, videogames can utilize visual rhetorics, but considering the systems and processes involved in their creation, visual rhetoric alone cannot account for all of the rhetorical capabilities of games. While procedural rhetoric is aligned with the affordances of videogames in particular, they are not its only examples: any medium "that accomplishes its inscription via processes" is utilizing procedural rhetoric (46). Not unlike the participatory compositional space theorized here, there is a participatory quality that moves beyond mere demonstration, for it is not enough for a user to have the process explained to them even with

appropriate visuals; what makes the experience persuasive is engaging in the process itself and also acting through a composer's own capability.

When it comes to key practices for the critical-maker multimodal classroom that incorporates videogames as new media, the following theorized three-unit course considers the following three to be of the utmost importance: working with/through constraints, modifying/pushing boundaries with genre and medium, and procedurality (communicating with processes). The first unit tasks students with learning about the history of videogames as a medium in addition to their own composing processes. Considering that *prosumers* have a heightened rhetorical awareness of their composing and the media they work through, this first unit would also be dedicated to helping students work with their participatory community of fellow composers to identify what Shipka and Prior refer to as environmental selecting and structuring practices (ESSPs) (1). An early assignment would be to have students examine planning documents for an Atari game, like *Maze Invaders*, and to then analyze the development cycle and feedback processes for this canceled game. Students would then be asked to examine a website for the popular game mod *Cry of Fear* and compare the feedback received on forums by users to the aforementioned focus group feedback. In comparing the two feedback cycles – one top-down, industry driven and the other bottom-up, community driven – students assess their efficiency and determine the parameters and roles they will create for their participatory composing community with specific emphasis on what would be of the most critical use to them during the feedback portions of their own composing process. This first assignment is important in that it establishes a “modding community” in so much that students begin to see their participation in that community, their invoking of a modders mindset, as not only important to the feedback they give classmates but also that critical, useful feedback is important to their own composing process. Not unlike the modders who compose not for financial gain but for credibility within their participatory community, students can conceive of their work in the course as important service to their participatory composition classroom community. Moreover, in learning about the tinkering/frivolous play integral to

the genesis of videogames, students are encouraged to invoke that same playful practice in their own composing. These two facets of the first unit establish an important foundation for the larger trajectory of the course: students will use the modder mindset and their participatory modding community as key tools for their work in the course.

Having established and practiced community guidelines students then transition into the next unit of the course which tasks them with comparing new media and old(er) media. More specifically, students will examine different media and their affordances and constraints. While affordances are important, this unit will ask students to pay more attention to constraints, to see every last bit of compositional potential they can squeeze out of a medium before resorting to something newer; the resourcefulness of the modders mindset deployed to full effect. A suitable case study for this would be the Atari game *Yar's Revenge*, a game that worked with the constraints of the Atari console and forged creative solutions that capitalized on what the medium could offer (Montfort and Bogost 97). To further develop their prosumer stance, students would apply insights gleaned from this case study towards products in other mediums. What would the *Yar's Revenge* of film look like? What text-based product found creative solutions for limitations imposed by its medium that actually contributed towards the composition? Alongside composition case studies like the aforementioned, students would also learn more about the "Three Circuits of Interactivity," the cycles that mediums and compositions go through as they develop and circulate amongst the public. In attending to these two fronts, students will gain a greater sense of how medium shapes genre conventions but also how composers can push at these same boundaries in their own compositional practices. More to point, students will get a sense for how they as composers already push at these conventions in their "mundane" composing and how these decisions might allow them to cross genre boundaries. Moreover, students also will get a sense for how new media disrupt these conventions originally instituted in old(er) media and why. The culminating unit project would be a "media tracing" assignment that tasks students with examining a topic and how

it is expressed across different genres and mediums; what is added to discussion of the topic as it moves across forms and as it is circulated.

Moving into the third and final unit students have already examined their practices as composers and consumers; experimented with a modder/prosumer mindset in identifying and creatively working through constraints in addition to crossing genre and medium boundaries; and they will have learned about the development of videogames in particular and the sociocultural/economic processes compositions go through as they are circulated. The last unit then asks students to attend even more to the rhetorical properties of different media and genres with an emphasis on procedurality, or persuading with processes. Taking from the “media tracing” project they completed in unit 2, students will look at how the videogame they selected utilizes procedural rhetoric to make its argument. Students will then look for examples of procedural rhetoric in other mediums for comparison. Alongside this rhetorical inquiry students also learn about immaterial labor and how modders view their work, their critical tinkering, as a resistance to the commoditization of their compositional labor. Students will also examine how the work they have done in this course – their mundane composing, consumption of various texts (games, articles, and films), and sustained inquiries – functions as labor for the institution. Regarding the course itself as an example of procedural rhetoric, one that is accomplished through multiple mediums and genres, students are tasked with designing a course syllabus of their own around a topic of their choosing. Essentially, students will transform the labor from the course into a multimodal composition that utilizes procedures (class content and activities) that argue a larger point they want to make. Rather than supplanting new media for old(er), students will use their new prosumer mindset to choose the components that they deduce will work best for the procedural system they are designing. Their syllabus project, therefore, is an embodiment of their intensive knowledge and experience working through multiple mediums.

V. Conclusion

This current project sought to answer Alexander and Rhodes call in their text's introduction for instructors to consider "how the rhetorical affordances of media might help us challenge ourselves to teach composing more robustly, with greater awareness of how to use different media effectively" (20). Perhaps the most important lesson learned when working with new media is to not settle for simplified notions of how it functions in comparison to old(er) media. Returning to Enzenberger's ideas for new media, I think that despite seemingly new capabilities and accessibility, the same complex issues we found in old media are perpetuated in the new. If anything, we would be better served in acknowledging the influences that persist in the compositions we make with new and old media alike, the messy relations that Winner attends to in his "Do Artifacts Have Politics." Helping students to attend to these issues as critical makers, modders and prosumers, asks that we teach them the history of the mediums they work through and how various other mediums and genres are interrelated. What is useful about videogames in particular is not only their relatively compact history (as compared to other mediums) but also in how it lays bare issues of ownership, authorship, rhetorical agency, and capitalistic influence. In contending with videogames rather complex history, I hope to have proven that we can find new ways to teach students multimodal composition and critical making: new pedagogical theories, rhetorical stances, compositional practices, and sites for new media theorizing.

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