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State Intervention, Videogames and The Public Sphere: a Critical Political Economic Analysis

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STATE INTERVENTION, VIDEOGAMES AND THE PUBLIC SPHERE:

A CRITICAL POLITICAL ECONOMIC ANALYSIS

by

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A thesis presented to Ryerson University and York University in partial

fulfilment of the requirements of the degree of

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Communication and Culture

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Abstract

This thesis illustrates, using political economy, the ways in which governments increasingly play a large role in developing, or encouraging the development of, videogames, and how these games then circulate and interact as political texts in the public sphere. This is achieved in four parts: two on history and theory, and two case studies. The theoretical chapters have two main foci: the first is by finding value in videogames as meaningful cultural artifacts that play a role in the ongoing maintenance of the state and civil society. This is achieved through a literature review and discussion of the contemporary theoretical parameters of the public sphere, which draws heavily on the work of Habermas (1991), Warner (2002) and Drache (2008). In the second chapter this discussion is located inside the field of game studies, drawing heavily on the work of Bogost (2007), whose theoretical frameworks about the persuasive potential of videogames is investigated through their unique status as computational objects. The two second chapters each conduct a political economy through commodification, spatialization and structuration (Mosco, 2009) on the development of videogames who have a direct link with state intervention: The United States Army recruitment videogame *America's Army* (which was funded entirely by the Pentagon) and the Toronto developed iOS videogame *Superbrothers: Sword & Sworcery EP*, which was the recipient of a small-scale cultural industry grant from the provincially owned Ontario Media Development Corporation.

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Introduction: Videogames are Communication and Culture. Time to wake up.

On June 30 2010 at the Tiff Bell Lightbox in downtown Toronto an event took place to mark the end of several months of heavy promotion on a videogame for Apple's iOS platform (which runs Apple's ubiquitous iPads, iPhones and iPods). The game was called *Superbrothers: Sword & Sworcery EP* (hereafter referred to as *Sworcery*), which had launched to fanfare and excitement in the Toronto videogame development community. It had made waves with various critics and had been generally recognized to be another example in a long line of successful small scale, but artistically forward thinking, videogames developed in the city. The night was titled the Midsummer ROCKSHOWCASE, which was putting a focus on showing off the work of other Toronto videogame developers, as well as a live performance by Jim Guthrie, a local musician who had recorded the music for *Sworcery*. In keeping with the showcase atmosphere, a new copy of the local self-published 'zine *exp.* was handed out to all attendees. Prefacing it was a short essay written by Craig Adams (2011), otherwise known by his company name, Superbrothers. Here it is, reproduced in full:

So I've heard it said that "videogames" are outstripping films in terms of cultural mindshare, and it's commonly accepted by non-serious people that films have long since clouded the minds of a population who used to read books... so it would seem in this 21st century, the imaginations of young people in the privileged suburbs of wealthy, western countries are often formed in part by the creators of videogames, who are themselves often at the mercy of the videogame press... people whose job it is to know what's up with videogames. If that's the case then these creators and their critics have a degree of power, in terms of the reach and the impact of their ideas. This power may well be illusory, a fabrication constructed with only a smattering of statistical data... or it may actually be true. Do you feel that shiver run up your spine? Or maybe not, maybe it isn't true... maybe it's only the idiocracy who pays any attention to videogames, I don't know...

In any case, here we are. It's the 21st century and we are not luddites, we will not

trade in our iPad 2 for a horse. We no longer dream of supersonic jets, we do not long for the adventure of space flight anymore; we as a culture dream about a new operating system, or a new machine to distract us.

We look forward, we believe in a forward momentum to the future... even if we fear the future we accept the march of time. We look to each new machine, each newly refined system, to save us... to save us time... to save us trouble... to show us an unforgettable adventure at a reasonable price, maybe a dollar or two but no more...

We as a generation have taken a leap of faith. We trusted those glimpses of brilliance we had witnessed here and there in now-antiquated videogames would one day pay off, that a new culture would emerge with a new strategy for thinking, a new method for communicating, that the computer system and videogame culture would reflect something profound about our ongoing mutations as a species.

With the noise and the furor of E3 2011¹ just a few weeks past we wonder, who makes these videogames? And who are they for? Where are the marvels, the masterpieces?

We know the reasons: team sizes tend to dissipate the creative dialogue, platform holders divide the audiences and undermine the viability of a project... or perhaps we go one step deeper and wonder if the audiences that exist, raised primarily on videogames, have taste? As old men, some of us approaching thirty (gasp!), some of us over thirty, we wonder if the kids are ok. (p. 1)

Adams' acute introspection into what drives and informs the videogame industry was once rare – but this kind of critical thought is beginning to rise out of new economic conditions that allow for small teams to build and create videogames with mass (or at least medium) market potential. These questions – about the role of videogames in society, their power, what they mean and what they say about us are all topics that this thesis explores.

There was a time when videogames were thought of primarily as toys and frivolous distractions for the young, but that era is quite clearly gone. In 2010 Ian Bogost, Simon Ferrari and Bobby Sweitzer' published *Newsgames: Journalism at Play*, which discusses and illustrated

¹ The Electronic Entertainment Expo (E3) is the videogame industry's biggest trade show, which takes place every year in late May or early June.

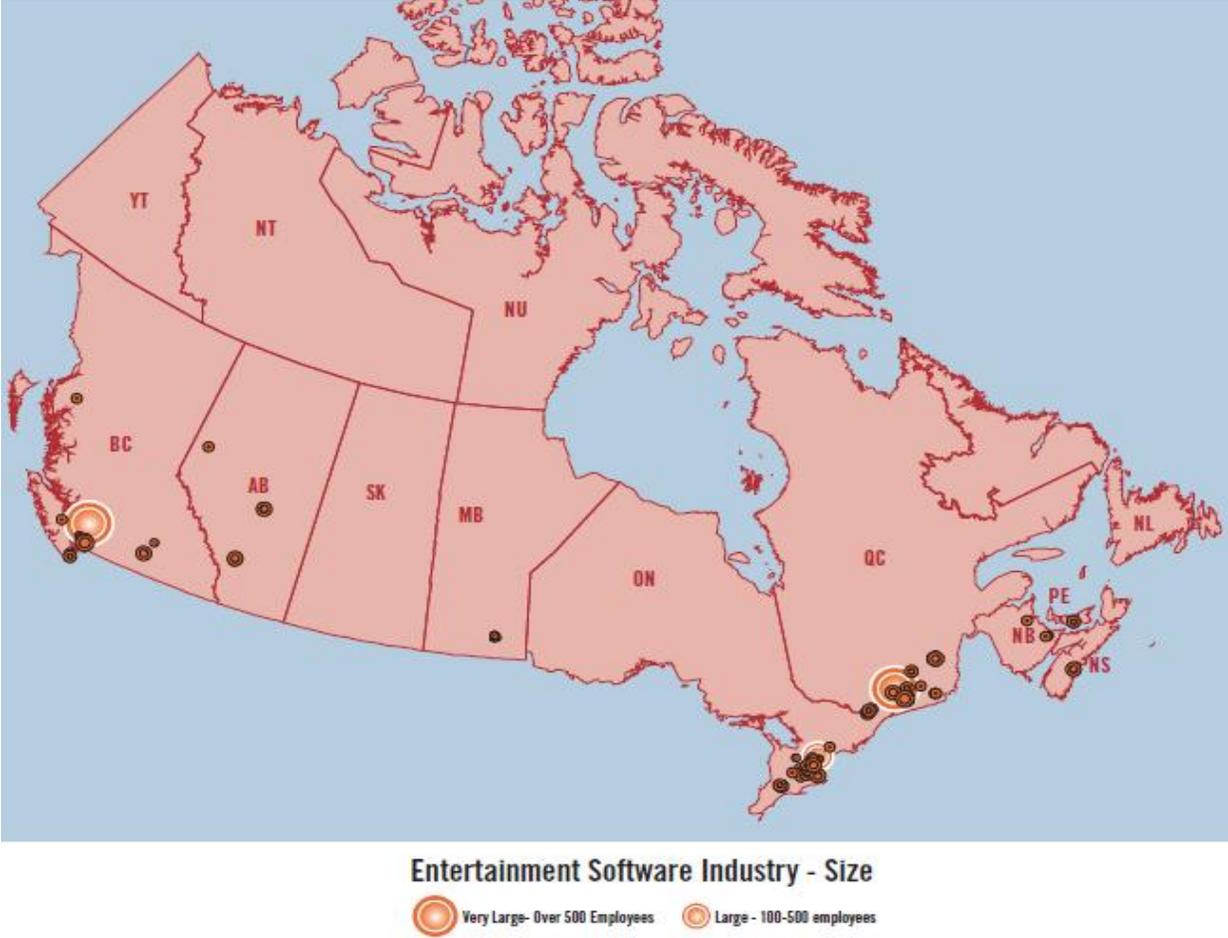
the ways in which traditional journalism outlets like *The New Times* and *Wired* have begun to experiment with using videogames as another means of telling the news. Popular writers and thinkers like Jane McGonigal (2010, 2011), a professor at the California-based think-tank Institute for the Future have become proponents of the power of videogames to “save the world”. McGonigal's ted talk, “Gaming Can Make a Better World” has more than one point two million views between Ted.com and YouTube. Industry reports show that the spread of broadband and powerful computers into the homes of ordinary Canadians put videogames in the reach of almost every major demographic. 47% of Canadian households have at least one videogame console, with 96% owning a personal computer, likely capable of playing various videogames. Maybe most exciting is that the stereotype of the lone male adolescent gamer is fading fast: 38% of gamers in Canada are women (ESAC, 2011).

An important shift in the last decade has been the use of videogames by the government and civil society to communicate with the public, much in the same ways that the state reigned in and used nascent telecommunications and cultural industries to push their agenda during the 20th century. Just as modern statehood owes much of its cultural coherence to the spread regional dialects through the printing press (Anderson, 2006), videogames have begun to make up a large part of the cultural and, increasingly, political discourse of the 21st century nation state. (Dyer-Witthford & de Peuter, 2009; Morozov, 2010)² Numerous governments, civil society organizations and private groups are using videogames with increasing frequency to communicate with citizens and consumers. This thesis examines these broad trends by

² For examples of political videogames, see: *Persuasive Games' Activism, : the Public Policy Game, Take Back Illinois, and The Howard Dean for Iowa Game*. Also see Morozov (2011) on China's new push in propaganda games as well as Dyer-Witthford & de Peuter (2009) on the US Department of Defense' *Full Spectrum Warrior* and Bogost (2008) on *America's Army*.

conducting a study of two videogames directly impacted by government intervention of some sort.

The Canadian Context



Geographic location of Canada's entertainment software industry. (ESAC, 2011)

Canada has, due in part to its proximity (and shared language) to the United States, become over the last 20 years a leader in videogame development and export. In Canada alone there are

numerous major video game studios located coast to coast in cities like Vancouver, Montreal, Toronto, Edmonton and Niagara Falls catering to the vast digital appetite of North America, and increasingly, the world. As a result of this Canada is rated as the third most successful videogame Industry in the world, behind the United States and the United Kingdom. It employs over 14,000 Canadians at 247 various establishments in what the Entertainment Association of Canada refers to as “high-paying jobs”. It also is a sector of high-growth, with estimates suggesting 29% annual expansion over the next few years (Dyer-Witthford & Kline, 2003; OMDC, 2011a; OMDC, 2011b). In addition to this high stature of the videogame industry here, there is another very important reason to conduct this type of research: Canada's substantial telecommunications, broadcasting and cultural industry regulation. This stands in contrast to the lack of any substantial protectionist cultural regulation in the United States, Canada's unique geographic position, small population and highly educated cultural workforce has produced a strong regulatory environment that privileges local producers in almost every form of cultural content. Music, television, film, radio and other cultural practices are the beneficiaries of regulations demanding local ownership, production, distribution and citizenship (CRTC, 2011a; OMDC, 2011a). Yet some claim that government programs whose primary concern are videogames development lag behind. As Dyer-Witthford and Sharman (2005) noted, there is a significant gap between the economic and cultural importance of videogames, and the ways in which the government funds and supports their development saying that:

“... it is true that, as important as tax incentives have been to game developers, the total amount of are probably small compared to those devoted to other cultural industries, and come rather haphazardly from programs designed primarily for other purposes. In part, this is simply due to Canadian cultural policymakers lack of awareness about the scale of and importance of the video and computer game industry.” (p. 200)

In contrast to this, the last several decades have seen the liberalization of regulatory bodies, the spread of global markets and increased global cultural flows. In this context Canada's telecommunications, broadcasting and cultural regulatory regimes provide a frame through which to understand the future of Canada's videogame industry.

The Structure of the Argument

This thesis focuses on illustrating the ways in which governments increasingly play a large role in developing or encouraging the development of videogames. This is achieved in four parts: two on history and theory, and two case studies. The theoretical chapters have two main foci: the first is by finding value in videogames as meaningful cultural artifacts that play a role in the ongoing maintenance of the state and civil society. I do this by building off the theoretical work of Jurgen Habermas (1991), Micheal Warner (2002) and Daniel Drache (2008). Habermas' historical and theoretical work on the creation of the public sphere as an important historical moment for liberal democracy provides the broad understanding of what the public sphere is supposed to do in the maintenance of democracy. Warner's thoughts on the textually-based, discursive, public sphere gives me a theoretical position to take the object of the videogame as a creator of many publics – united by a common interaction with an text, whether that interaction is the 'suggested' or 'oppositional' reading. Drache's work on what 'being in public' means for the contemporary citizen of the globalized nation-state rounds out this particular theoretical point. His investigation of contemporary conceptions of what constitutes a 'public good' and the role that new informational technologies have in creating new ways of 'being in public' is key.

This chapter concludes with a broad discussion of the role that states have played in developing and extending communications technologies, be they broadcasting, telecommunications or otherwise. Using Mosco (2008) and Wu (2011), I analyze the discourse and policy goals of the governments of the United States and Canada, showing how at the centre of expanding telecommunications technologies was the ideological position that such communication was key to the public good and the furthering of liberal democracy. They did this by supporting state-sanctioned monopolies, underwriting infrastructure expansion and writing into policy broad mandates for the protection of (democratic) rational thought and local culture. I take a close look at the Broadcasting Act of Canada and highlight the broad policy goals inside it, setting the foundation for later analysis of cultural programs, like the Ontario Media Development Corporation (OMDC) in Ontario.

Chapter 2 provides an in-depth look at videogames and the burgeoning field of game studies. The first half consists of a short literature review of theoretical debates and discussions in the field, with a focus on the recent critical political economic work on the videogame industry of Nick Dyer-Witheford & Greig de Peuter, summed up in large part by their 2009 work *Games of Empire*. This discussion shows how this thesis is informed by, but different in approach and conclusion than their work. I then move on to a discussion and introduction to the work of Ian Bogost (2008), who posits that videogames have unique qualities as computational objects that makes them distinctly different than other forms of media, and that these distinct qualities are ideally suited to various kinds of persuasion, which he calls procedural rhetoric. This interest in procedural rhetoric is two-fold: first, it acknowledges the important influence that computers have on new media – it shows how media is co-determined and mutually constituted by

authorship as well as the constraints of the platform. It highlights the *medium itself* as an important actor. Secondly: it posits a way of understanding how videogames are uniquely suited to persuasion, and how they might play a role in society.

Chapter 3 focuses on the development of the military recruitment videogame *America's Army*, as an important historical moment where the state, much as they supported the aforementioned expansion of communications technologies, began to play a large role in developing videogames for the purpose of mass address and propaganda. This videogame's direct development and funding by the US Department of Defence is the first example an official state organization treating the medium as a viable medium for nation building. I show how *America's Army* is made up of various processes and structures that link it inexorably to “publicness” and the role of the state in contemporary society. *America's Army* shows generally how videogames are going to be an ever present part of the state and civil society, and that their development is a priority for the state's ongoing project of nation building. This is premised with the assertion that there are new uses of videogames by civil society for further challenging the neoliberal State's conception and view of the public.

Chapter 4 examines the role the Canadian state played in the development of the videogame *Superbrothers: Sword & Sworcery EP*, which was developed by Superbrothers Inc. and Capyberra games in Toronto. The game, which was released on Apple's iOS operating system in the Spring of 2011, was aided in large part by the Ontario Media Development Corporation, which specializes in funding media development in Ontario through tax credits and grant programs. This aid played a large role in the development of *Sworcery*, and through an interview with the lead designer of *Sworcery*, Craig Adams, and investigation of primary

documentation I examine how one developer understood the role of the state in helping them create videogames. I argue that because of the economies of scale (Blockbuster videogames are notoriously expensive, with budgets running into the tens of millions) and other industrial pressures in the multi-billion dollar videogame industry, these grant programs often offer the only way for small developers to create videogames as a full time profession. In spite of the support that the OMDC provides for independent videogame developers to create their work, videogames remain largely unsupported and unrecognized as important cultural artifacts with a role to play in the public sphere.

This lack of recognition is especially apparent when comparing this perception of videogames to the typically acknowledged roles of 'high art' (film, literature etc), and investigative journalism in the functioning of a healthy democratic state. I believe that this is due largely to the youth of the medium and the specific historical and economic flows that the industry came of age in. As a result, they have only garnered interest as industries of high economic growth, in keeping with the economic instrumentalism of neoliberalism. Due to the qualities inherent to the medium, videogames' use of procedural rhetoric easily allows them to be encapsulated into theories of the ideal "public sphere", as said above, games of all sorts make arguments about how systems are made and build procedural literacy, and effective or not they contribute to the discursive nature of the public sphere. By engaging with the development of *Sworcery* I illuminate the ways in which the Canadian government influences development, and suggest ways in which future government grant programs can continue to provide economic autonomy for creators to allow them to create videogames which contribute to public life that otherwise wouldn't exist.

Chapter 1: Theoretical Concepts and Political Economy

Political Economy as Method

Methodologically my study finds its philosophical roots in contemporary critical political economy. This is because critical political economy provides one with a grounding that is necessary for the theoretical and practical undertaking of this thesis – that of finding a definition of truth that the work thereafter can flow from. In his book *The Political Economy of Communication*, Vincent Mosco outlines what can be seen as a way forward for theory and practice in the study of communication and culture: a method that is built on a realist, inclusive critical theory of theory. Critical realism then, starts with the view that reality is made up of both what we see and how we explain what we see. Building on the work of Raymond Williams and his socio-historical approach to literary theory, realists seek to unite disparate theory – therefore creating a space of inclusiveness, united against exclusive dualisms. Mosco describes the relationship between theory and empirical/interpretive practices as *mutually determined* and *mutually constitutive*. Objects thus do not exist without their relationships to other objects and actors meaning that the chief focus of study is not the object, but the processes and relationships between the objects.

Mosco's method for studying communication can then be seen as a way of uniting the rift between the critical political economy of theorists like Horkheimer, Adorno, Althusser and others with the tradition of Cultural Studies, which places emphasis on the agency and actions of subjects and consumers. For cultural theorists influenced by the theoretical postulations of Michel Foucault and other post-modern theory, power rises out of relationships between actors, as is famously summed in the quote “Where there is power, there is resistance”, in that power

relations are discursive and exist at all levels of society. (Foucault, 1995) Cultural Studies' focus on the personal and subjective stands in stark contrast to the critiques levelled against mass communication by Horkheimer and Adorno, who stress monolithic structures of power and repression and their reification through mass communication. These critical political economists argued that such structures of power have resulted in the implementation of a false consciousness obsessed with fleeting pleasure through consumption.

Mosco's method focuses on uniting these two theories of power and value. By looking at communication he seeks to unite the distributed power of cultural studies with the structural focus of political economy. He stresses that the political economist must take into account both fields of study to make proper sense of the research object. This all hinges on an epistemological approach that is an “ontology that foregrounds social change, social process, and social relations against the tendency in social research, particularly in political economy, to concentrate on social structures and institutions.” (p. 138) For Mosco the entry points of this study are commodification, spatialization and structuration.³ Keeping in mind the realist, inclusive nature of the project, these are only entry points, not “essential singularities” to which all relationships and structures are subject to, and thus do not exhaust what the political economist can look at.

Commodification explores from a Marxian perspective the process of transforming use values into exchange values. In this way it examines the commodity form as an object that is not the result of natural law, but a complex series of social relations and processes. Mosco believes in de-essentializing the commodity form, explaining that commodities are mutually constituted through their appearance as objects (television shows, automobiles, pens) and the social relations

³ It should be noted that the word 'structuration' is Mosco's term. I use it specifically in reference to his work, despite its awkwardness.

that bring it about. The examination of the commodity form then takes into account audiences, products, labour and importantly the act of decommodification – where actors re-contextualize the value of objects and form resistances of use that fall outside traditional political economic practice.

Spatialization is the process of economics, communication and actors overcoming the constraints of space and time in social life. Through this entry point the political economist can come to understand the importance of shrinking space and the decreased significance of space as a constraint on the expansion of capital. Spatialization allows one to look at the importance of globalized markets, the expansion of telecommunications technology and the theoretical implications of new “non-spaces” and “spaces of flows”. (Castells, 2004) This means that geographic conceptualizations of nationalism, nation building and citizenship are all topics of discussion.

Finally, structuration takes into account more traditional critical political economic practice, giving one an insight into the ways in which various structures are constituted out of human agency, as this agency provides the very medium of their constitution. Expanding on the notion that “people make history, but not under the conditions of their own making”, structuration places a focus on the ways in which power flows through social structures of all kinds. With a study of power and value at the centre of structuration one can come to understand how class, gender and race play important roles in the overall makeup of capitalism, and how human structures of all kinds (institutions, corporations, groups, governments, publics etc) facilitate, direct and resist power.

As a methodology for the thesis Mosco's three entry points provide a framework that is

comprehensive for what I want to discover about videogames, yet at the same time flexible and open enough to allow creative approaches to the subject matter. While Mosco's methods are up for debate in the discourse of contemporary critical political economy (notably, Phil Graham's (2006)⁴ critique and approach), I find that its flexibility allows me the room to manoeuvre comfortably and maintain a connection to my familiarity in cultural theory while using the best methods and critiques that critical political economy affords.

The Public Sphere

One reason for using critical political economy is due to its strong moral dimension, one that “provides a strong defence of democracy, equality and the public sphere.” (Mosco, 2008, p. 36) All three of these things are key to the political project this thesis has and all are wrapped up together. This thesis narrows its focus on one: the public sphere. This means it is important to get to the root of this concept.

Generally defined as a space of discourse, Habermas' history of the development of the bourgeois public sphere gives a good idea of the general concept. Arising during the spread of liberal capitalism, the bourgeois class began to seek spaces in which their power could be exercised as private citizens, in stark contrast to the 'publicness' exercised by the monarchy of the day. Any and all definitions of publicness previous to the rise of capitalism fell under a form

4 Graham's (2006) critique is with the theory and practice of critical political economy (CPE) like Mosco's. He says that Mosco and other “mainstream” members of the field lack a thorough understanding of value that exists outside of a framework that takes global capitalism as a given. Instead he suggests for understanding the political economy of communication with a new theory of value that relies on symbolic value, rather than purely economic. This critique is well taken, but I believe that Mosco *does* take this into account. Regardless, while late-capitalism relies on a number of forms of value, the dominant one is still economic.

Habermas calls “representative publicness”. This representative form of publicness was limited to the monarchy, whose display of the self was intimately linked with the relationship of ruling over their subjects. Bedrooms, palaces and gardens of the monarchy were often crafted with the express purpose of *displaying* the monarch in public. The subjects themselves had little to no concept of what private might mean otherwise, Habermas contends that the material and economic conditions required for this style of subjectivity had not yet spread to the rest of society. The “commons”, land on which all subjects were allowed to farm and reproduce with, with the *express* permission of the monarchy, symbolizes this perfectly.

With the rise of industrial capitalism in the UK however, the monopoly on power that was commanded by the monarchy was subverted by private capital. The bourgeois class began to be able to create and reproduce for themselves, without direct intervention from the monarchy, reshaping previous power relations. The creation of private property, the development of parliamentary democratic systems and privately-provided social services meant publicity began to stand for something other than representation of the monarchy. The public sphere was now about private individuals and the space of interaction between them, as Habermas says: “The fully developed bourgeois public sphere was based on the fictitious identity of the two roles assumed by the privatized individuals who came together to form a public: the role of property owners and the role of human beings, pure and simple.” (p. 56)

Habermas described the bourgeois public sphere as an inclusive space that encourages rational discourse. Through the development of the printing press, and later, the popular press in the late 17th century in England, a real space of national discourse where private citizens could come together and debate the future of democracy was created. In the public coffee shop, private

parlours and salons the project of the enlightenment spread and sank its roots deep into society.

Beyond the historical importance of Habermas' work on the public sphere, his main contribution to work on the public sphere concerned its ongoing transformation through public opinion polling, mass communications and advertising. He argued that new analytical tools had to be formulated to understand its operation. In Habermas' view the imposition of public institutions into the private realm by the welfare state as well as the development of special (private) interest groups to influence legislation fractured the public sphere, effectively re-feudalizing it. No longer is the private individual equal across the political spectrum; our new "Lords" are these interest groups, often the only organizations that can have any significant impact on policy as they have access to the tools of mass persuasion. The average citizen would never be able to conduct a mass opinion poll or engage in a multimillion dollar publicity campaign. The citizenry is now segregated from the ability to influence the operation of the government. No matter how enlightened the population was by the public sphere, coming to a conclusion through reason was almost futile in the face of organized capital: Bourgeois democracy undermined by the very institutions that it was central in creating.

Towards a Textually-Based Public Sphere

Micheal Warner's (2008) historical work on the roll of circulating texts and communications systems on the development of multiple, discursive public spheres shores up another part of this thesis. This is mainly because he does an excellent job of linking the imagined community that is 'the public' to the objects in circulation that allow for this public to

come into being. He describes publics in three ways: totalizing, dualistic objects defined by insiders and outsiders, for example publics as nations, communities, etc; publics as groups in public spaces, audiences of theatres etc; and finally the public that “comes into being only in relation to texts and their circulation.” (p. 50) Videogames engage in dialogue with publics in all three of these ways, but for the most part, the publics that form around videogames are of the third kind, and thus why Warner is particularly useful. For Warner publics that are made up of anything other than location-based audiences and concrete polities have to be made-up in relation to texts:

[even those] increasingly organized around visual or audio texts. Without the idea of texts that can be picked up at different times and in different places by otherwise unrelated people, we would not imagine a public as an entity that embraces all the users of that text, whoever they might be. Often, the texts themselves are not even recognized as texts - as for example with visual advertising or the chattering of a DJ – but the publics they bring into being are still discursive in the same way... (Warner, 2002. p. 51)

As such these publics are spaces of “discourse organized by nothing other than discourse itself.” (p. 67) For Warner texts are only builders of the public when they are sent in the infinity of possibilities in the wider world. Texts thus become public when they are intended for strangers. Those you have never met, but nonetheless wish to communicate with. This means interpersonal communication such as private mail or invite-only events remain in the world of the private, and do not create wider publics. In theory the work *has* to be available to all (even if material constraints don't allow for the actualization of this); without the ability to exclude particular individuals. While Warner's work is wound up in the deeper project of identity politics and queer theory, this typology of how publics are formed is key to the overall project I am laying out. There are thus two concepts at play in this paper in relation to cultural artifacts: this textually-

based, self-reflexive creation of publics through texts, and the greater liberal-democratic goals of the public sphere laid out by Habermas. To unite these, I turn to the work of Drache which contextualizes these practices with contemporary Information Technologies, global capital and cultural flows and the tricky business of democracy.

A New Public: Neoliberalism, Information Technologies and Changing Nature of Citizenship

If we begin to look to videogames as objects 'in public', we need to figure out exactly what being in public means today, and what role citizens and governments are playing in relation to it. Daniel Drache's (2008) recent work has focused extensively on the shift of citizenship away from the traditional state to transnational actors and decentralized organizations with *flat hierarchies*. This, for Drache, posits new ways of conceiving of what 'being in public' is, especially in relation to the neoliberal state. The fall of the Berlin Wall at the end of the Cold War seemed to mark this new dominant order, marking the “end of history” as Francis Fukuyama famously proclaimed.

Describing neoliberalism Drache says that “It consecrated an improbable marriage between the economic triumphalism of technocratic elites and the political optimism of easily led global publics that expected their governments would continue to build strong cohesive societies and foster the public interest through generous government spending.” (p. 1) What resulted was the sell-off of the public sector, the gutting of banking regulation and the imposition of economic rationalism on life itself, all in the name of economic liberalism. Capitalism became the

dominant order, having won out against the authoritarian command economies of the Soviet Bloc, just as Deng Xiaoping's "Third Way" was marking China's entrance into the global marketplace. Yet this optimism on the part of neo-liberal thinkers like Fukuyama has run out of steam, as their project has begun to show its gaping flaws. Drache posits that it is the combined force of massive institutional economic failure and information technologies that are forcing the state and civil society to re-imagine what the 'public' is.

Drache suggests that "movement activists today are in possession of the organizational and informational tools required to rescue the idea of the public from the instrumental economic rationality of the market and return it to its original roots in individual action, collective achievement, and public reason." (p. 5) This means a return to the concept of the individual in public, where citizens come together for collective reason. For Drache "public reason" and "public domain" are just as important terms as ever – and that they shouldn't be confused with just the "provision of public goods, a staple of modern liberal economic theory." (p. 7) This is because under this economic reasoning it only makes sense to provide for the public those things which are the result of either the "tragedy of the commons" or the result of collective action problems such as the classic example about the provision of lighthouses (or as I will elaborate later, the development of telecommunications infrastructure). Drache instead suggests that the "public domain is a sphere of political agency, first and foremost, in which individuals work together to meet collective needs and overcome complex political and economic challenges. *The public domain, above all else, is a forum in which to be heard.*" (p. 7)

Drache builds on this with an introduction to the loosely defined recognitionist school of citizenship, based primarily on the writings of Hannah Arendt, Charles Taylor, Arjun Appadurai

and David Held. This interpretation of liberal humanism stems from the concept of diverse, pluralistic societies that takes into account the multiplicity of individual and community identities, and in so doing, recognizes them as meaningful subjective positions in wider society. This means that without “recognition of the uniqueness of individuals, but also religions, ethnicity, and cultures, there can be no strong system of human rights.” The public then serves as the primary site of this kind of recognition, where liberal, social democratic society was “rooted in public transparency and individual actions performed in public.” (p. 10)

This of course, comes with the acknowledgement that it is the complex impulses of classical liberalism that led to the imposition of the neoliberal state. Drache argues that liberalism “has given us a robust view of the individual living in society”, but that economic liberalism offers a “one-dimensional caricature of the individual”. This is the economic individual who only finds uses for “public goods” like lighthouses. Elaborating on the idea of public good, Drache says that:

Those goods that individuals are unable to produce are produced through collective effort. These “public goods,” such as national defence, are the rationale for a public sector. But there is no room in this view for a notion of public goods and the public good that is separate from economic need and the self-interest of individuals. When Margaret Thatcher pronounced in her famous 1987 interview with *Woman’s Own* magazine that “there is no such thing” as society, she was simply reducing liberal economic theory to its foundational assumption. (p. 12)

This is the tricky If this conception of what publicity means is the norm for neoliberal thinkers, we need to find ways of challenging this conception, while still maintaining the importance of individuals in society. To do this Drache returns to Arendt to illustrate how the public is a “space of appearance and recognition, a space where individuals were recognized and actions could be judged.” (p. 13) In this way it articulates how the public sphere is more than a tool by which

individuals solve pure economic problems. It also places value on the voices and opinions of individuals in guiding democracy.

In the intersection of these theories I find clarity for the public sphere today. From Habermas and Fraser it is an ideal state of democracy. From Warner it is intimately linked with the dissemination of texts through communications channels of all sorts, forming new, discursive communities with direct contact with discourse. With Drache it isn't just an ideal democratic concept, but a real possibility with new information technologies that enable citizens and actors in ways that are qualitatively different than those that came before. For me, this provides a great way to appraise videogames, and videogame development, in relation to the state. As I will discuss later, videogames are uniquely suited to rhetorical argument, and can function as an ideal form of communication for the furthering of reason in the overall project of democracy. One of the main goals of this public sphere is the right to be seen – to be recognized. Drache focuses on the Internet as the primary force behind the powershifts of the last decade, and if recognition is something enabled in part by the Internet, *there still remains the goal of finding recognition in other media*. Videogames are just one of many that can provide this kind of recognition: yet there remain numerous barriers to the creation of videogames, barriers that might only be remedied through collective action to push for new groups, identities and subjectivities to be involved in the development of the form. One way this might be taking place is through their development, use and support the contemporary state: this is because states, whether they intend to or not, are legitimizing and funding the medium's expressive potential. At this point, however, I think it's important to contextualize the history of the state and communications technologies. The history of telecommunications and broadcasting regulation, the reasoning behind it, provide some hints

to how the traditional state has actualized its role in encouraging the “public sphere.”

Chapter 2: The History of the State and Public Communications

Communications, States, and the Public

The Canadian historian and political economist Harold Innis' is best known for his work on the power of commodities and communication in shaping the development of Canada. At the centre of his work is the assertion that communication, and specifically, communications technology, can drive the development of the state. Similarly Benedict Anderson (2006) argued that through communications of all sorts, the contemporary nation-state is formed in the imagination of the public. Through communications the idea of “nation” is built up, creating imagined communities while at the same time invigorating new forms of intra and inter-state commerce. As a result states have long recognized the importance of communications technology for continued prosperity and growth, playing major roles in the development and deployment of them. The history of communications in the 20th century is massive state and private intervention in the market – often informed completely or in part by notions “public service” and “public responsibility.” Telecommunications and broadcasting are often the most common examples of this, but it extends to other cultural industries as well.

Until the late 1970s and early 1980s the telecommunication and broadcasting (as well as other cultural industries) were considered a public good. The main thrust of which included public subsidy, public regulation (state sanctioned monopoly or public ownership of telecoms), and public input into the development and use of communications technology. Essentially the *public* was at the heart of issues associated with communication and culture. The goals and

mandates of these organizations were up to the state's conception of what was in the public interest. This meant obscenity regulation (in the United States implemented through the Federal Communications Commission) and concepts like the fairness doctrine.⁵ This also meant protecting and projecting what was deemed culturally important to citizens (CRTC Canadian Content regulations after the Massey Commission), as well as guaranteeing access to such communication (Lorimer et al, 2008). The social and public implications and consequences of communication defined the discourse of various states.

Telecommunications and the Public Good

Several examples from the United States and Canada provide insight into how framing telecommunication as a public good shapes how it develops. The Bell monopoly in the United States specifically gained the approval of Congress by touting its devotion to public service and the benefits of central organization and planning. While Bell telephone operated as a for-profit corporation, it presented itself with the slogan “ONE COMPANY, ONE SYSTEM, UNIVERSAL SERVICE”. This meant that Bell had to provide public benefits that an otherwise unregulated corporation might not do. Bell, in return, built a nation-wide telephone system, unrivalled in quality, while at the same time charging a flat rate to all customers, regardless of geographic location (urban or rural). Bell subsidized this nation-building project with the massive-profits that accrued from over-charging on long-distance calls. While profit was no doubt the driving force of the Bell monopoly, the express commitment to public service was always there,

⁵ A US policy guaranteeing opposing political opinions access to airtime in broadcasting. (Bar & Sandvig, 2008)

and informed its corporate culture (Wu, 2011). The corporation was ruthless in defence of its monopoly, but also wildly energetic in its public commitment to improving the ability of Americans to communicate. Bell Telephone would not have been what it was if not for such a commitment to public service. Theodore Vail, the leader of Bell in the early 20th Century commented as such:

For the protection of the community, of individual life and health, there are some necessities that should be provided for all at the expense of all, such as roads, pure water, and sanitary systems for concentrated population, and reasonably comprehensive mail service. The determination between services that should be operated by the government and those which should be left to private enterprise under proper control should be governed by the degree of necessity to the community as a whole as distinct from the personal or individual advantage (p. 29).

In Canada communications has been framed as a right, as something that enables the functioning of democracy. In 1971 the Canadian government published the report *Instant World: A Report on Telecommunications in Canada*. It underlined the importance of access to communication in enabling citizens to understand politics. The report went on to say that:

The predominant theme underlying nearly all the discussions at the seminars was that the “right to communicate” should be regarded as a basic human right. In the impending age of total communications, the right to freedom of assembly and free speech may no longer suffice. Many people are unable to communicate; they do not receive messages distributed by communications systems, they lack the know-how to use them, and above all, they are deprived of the opportunity to send messages through them. The basic decisions that govern the development of communications systems are political; therefore if all Canadians are to be provided with the minimum services needed to exercise of a right to communicate, political decisions and money will be required (Canada, 1971, p. 232).

Marc Raboy and Jeremy Shtern (2010) note that *Instant World* played a massive role in introducing the idea of the “right to communicate” into the Canadian policy discourse. They say that it this “right to communicate stemmed from the belief that equitable communication is

fundamental to democracy...” and that it is “possibly the most substantial official document framing the concept of communications rights in Canada.” (p. 4-5) Canada itself has been the location of vast public and private regulatory regimes to set up in the name of protecting “the public”, a legacy that exists to this day. Even before *Instant Worlds* was published, Canada was engaged in vast regulatory programs.

Due in part to the disparity in economies of scale between the United States and Canada, the Canadian government played a large role in developing radio, telephony and television. Lorimer et al (2008) argue that because of massive amount of technical infrastructure needed to connect the geographic space that makes up the Canadian state it was necessary to do so, for without it private investment would have moved slowly, or in many remote rural areas, never. This is especially true for the northernmost Canadian and First-Nations communities, whose small populations made the expansion of telecommunications and broadcasting a project that would only incur capital losses. It is the rhetoric of the Broadcasting Act I look to in identifying the importance of communication to culture and democracy.

The Broadcasting Act

The Broadcasting Act lays out a very clear path for what Canadian broadcasting is supposed to be in the eyes of the state. Specifically, it is section 3, which outlines the broad policy goals, that falls into line with narrative presented above. Canadian ownership of broadcasting enterprises is key in subsection a, mandating right away the importance linking the spatial relationships of the state with cultural sovereignty. Subsection (b) builds on this:

(b) the Canadian broadcasting system, operating primarily in the English and French languages and comprising public, private and community elements, makes use of radio frequencies that are public property and provides, through its programming, **a public service essential to the maintenance and enhancement of national identity and cultural sovereignty**; (Canada, 1991) [emphasis mine]

Subsection (d) speaks more elaborately about this and the focus on the distinctly Canadian content to be used in broadcasting:

(d) the Canadian broadcasting system should

(i) serve to safeguard, enrich and strengthen the cultural, political, social and economic fabric of Canada,

(ii) encourage the development of Canadian expression by providing a wide range of programming that reflects **Canadian attitudes, opinions, ideas, values and artistic creativity**, by displaying Canadian talent in entertainment programming and by offering information and analysis concerning Canada and other countries from a Canadian point of view,

(iii) through its programming and the employment opportunities arising out of its operations, serve the needs and interests, and **reflect the circumstances and aspirations, of Canadian men, women and children, including equal rights, the linguistic duality and multicultural and multiracial nature of Canadian society and the special place of aboriginal peoples within that society**, and... (Canada, 1991) [emphasis mine]

The rest of section 3 goes on to describe in other ways in which the CRTC is to regulate the various means of broadcasting in Canada. It carries the same tone. Broadcasting technology like radio and television towers should be accessible to all Canadians, and the content should be tailored to and developed around distinctly Canadian values and goals. These are all an important part of nation-building. These acts make it clear that the Canadian government was to have a large role in developing and providing access to communications, all in the name of the public good.

Why? For Canada the ever-present spectre of a cultural production powerhouse to be found in the United States provided the impetus for this. Again, stressing the economies of scale that allowed the US to mass manufacture popular culture at a fraction of the cost, the only way to allow Canadian firms to compete in the marketplace was to level high tariffs and mandate that Canadian content would make up a certain percentage of content. The emphasis, on the surface, was on the value of Canadian culture: separate from the idea of a perfectly operating free market.

Neoliberalism's fallout: The Economic Instrumentalization of Culture

The rise of economic neoliberalism in the last 30 years has changed the tone of how governments conceive the value of communications and culture. This is due mostly in part to de and re-regulation of markets (the decrease of government intervention and the increase of voluntary industry self-regulation), communications and broadcasting industries. From 1979 to the crash of 2007 the rhetoric of Western governments focused on the efficiency of self-regulating markets and Adam Smith's invisible hand (Lorimer et al, 2008).

For the prosaic world of telecommunication and broadcasting, this shift had enormous consequences. In the US the Bell Monopoly was slowly chipped away by various small deregulations (opening up long-distance for competition to competitors like MCI) and finally, the breakup of the national monopoly into various “Baby Bells”. For most in power at this time the greater social goal of broadcasting was considered to have already been achieved meaning that citizens had access to signals and the technology to use them (Wu, 2011).

Through these market de and re-regulations the value of culture has effectively been transformed into pure economic terms. In the ideal liberal market supposedly “esoteric” and “subjective” senses of a value are meaningless without a direct connection to market value, in that they impede and restrict the functioning of the ideal market through unfair market advantage. At the centre of this project is the individual, whose rational choice making abilities should invalidate the undemocratic and authoritarian tendencies of government led central planning (Hayek, 1944).

In Canada the tension between the social good and individual choice often frames discourse about culture, with the media often taking the side of individual choice. As Lorimer et al (2008) note “... when the sense of individualism clashes with the need to support distinctive Canadian institutions, almost without exception the media can be found on the side of individualism.” (p. 70) Similarly they note that “The usual rationale for government investment in communications infrastructure is that technological development creates jobs – numerous spinoff technologies lead to the creation of new industries...” (p. 73) This is the new dominant paradigm of Canadian state intervention in cultural industries. A cynical take on this new kind of intervention is voiced by Zizek (2008):

“perhaps therein resides the “fundamental contradiction” of today's “postmodern” capitalism: while its logic is de-regulatory, “anti-statal,” nomadic, deterritorializing, and so on, its key tendency to the “becoming-rent-of-profit” signals a strengthening of the role of the state whose regulatory function is ever more omnipresent. Dynamic deterritorializing co-exists with, and relies on, increasingly authoritarian interventions of the state and its legal and other apparatuses. What one can discern at the horizon of our historical becoming is thus a society in which personal libertarianism and hedonism co-exist with (and are sustained by) a complex web of regulatory state mechanisms. Far from disappearing, the state today is gathering strength. (p. 145)

The neoliberal state rejects value and intervention in some areas, while building power and influence in others. The contemporary political climate in Canada has led to governments moving away from the spirit of the Broadcasting Act (and by extension, other governments acts related to communication and culture), reflecting Zizek's cynicism. The last several years of the conservative government of Prime Minister Stephen Harper has at various points framed discussions around Canadian cultural institutions, grant programs, telecommunications regulations and the like as illegitimate or morally bankrupt, existing only by leeching paycheques of the hard working, ordinary taxpayer (*The Star*, Sep 24, 2008). Instead of fostering arts for the public good, the state frames the discourse around culture as one of dollars and cents, something reducible to a pure economic equation. This is the economic instrumentalization of culture, where the public is framed as simple rational economic actors, whose only interest in communication and culture is their pocket book.

Chapter 3: Videogames & Game Studies: Neoliberalism and Persuasive Games

The Videogame Industry's Birth in Neoliberalism

The shift described in chapter 2 away from the impact on nation-building and the public goals of communication and culture gave birth to the environment that mass-market videogame production grew up in. During the growth of the neoliberal state the first major videogame hardware and software manufacturer Atari began making huge inroads in the arcade and later, home console markets (Montfort & Bogost, 2009). While the videogame market would suffer a industry-wide crash soon thereafter, the introduction and popularity of the Japanese manufactured Nintendo Entertainment System after its North American debut in 1985 made videogaming a permanent fixture in the contemporary home (Baer, 2005). This means that videogames literally never had a chance to be included in the old discourse of communication and culture as a public good and as public service, as politically such discourse had fallen steeply out of favour in the West. When they came into being the discourse had shifted from consumers as citizens to citizens as consumers (Hesmondhalgh, 2007; Shiller, 2003; Lax; 2009).

What this has ostensibly resulted in an environment around game development that stifles discussion of videogames as artifacts that interact with publics in any fashion outside of entertainment. This statement comes with a caveat: few *major* studios will suggest that their videogames have any political or social value to their existence outside of entertainment. They want people to enjoy them, but not place them in any wider political context. A good example is the release of two high budget first-person-shooter videogames in 2011. One is a sequel in the

highly profitable *Call of Duty* franchise, titled *Black Ops*. In response to a question concerning the historical context and controversial nature of *Black Ops*, whose single player narrative takes place during the height of the Cold War in the 1960s, with levels set in Laos, Vietnam and Cuba.

Producer Dan Bunting was quoted as saying:

At the end of the day it's an entertainment product and we're creating an entertainment experience. It is more about the story that you're living through in this game. It's a fictional story that's inspired by a lot of real life events. So, we're not trying to make any political messages or give any history lessons. It is about experiencing this game within the context of that war (Grant, 2010).

Black Ops launched to little controversy about the subject matter (outside of the condemnation of the game by the Cuban government over a level modelled on the infamous US sponsored Bay of Pigs invasion) (AP, 2010).

Another title, *Medal of Honor*, released earlier in 2011 proved more contentious. The game is set during the opening days of the current war in Afghanistan with the player taking on the role as an American special operations soldier. The developer, Electronic Arts, was heavily criticized by the Pentagon and the department of defence in Canada because of the inclusion of a multiplayer game mode where you can “play” as the Taliban (Pigna, 2010). Electronic Arts gave into this pressure and soon thereafter removed the word “Taliban” from the mode, naming the Afghans the “opposing force” (Pereria, 2010).

Electronic Arts and other development houses have been lobbying (using the Entertainment Software Association [ESA]) for videogames to be considered forms of speech in the United States, thus extending their protection under the first amendment. Ian Bogost in an industry column denounced the fact that Electronic Arts backed down to government pressure on the inclusion of the Taliban in *Medal of Honor*. This is because if developers want their work to

be considered speech, they need to assert that what they are saying is worthwhile to the public. To Bogost self-censorship resulting from government criticism of their message is regressive, in that it suggests videogames are nothing more than distraction, not worthy of saying anything important. (Bogost, 2010) To be recognized in the public sphere as a legitimate medium, they need to defend themselves as the film industry did in the 1970s, refusing to cave to pressure about the content of controversial films like Michael Cimino's 1978 film *The Deer Hunter*.

The development and resulting discourse of these two blockbuster titles highlights the contemporary environment of major game production and how ultimately, these games' interaction with the public is one of selling to consumers, not citizens. It also marks an interesting historical inversion with previous mediums. Radio and television were first seen as an important technology to foster speech, but with time they were transformed into mediums that sold audiences to advertisers. Videogames were born as a mass medium in the same model – marketing products (the games themselves) to the largest consumer audience. But as the market and technology has changed, there are new opportunities to begin to think of the medium's audience as citizens, rather than just consumers.

Engaging Critically with Game Studies

Game Studies, as a relatively new discipline in the last ten years has evolved from various segments of the academy, and as a result, the field is naturally interdisciplinary. Formalisms in videogame studies have risen (and dissipated) in the last ten years that have attempted to come to terms with the specific ontology of videogames: narratology rose to interpret videogames

through the lens of English and film studies, making sense of videogames as texts understood through affect and aesthetics. On the other side were so-called ludologists, or game theorists, who posited a more sociological approach that focuses on how simulation and game constitute experience. To them the story was ancillary to the phenomenological experience of simulated problem solving and play. As it stands that many of those involved in Game Studies have successfully shaken off or dismissed the supposed “debate” between these two prominent formalisms, the very idea that there might be a debate at all is in itself interesting. It shows, especially given the prominence of the arguments in foundational textbooks such as Wolf and Berhard’s (2003) *Video Game Theory Reader*, a growing field, ripe with discussion and interpretation.

The field is quiet extensive now, with a number of academic journals focused entirely on game studies such as *Loading...*, *Game Studies*, *Journal of Digital Games*, *Games and Culture* and *Simulation and Gaming*. Recent critical appraisals informed heavily by Education studies, Cultural Studies and critical Political Economy have begun to take into account the historical, material, political and economic conditions associated with digital play. These theorists offer insights into the implications of videogames for cyberfeminism, racism and Orientalism, identity and subjectivity, to name but a few (Hoglund, 2008; Jenson & de Castells, 2007; Kennedy, 2002; Turkle, 1997). Recent sociological and feminist critiques of the videogame industry have opened new doors for looking at the cultures that exist in and around these artifacts. This is especially important considering the under-representation of women in game development studios and the hyper-sexualisation of both female videogame characters and players (Castells & Jenkins, 2008; Denner et al, 2008; Dyer-Witthford & de Peuter, 2009; Taylor, N. et al, 2011).

This thesis focuses on a number of distinct strains inside of Game Studies to build on: the critical political economic work of Dyer-Witheford & de Peuter, as well as work on procedural rhetoric and persuasive games by Ian Bogost. Foregrounding Dyer-Witheford & de Peuter's 2009 work *Games of Empire* provides a starting point for examining the state of critical political economy of videogames. I look to its strengths and to its weaknesses, and in so doing show how this thesis is informed by their work, but also distinctly different in method and conclusions. I then move to Ian Bogost's work on procedural rhetoric to find footing in the field upon which to discuss and understand videogames as persuasive objects.

The Political Economy of Videogames: *Games of Empire*

The Political Economy of videogames and the videogame industry is a relatively new academic project with some scattered academic work being conducted in the area. Nick Montfort & Ian Bogost's (2009) *Racing the Beam*, fits roughly into this field as a rough sketch of the social, political, material, technological and economic factors that contributed to the development of the Atari VCS. Similarly, Lugo et al's (2002) study of the Latin American videogame manufacturing industry showcased the methods by which multinational corporations and local economic elites drive the development of Maquiladoras and special economic zones. In Europe Aphra Kerr's (2006) work on the everyday business practices and culture of large videogame firms has also been integral. In Canada Nick Dyer-Witheford has been at the forefront of critical political economic analysis of the videogame industry, publishing several co-

authored works.⁶ In their 2009 work *Games of Empire: Global Capitalism and Video Games*, Nick Dyer-Witheford and Greig de Peuter take aim at various facets of videogames, and assess them critically “... Rejecting both moral panic and glib enthusiasm.” Laying out their project they describe videogames as a “media that once seemed all fun is increasingly revealing itself as a school for labor, an instrument of rulership, and a laboratory for the fantasies of advanced techno-capital” (Dyer-Witheford & de Peuter, 2009, p. xix). The book “sketches a critical political economic analysis of the digital games industry and game culture drawing on Michael Hardt and Antonio Negri’s theoretical concept of ‘Empire.’ It is a perspective that directly implicates academic game studies in a concern with either being part of the ‘problem’ or part of a ‘solution’” (Simon, 2011).

Hardt and Negri argue for a conceptualization of global capitalism called 'Empire', (which is “the problem”) which functions as a regime of biopolitical governmentality, a term and theory they borrow from Foucault. It is the “emergence of a new planetary regime in which economic, administrative, military and communicative components combine to create a system of power ‘with no outside’” (Dyer-Witheford & de Peuter, 2009, p. xix). As such Empire “exploits social life in its entirety.” (p. xx) Empire functions so well because it is capable of incorporating tensions and contradictions into its very function. Yet this is where it is weakest. In Empire Hardt & Negri have built in the Multitude, a heterogeneous and fluid collection of global publics, the spectrum of bodies and power that the biopolitical strategies of capitalism and governance exist in a oppositional relationship with. Dyer-Witheford and de Peuter see the Multitude as those who videogames are directly targeted at, and keeping with their revolutionary potential, the group that is most equipped to navigate its way through capitalism and networks of power to find pleasure

⁶ Please see Dyer-Witheford & Klein, 2003; Dyer-Witheford & Sharman, 2005.

and escape.

Dyer-Witheford and de Peuter address videogames in the context of Empire in a number of ways: labour, biopower, neoliberalism, and the military entertainment complex. The first is through labour, which they describe using theories of “immaterial labour” and cognitive capitalism, which derives its legacy from Italian autonomist Marxism. In these assessments they address the various exploitative practices that exist in the process of coding and creating software. One such example is the ubiquity of the practice of “crunch time” that necessitates 14 hour days and unpaid overtime in the final weeks before a game's launch (Dyer-Witheford & de Peuter, 2009).

In relation to the military-entertainment complex and the ongoing wars in Iraq and Afghanistan they address the complex ways in which videogames have been directly involved with the military in the creation of the popular online shooter/recruiting tool *America's Army* and the Real Time Strategy (RTS) training/mass market game *Full Spectrum Warrior*.⁷ They argue that these games serve to socialize and make war “banal.” As Hardt & Negri (2000) discuss, “...war becomes part of the culture of everyday life, with “the enemy” depicted as “an absolute threat to the ethical order” and “reduced to an object of routine police repression”. (p. 13)

Their exploration of biopower is of particular interest. In the case of online virtual-communities like the massively popular *World of Warcraft* (which claims more than 12 million paid members – Blizzard, 2010) the biopolitical implications of ruling (and exercising power) in

⁷ *Full Spectrum Warrior* is a Real-Time-Strategy and action game developed in part by the Department of Defence with the private sector. In the game you take control of a small squad of US troops engaged in combat in a fictional central Asian country. The military version of the game was used for training purposes, while another was developed for mass market consumption by the public. Of special interest is that by using a special code players at home could “unlock” the military version at home, giving them the more realistic training scenarios and game settings.

online spaces by the corporations that own them directly mirrors the biopower that is exercised by the contemporary Chinese government. This happens through the Chinese government's massive push to move rural peasants off of their farms to urban centres where they can become labourers in new high-tech industries. They often find employment in low-wage manufacturing jobs or in (ironically) low-wage jobs in massive offices with hundreds of computers "gold farming" (through the process known as "grinding") for digital resources in *World of Warcraft*. These resources are then sold to companies owned in North America, which then resell them to players in the first world for profit. For Dyer-Witheford & de Peuter there is no doubt then that the "lush lands of Azeroth (*World of Warcraft*'s fictional fantasy world) arise on the ruins of Pearl River delta..." (p. 146) This speaks to the enclosure of virtual space, which mirrors the primitive accumulation process at the birth of industrial capitalism in. They conclude that virtual spaces find themselves more and more subject to the whims of biopolitical manipulation of capital.

In keeping with their overall political project Dyer-Witheford and de Peuter are sure to assert that there remain radical and important breaks in the narrative of capital, and as such, vehicles for what they describe as exodus. Dyer-Witheford and de Peuter thus come to a mixed conclusion about videogames and global capitalism. They exist in a paradox:

To grasp this paradox, one might say that while games tend to reactionary imperial content, as militarized, marketized, entertainment commodities, they also tend to a radical, multitudinous form, as collaborative, constructive, experimental digital productions. This schematization is approximate and simplified – but it

8 *World of Warcraft* is currently the most subscribed Massively Multiplayer Role Playing Game in the world with more than 11.4 million subscribers in March 2011. The game takes place in the fictional world known as Azeroth, where your avatar is one of many fictional races, using magical powers and weapons to complete quests on servers populated by thousands of other players. The game is known for its thriving player communities (known as guilds), virtual economy, and its place in pop culture. This is best exemplified by the 2006 episode of *South Park* "Make Love, Not Warcraft" which was a send up of popular myths around the game. (Curse, 2011)

points to the deep ambivalence of videogame culture. (p. 228)

This ambivalence they identify is the most important thing to take away from their work: videogames are a part of Empire, but they contain possibilities for new, more egalitarian futures.

Critiquing *Games of Empire*

Ultimately Dyer-Witheford and de Peuter's project begins the work of locating videogames through the structure of capitalism, and succeeds in opening the door to further examination through political economic study. That being said, they fall short in some areas that need to be pointed out. Bart Simon argues that while theoretically the *Empire* thesis is an interesting way to frame their discussion, is not the strongest aspect, especially in context with the now thriving cottage industry that is the critique of *Empire* and *Multitude* (2005). He says that “the major strength of this book does not come from its theoretical apparatus but rather from the well presented and coherent account of the political economy of the industry.” (Simon, 2011) Throughout the book the best work for Game Studies scholars is the rigorous scholarship and history: the hard work of political economy.

I also agree with Simon's critique of the Althusserian framework of interpellation that Dyer-Witheford & de Peuter use to analyze the content of the videogames that make up their case studies in chapter three:

...in this section the authors have all but abandoned the nuanced and multivalent aspects of the *Multitude* in favour of the determination of production and representation over play. Readers who wish to more carefully examine how and why digital games might be importantly different from other media should concentrate on these chapters which, in my view, overly stress the ways in which

games as discourse interpellate players into subjectivities with Empire-friendly affinities for war and violence, bureaucratic self-discipline, and racial and gender stereotypes.

This is certainly the weakest component of *Games of Empire*, and a bit of a surprise considering the nuanced attitude that Dyer-Witheford took with technology in 1999's *Cyber-Marx*. While videogames can certainly be implicated in the larger ideological work of Empire and its ability to build new hegemonies and subjectivities amenable to itself, such an approach does a disservice to their specific form and materiality (the nuances of which political economy as a method is so interested in!). *Games of Empire* provides a great framework for understanding the political economy of videogames: why they are made and what they are made of, but if scholars want to understand what videogames *do* and what they *are*, I believe they need to turn to another source.

The Expressive Power of Videogames

Ian Bogost (2006a) suggests avoiding any strict definition of how to study videogames. Instead of focusing on *how* games work, Bogost wants a study of *what* they do. Specifically, he calls for trying to understand “how they inform, change, participate in human activity, how videogames reveal what it is to be human.” Ian Bogost's (2006) work does just this by building on theories of procedurality. Here it is important to return to his call to understand videogames in terms of “how they inform, change, participate in human activity, how videogames reveal what it is to be human.” Bogost understands videogames as ‘objects’, or what he calls ‘units’ to be read and understood through a functional perspective, rather than a historical or material one.⁹ These

⁹ It is important to note here the contradiction of critical political economy being derived from a historical-

texts are held together through processes called *unit operations*, “modes of meaning-making that privilege discrete, disconnected actions over deterministic, progressive systems.” He then goes on to define the central characteristic of computer and digital environments that interest him: their procedurality. It “refers to the practice of encapsulating specific real-world behaviours into programmatic representations ... it is a name for the computer's special efficiency for formalizing the configuration and behaviour of various representative elements.” (p. 13)

Simulation Gaps

Bogost introduces the concept of enthymeme as the core component of procedural rhetoric. He refers here to Aristotle’s rhetorical practices, which makes a distinction between two modes of human reason: induction (syllogism) and deduction (enthymeme). Syllogisms are made up of both the proposition and the conclusion, both explicitly stated. In an enthymeme one of the propositions in the syllogism is omitted. Bogost gives this example:

Politicians are not trustworthy (premise is omitted)
This man is a politician.
Therefore, we cannot trust this man.

Bogost then uses the example of the 1964 Lyndon Jonson television spot (“Daisy Ad”), to illustrate how visual images can create enthymemes.

Increasing nuclear proliferation will likely lead to the destruction of humanity.
Goldwater supports nuclear proliferation (omitted).

materialist perspective while using a method of understanding videogames as objects that is decidedly anti-historical and material. In this case I happily acknowledge the philosophical tension between the two, and move forward. Procedural rhetoric unlocks ways of understanding videogames as objects unto themselves that a pure historical materialist approach (reflected somewhat in *Games of Empire's* thesis) does not.

Therefore, electing Goldwater may lead to the destruction of humanity.

Bogost argues that this kind of visual rhetoric also applies to videogames, but instead of it being purely visual, there are computer systems involved. The player of the game is expected to fill in the missing proposition. This is what Bogost calls the simulation gap (Bogost, 2007; Klabbers, 2011), something that the player then experiences the feeling of ‘simulation fever’, which encourages the filling of this gap through gameplay.

The key element in applying procedurality to videogames and other digital artifacts is the computer system’s ability to reproduce and represent systems and processes in ways that other media cannot. Where a television program can allow you to view an explanation of Lacanian psychoanalysis (as French state TV did in the late 1960s) the actions taken by the viewer are entirely in the realm of reception with no interaction.¹⁰ If Lacan's rhetoric fails to convey its argument to you at any point in the programme, you stand a chance of losing sight of the overall argument. On the other hand, a digital environment such as a videogame could *not let you advance* until you have begun to understand the behaviour of elements in the world, which is key to the power of procedural rhetoric. This is Bogost's simulation gap, where you fill in the piece of the argument. If a (well designed) videogame had been the method of introducing an audience to Lacanian psychoanalytic theory, if one had to “play” through the arguments made about the power of the subconscious in human life, there is a good chance that it would have showcased how Lacan conceived of the subconscious as a system. The hard-code of videogames requires the user to interact and understand the argument being mounted to progress through the media itself. This doesn’t mean that videogames are a better way to make arguments about the world, but they

¹⁰ Barring, of course, the interpretive work of audiences. See Hall, (1973)

are qualitatively different.

This brings us to consider the procedural quality of videogames whose primary purpose is to accomplish more than entertainment: games that intend to persuade the player in one way or another. This was the topic of Bogost's 2008 work *Persuasive Games*, in which he uses unit operations to analyze the various ways in which videogames mount arguments about the world, be it for political, marketing or educational purposes. Some of these are what you would expect of the genre - "serious games" like *World Without Oil*¹¹, which is an "Alternate Reality Game"¹² (which mounts an argument about oil dependency for a world quickly running out of fossil fuel) or *September 12*¹³, which argues against using military action to fight terrorism. Others seem outright silly, as the Atari VCS marketing videogame *Adventures of Kool Aid Man*, in which the player takes on the role of the titular Kool Aid Man as he fights the evil Thirsties, no doubt hoping to create positive brand awareness for the Kool Aid brand drink.

Important for Bogost is that not all such games (persuasive or otherwise) mount successful arguments. They often fail. Videogames are the product of a design process. The intention of the designer to convey a particular message can fail if the structures in play do a poor job. Quite often game designers don't provide these things, and thus the game fails at

11 *World Without Oil* (developed in 2007 by Ken Eklund and Jane McGonigal) is a complex multilayered Alternate Reality Game that uses websites, game mechanics and personal blogs to "simulate" what life would be like during the first 32 weeks of a global oil crisis. The concept was that players would voluntarily act out how they would live their life during such a crisis – and simulate what ways in which they are able to both have an impact on global events, as well as how they are powerless to individually impact global consumption patterns themselves. (worldwithoutoil.org, 2011; McGonigal, 2011)

12 Alternate Reality Games (ARGs) are a relatively new phenomenon that often combine interactive websites with game-like mechanics, that encourage the player to engage in real-world behaviour (like attending an event set up by the making of the ARG) with gameplay.

13 *September 12* is a short flash game where the player attempts to kill terrorists in a small Middle Eastern city using guided missiles. The problem is that the missiles are slow and often only mildly accurate, leading to cases of civilian casualties. When civilians are killed, other civilians rush to their lifeless bodies and transform into terrorists. The game's argument is that the only way to win is to *not shoot any missiles*. It questions the entire premise of military action to remedy radical terrorism.

arguing effectively, and even when they do succeed in doing so, it can be argued that consumers of media still play an active role in making meaning out of cultural artifacts.

Out of this Bogost makes the claim for building “procedural literacy”. Traditionally procedural literacy was often touted by programmers and engineers as a goal for educating people in the tools and programming languages that allow one to create software on computers. Bogost extends the term further, suggesting that we build procedural literacy through interacting with the systems themselves. As one incorporate more and more computer artifacts in our daily lives through portable laptops, smart phones and MP3 players, they might understand how computer technology functions as systems run through procedure. For Bogost the “procedurally literate subject is one who recognizes both the specific nature of a material concept and the abstract rules that undermine that concept” (p. 255). Literacy with procedural systems allows the subject to more accurately understand all sorts of processes.

Persuasive Games

But looking beyond mere literacy, the question of the actual *persuasiveness* of a videogame remains in question. With most media (and most forms of education, politics, advertising, etc) there is the long standing tradition of positivist “assessment” of the effectiveness of artifacts and institutions. Data collection and the reliance on previously agreed standards of performance often obscure the nuance of media consumption. Political pollsters measure demographics on issues, registering all participants on scales of refusal and acceptance, with the quantified undecided in the middle. Advertisers use software on the Internet to measure

consumer purchasing habits and the length of time consumers spend looking at a product's website. Economists look for causality between economic stimulus and economic growth. All of these to Bogost are a form of “assessment”, wherein the efficacy of all sorts of human enterprise is collapsed into a kind of financial expenditure. The problem here is that these forms of assessment attempt to categorize and understand information and efficacy inside of already articulated systems of understanding, whereas for Bogost a persuasive game can actually question the system it represents unintentionally (as I discuss later, in reference to *America's Army*).

This leads Bogost to consider the persuasiveness of a videogame in terms of moving the subject to deliberation. In a state of deliberation, the goal of rhetoric is not to produce a yae or nay, but instead states in which all possibilities are *considered*. He invokes Alain Badiou's concept of the “eventual site”, saying that the subject “can belong to multiple situations simultaneously without inconsistency and it gives participants of a situation perspective that can lead to disruption.” (p. 332) In this site new ideas, opinions and subjectivities lie in wait. In each interaction with a videogame there is the possibility of disruption and new modes of being. The success of a persuasive game then does not rely on it having convinced the player of its efficacy. A well-conceived persuasive game succeeds when the player has achieved the “ability to see and understand the simulation author's implicit or explicit claims about the logic of a situation represented.” In this way Bogost makes it clear that the production of procedurally literate individuals capable of understanding the underlying systems inherent in the world is one of the massive benefits of videogames as computer artifacts.

As procedurally literate subjects we can return to *ideal concept* of the public sphere. In

building our procedural literacy videogames serve a purpose inside of the free exchange of ideas, emboldening players with new understandings, placing them inside of contexts and systems that they might not envision or more likely, *even have access to*. It is through simulation of systems the subject-citizen gains new awareness, new modes of being. In the sense of efficaciousness of media, we can remove the condition that media and communication have a *direct* and *measurable* impact on public opinion, involvement, etc. Instead the very building of a literacy of objects and systems can lead to a discourse inside contemporary power structures of late-capitalism just as the spread of bourgeois public sphere impacted relations in Enlightenment Europe. This being the case, there stands an argument for the involvement of the liberal democratic state to encourage such artifacts to circulate for the public good. Yet, as was discussed earlier, states have retreated from the role of building and protecting the public sphere, at least overtly. The two following case studies show how the state is still actively involved in the maintenance of the public sphere, even if they do not intend to. They have switched their rhetoric, but they are playing an ongoing role in how citizens communicate.

Chapter 3: *America's Army*: Videogames, the State, and Communication with the Public

Chapter 1 established how the contemporary state of broadcasting, telecommunications and cultural policy in Canada is currently defined by the economic instrumentality of cultural artifacts and communication. Chapter 2 discussed first how, contrary to the arguments made by Dyer-Witheford & de Pueter, videogames can't be understood purely as computer artifacts that interpellate subjects into ideal subjects for Empire. Instead it argued that videogames can be understood in terms of their procedurality, and that this procedurality makes a case for their inclusion in discussions of the public sphere. This chapter teases out the links between the state and videogames. Specifically it shows how *America's Army* is the first major example of the state to use videogames as a tool to interact with the public. Most importantly, it shows how the state will continue to play a role in the communications industry. The political economy of *America's Army* shows it to be intimately interlinked with the public sphere.

Americas Army, is used as a case study for two reasons: 1) It is an example of procedural rhetoric (using computational systems to to represent and make arguments about real-world systems) being employed at the level of public address and international statecraft. 2) It serves as an important historical marker in the narrative of the state's interaction with videogames as a *medium of communicating with and addressing the public*. It is a milestone in the history of games – where videogames came full circle from their origins in the Military Industrial Complex, to the commercial market, and then back again.

It bears mentioning that while the military's use of a videogame for public outreach was

unprecedented at the time of *AA's* release, the use of games and videogames in the military is nothing new (Der Derian, 2009). Wargames date back thousands of years, but the modern equivalents can be traced to various German militarized board games in the 19th century, which used probability charts, dice roles and specific rules to simulate battlefield outcomes. More recently militaries around the world have begun to use large scale military training scenarios and computer games to replicate and train soldiers for the various outcomes of armed combat.¹⁴ Videogames have been actively used for quite some time, with the use of the contemporary training program *DARWARS Ambush*¹⁵ to simulate various tactical situations using the game engine from *Operation: Flashpoint* and large banks of networked computers (McLeroy, 2008). The use of simulation for readiness and training remains a key component in military strategy, and the use of various videogames (due to ongoing convergence of communications technology) and videogame technology seems to be one of the best uses of resources for this organizational goal. What allows *America's Army* to stand apart from these other pieces of software is that digital combat simulations are intended for internal use for the military. They have no use for addressing the public, as their goals as strictly professional.

I believe that it is because of the very specific public goals (public service in the military, duty, honour, etc) of *America's Army* that makes it pertinent as a point of critical political economic study. As I showed above, much of the critical scholarship around the policy and regulation of broadcasting and telecommunications has focused on the discourse of markets – that when discussion of regulating various mediums and formats arises, it needs to be framed in

¹⁴ See Der Derian (2009) for a detailed explanation of the various battle simulations conducted by the US military using entire battalions of troops.

¹⁵ *DARWARS: Ambush* is a re-purposed version of the consumer videogame *Operation: Flashpoint*, which is a first person shooter which focuses on ground infantry combat simulation. *Operation: Flashpoint* already stands out in the marketplace by its strict adherence to realism, so its use by the military as a training simulator comes as no surprise.

ways that encourage economic growth and opening up markets to competition, or just as often, protecting local marketplaces from the turbulence of the global economy. The public nation-building goals of telecommunications, broadcasting and cultural content have either lost out to deregulation, or are barely fighting to stay protected. I would say that while this *is* the dominant trend in communication and culture in general, *Americas Army* shows that governments have shifted their focus from broadcasting and telecommunication style media to forms like videogames to do the heavy lifting of nation-building.

To once again reiterate Warner's discussion of texts and publics, *America's Army* is a self-reflexive text, encouraging discourse through and around it. It is the relationships that connect it with an unknowable audience that it functions as a mode of public discourse. Indeed, what *America's Army* appeals to is not some abstract notion of maximizing economic opportunities for private actors, but something much more ethereal and philosophical. At its heart, it is publicly-minded.

Simulating Military Life

America's Army is, on the surface, much like other videogames in the same genre: an online multiplayer first-person-shooter (FPS). These games involve the player seeing through the eyes of a soldier holding a firearm and engaging in battle with other players. Using a keyboard and mouse (and in the case of the Xbox and Playstation variants, a console controller) the player navigates a digital space that is populated by teammates and enemies. The logic of these games is that when you confront player on the opposing team you use your weapon to try and kill them.

Whether or not you hit them, however, is a combination of individual skill, teamwork, spatial knowledge and personal reflexes. With one game broken into a series of matches, the players on each team battle each other in an attempt to complete various objectives on the battlefield, ranging from bomb defusal, hostage rescue, taking/holding positions and the like. In general, these basic characteristics are shared by many military themed FPS's on the market today, typified by other game franchises like *Battlefield* and *Call of Duty*.

What sets apart *America's Army* from these other videogames is that to be able to play the multiplayer portion and compete against another players, the player has to complete a simulated version of Army boot camp. This involves running obstacle courses, conducting weapons training at firing ranges and undergoing basic field medical treatment courses. It takes roughly an hour to complete this training, during which time you not only complete the tasks but are reminded repeatedly about the duties of an American soldier. Upon completion a cinematic trailer is played, showing a typical boot camp graduate ceremony with cheering families, waving flags and a speech about the honour bestowed on the newly trained soldier as a member of the armed forces. Right after the cinematic the player is told that they are being deployed to the battlefield in a military intervention to halt the invasion of an innocent country by its rowdy neighbour. This marks the player's ability to now play online with other people.

Developing *America's Army*

America's Army was developed and released in the summer of 2002, and showcased that year at the videogame industry's yearly convention, the Electronic Entertainment Expo.

(Goodale, 2002) It has gone through three iterations of the software (*America's Army 3.0* is the current release) and been spoken of at length as the military's pioneering work in public relations in the digital age. The idea for *America's Army* came from Col. Casey Wardynski at the Office of Economic and Manpower Analysis at West Point, the United States Army's officer training university. While not a videogame player himself, he noticed that his two sons were especially taken with the medium of videogames. Building on the perceived strengths of the Internet at the time, he believed that releasing a videogame free of charge and encouraging players to share and download it online would be a successful gambit for military PR. The project was approved and then developed in-house by the Modelling, Virtual Environments and Simulation Institute at the Naval Postgraduate School in Monterey, California using the Unreal software engine.¹⁶ The ultimate goal for Wardynski was to create an “engaging, informative and entertaining” videogame, addressing possible new recruits for the United States military. The original cost of the game came in at around roughly \$7.6 million, with \$2.5 million more allocated for ongoing updates and \$1.5 million for infrastructure upkeep (server maintenance, bandwidth, community management etc) (Kennedy, 2002; Huntemann & Thomas Payne, 2010).

Commodification: Labour and Selling Militarized Citizenship

Understanding the commodification of *America's Army* means studying the methods by

¹⁶ The Unreal software engine is regularly used by development studios that wish to avoid constructing their own game engines. The Unreal engine is just one of many engines available for use by various development houses. It is owned by Epic Games, a privately owned development corporation based in North Carolina. Engines are suites of development tools that allow programmers to avoid building the underlying structure of a videogame. Think of them as videogaming's allegory for the PC operating system. It is often easier to avoid building a new operating system for each new piece of software.

which America's Army came into being. Reiterating Mosco, it is important to focus on how *America's Army* is an ontologically distinct object - a videogame - and a product of numerous forces, one of which is labour. While it might have been distributed for free on the Internet, it is still the product of capitalist relations. While there are many ways in which to explore commodification, I will focus on two: the commodification of labour and the commodification of audiences. These show how the values of labour, citizenship, military service and duty to the state mutually constitute the relations that brought about the creation of *America's Army*.

The development of *America's Army* has much in common with private development of videogames. Using the theories of cognitive capitalism and the importance of immaterial labour of Hardt & Negri, Dyer-Witheford & De Peuter's (2009) exploration of videogame production and labour offers an insight into the commodification of AA. In their assessments they address the various exploitative practices that Empire engages in, as it exploits not only labour but all of 'life'. One such example is the ubiquity of the practice of 'crunch time' that necessitates 14 hour days and unpaid overtime in the final weeks before a game's launch, which leads to the loss of family and recreational time. This process needs to be re-evaluated recognizing that production by military employees (with the requisite job protection, pensions and health coverage that such positions can/cannot provide) might be both the same and different from private production geared towards the maximization of profit. The labour of military personnel has been chronicled in the Canadian context by Deborah Cowen (2008), whose work focuses on linking citizenship, military service with the birth and decline of the welfare state. She concedes that, even in the neoliberal era, military spending continues to rise and thus militarized labour is more and more prevalent. Cowen shows how rhetoric of private sector benefits and general "Quality of Life" has

entered the lexicon of the military, showing their labour to be subject to the same market forces that drive labour relations in the private sector.

A more readily accessible look at commodification is through the audience, described as the process by which “companies produce audiences and deliver them to advertisers.” (Mosco, 2009. p. 148.) While this approach is historically based on the process by which broadcasters create content to draw in the widest audience possible, this is easily applied to the goals of *America's Army*. Where this practice of commodification differs from the norm is that the audience isn't one of consumers, but citizens. What's being sold isn't a product in the form of an ad, but an *ideology* about the how the world works – and the role of the American citizen in that world. In essence, it is a mode of *citizenship*. Explaining how the game deals with violence (what the Army calls, “use of force”) Wardynski shows how the game reflects a popular ideal of what it is to be “American”:

Our approach was that employment of force in the game would be subject to the same rules that the Army lives under. Our game will operate under those rules, and that's the truest way to show people their Army, and, if they want to join their Army, how they'd have to operate. Basically we built our game around a set of norms and a set of rules which makes it very hard to make a game, but our design criteria required our developers to motivate gameplay using Army values – which really are American values – integrity, loyalty, all these sort of noble values. They also had to make sure that advancement in the game was governed by the player adhering to those values and rules of engagement that mirror the same rules of engagement soldiers operate under (Hunteman, 2010. p 181).

America's Army is a specific tool used to target a very specific audience: young (mostly male) American citizens that are computer and technology savvy with a likelihood of attending college. This means that it targets a socioeconomic class of users that are often not being encouraged (through family tradition) or forced (through socioeconomic status) to join the military (Kennedy, 2002). This articulates that the American military, which relies entirely on

voluntary recruitment, commoditizes the bodies of American citizens and creates media to gain access to these bodies. It was established earlier that advertisers have done this for a long time, but the difference is that the subjects the US military targets do not consume products. Instead they consume an idealized model of citizenship.

One of the Department of Defence's (DOD) main goals with the project was to minimize the amount spent on finding and recruiting new soldiers. Because the US military figures that they spend around \$26,000 of advertising on each new recruit, if *America's Army* was able to produce 300 to 400 new recruits yearly, it will have paid for itself. With a prospective audience of millions, the ability to “buy” 300 to 400 recruits per year with a videogame is a savvy use of funds. Similarly, by communicating certain aspects of military life to the prospective recruits, the DOD hoped to cut down on those who wash out of basic training when they finally realize the military lifestyle isn't for them (Kennedy, 2002). This goal suggests the US military then “sees” the citizen as commodity to be better accessed through videogame like *America's Army*. Here Wardynski explains the monetary incentives behind the game:

Army recruiting is a very expensive business – I think on average we spend about \$26,000 for each recruit. That's pretty expensive. And there are probably recruits coming into the Army that cost \$150,000 to \$200,000 at the margin. In addition to considering the expense, we have to ask, were the recruits ultimately happy? While recruiting tends to focus only on the recruiting experience, that's not really what's most important. What's important is, were they a good fit and did the Army put them in the right job where they can excel? If they don't have a good experience, it doesn't matter what we say, it only matters what we did. The game is involved in creating a better-prepared customer (Hunteman, 2010. p. 184).

Ultimately, *America's Army* both reifies and calls into question how audiences can be commodified through communications technology. The fact that the US Military *needs* citizens, not just consumers, to be an audience to their videogame is emblematic of its public aspirations.

Spatialization: Geography, Militarism and Virtuous War

Much of the contemporary literature on spatialization in the communications industry focuses on the technological and organizational convergence. Technological convergence speaks to ways in which platforms are increasingly multi-use and multimedia ready – for example iPhones play video, make phone calls and surf the Internet (Hesmondhalgh, 2007).

Organizational convergence is the process by which corporations vertically or horizontally integrate with other industries and companies to give themselves an advantageous position in the marketplace. Spatialization can also speak to the ongoing globalization of communications technology, marketplaces and identities (Mosco, 1996). While *America's Army* is ideally targeted at the American citizen as an audience, its nature as an online multi-player game available for download anywhere in the world means that spatially its effects are much more widespread; the public it is mutually constituted and reflexive with is decidedly global.

As discussed earlier, *America's Army* is made up of two distinct portions: “Operations” and “Soldiers”. Operations functions as a classic example of an online First-Person Shooter, which places the player in the role of one member of a squad assigned with various tasks inside a digital map. The players then use simulated firearms to engage in combat with other players while completing objects like capturing a terrorist encampment or extracting a POW. What makes this game particularly special is the “Soldiers” portion which is made up of a number of training exercises modelled on “real” military life, including obstacle courses, firearms marksmanship training and first-aid education. To be able to gain access to the Operations

(multiplayer) section of the game, the player had to complete at least this Basic Training component. To do this the player had to actively follow the rules and pass various tests which demand attention and participation.¹⁷ All of this from the comfort of your computer chair.

Bogost (2007) shows how the game's ideological construction of the world links directly to the ongoing nature of American military intervention around the world: it presents conflict as a force between good and evil. Us vs. Them, with the United States always on the side of justice and freedom. Many parts of the game, from the training exercises to the short cut-scenes, present the world in easy-to-understand dichotomies. They are events whose only important context is that America is there to forcefully halt the aggressor. Coming from a propaganda tool this is no surprise, but it reflects the actual practice in the military: as an arm for the American Executive branch operating separately from the ongoing electoral politics in the US, one learns from *America's Army* that being a US soldier is an apolitical life in which one follows orders issued by the President, without question. Spatially this reflects that “as a manifestation of the ideology that propels the U.S. Army, using procedural rhetoric the game encourages players to consider the logic of duty, honor, and singular global political truth as desirable worldview” (Bogost, 2007. p. 79).

Spatially this reifies the contemporary ideology that drives the operation of the contemporary US military. As David Harvey (2005) and Naomi Klein (2009) have argued, it is one tool of the “Shock Doctrine” utilized for regime overthrow that allows for the introduction of American business interests and economic liberalization. *America's Army* could then be described as a mediator for the global project of Empire – a way in which to frame the globalized

¹⁷ This is just a cursory explanation of how the game operates. For better explanations see Bogost's *Persuasive Games* (2006).

world, where military intervention can be called on to solve a diverse set of political goals. James Der Derian (2009) describes this new type of war as “Virtuous War” - where the world presented has no boundaries – immediately available to the military for the ultimate goal of “good”. Through the technological convergence of the last twenty years, *America's Army* allows the virtual/digital soldier to travel thousands of miles in the blink of an eye and engage in a global police action. In very real material terms such presentations of war mirror the realities of contemporary warfare where the use of remote controlled drones and long-range missiles and other high tech remote warfare is now the norm (Singer, 2009).

Structuration: Revealing the Systemic Nature of Modern War

America's Army is produced out of various structures of human agency, the US military, the United States Pentagon and of course, the virtual, digital and real publics of the United States. This means that the social relations of race, class and gender all play a significant part in the process of production and consumption of this kind of a digital artifact. Because of the struggles that rise out of these subjectivities in society, structuration as a mode of analysis places a strong emphasis on social change and recognition in society. Mosco (1996) says that “Out of these tensions and clashes within various structuration processes, the media come to be organized in their full mainstream, oppositional, and alternative forms” (p. 216).

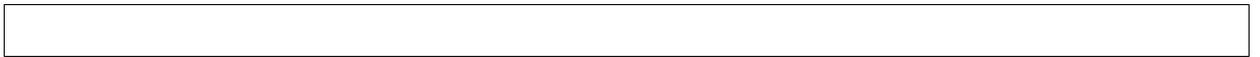
Returning to the self-reflexive nature of texts stressed by Warner, *America's Army* has not existed in a vacuum devoid of social critique. Indeed, while the overall structure of the game is monitored by the military, the various loopholes in code and social practice open the text up for

numerous readings and interactions with it – influencing the maintenance of the game and the community that regularly plays it. Easily related examples are those of hacking, where players find loopholes in the code to gain unfair advantages in the game world, ruining the “ludic” game-like nature of rules. The irony of this tactic in reference to the technological superiority of the US military's weapons to those of the insurgents is likely not lost on the hackers themselves.

Other examples of social critique abound. One such example is the intervention of artist and Professor Joseph Delappe from the University of Nevada. His project entailed him joining *America's Army* with the soldier name “dead-in-Iraq”. Once inside the game he used the chat client to transmit “the name, age, service branch, and date of the death of real soldiers killed in the occupation” (Dyer-Witthford & de Peuter, 2009). I would characterize Delappe's performance to be a direct use of the game's public – he responded to the clean, virtuous environment of *America's Army* and presented his own interpretation of the game's overarching ideology with a realist argument the material reality of war. For Dyer-Witthford and de Peuter this is another example of the multitude standing in opposition to capital – attempting to reclaim the essence of 'life'. In very real material terms, it shows how games can be 'played' with in a number of ways, especially after one understands the rhetorical goals of them. After filling in the simulation gap and reaching the eventual site, the possibilities of play, and most importantly, *critical engagement* with the text is possible. By creating *America's Army* the Department of Defence put the logics of their worldview in plain sight – unobfuscated by the role embedded reporters, press-conferences and PR.

What *America's Army* illustrates is the complex interweaving of social, economic and cultural forces on the development of one videogame, with the central mediator a government

organization with the attendant goals of nation-building. It was mutually constituted out of a system of processes that traverses the form from the micro of individual subjectivity to the macro of international economic and political flows. As a case study it serves as an example of a direct link between the state and communications technology. It also functions as a historic marker for the (now seemingly) inevitable role that the state will take in regards to the future development of videogames as a means of public address and cultural content. The political economy of *America's Army* reveals the ways in which the game is explicitly public, from its production funded by the state, to its aspirations of encouraging youth enlistment.



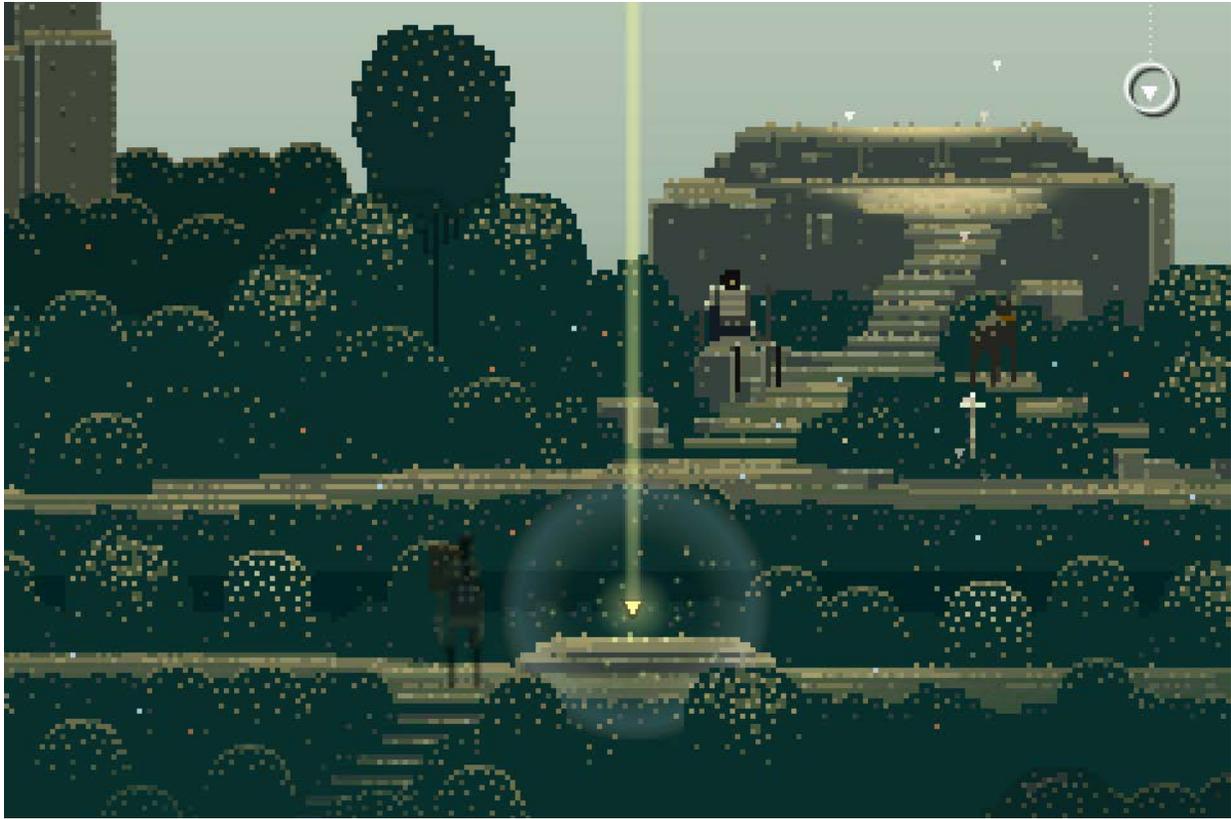


Figure 3.1 Superbrothers Sword & Sworcery EP during a typical exploration phase of the game.

Chapter 4: The development of *Superbrothers: Sword & Sworcery EP* and the role of the Ontario Media Development Corporation.

Having examined a very explicit case of state engagement with videogame development with *America's Army*, this chapter turns to a much more prosaic example: state funded industrial development grant programs. Where *America's Army* appears as an explicit way that state interacts with the medium, it is just *one* game. In Canada, federal, provincial and municipal

grants and tax incentives drive the development of various videogames. Looking closer at one game and one grant reveals the new ways states interact with communications technology, and by extension, the public sphere. To do this I look to the videogame *Superbrothers: Sword & Sworcery EP* and the Ontario Media Development Corporation.

Sworcery is an interesting game considered in the context of contemporary mobile gaming. Specifically, it stands out as a videogame that pushes both the platform it exists on, as well as the aesthetic and interactive elements of contemporary videogames. On the game's website it is described as such:

S:S&S EP is a 21st century interpretation of the archetypical old school videogame adventure, designed exclusively for Apple's touchtronic machinery. It's a mix of laid-back exploration, careful investigation & mysterious musical problem-solving occasionally punctuated by hard-hitting combat encounters. S:S&S EP is an unusual genre-bending effort with an emphasis on sound, music & audiovisual style that has been positioned as 'a brave experiment in Input Output Cinema'.

It lives up to this description: you wander through a two-dimensional world by directing the main character, the female warrior “The Sythian” on what is described as a “woeful errand”. By tapping on the screen you navigate the world. In the process you explore the wilderness, the ruins of a lost civilization and battle with various mystical powers. (Figure 3.1) The puzzles one solves often take the form of tapping, rubbing or shaking the iPod (or iPhone) to interact with the world. It is, very simply, an adventure game that focuses more on reading text and abstract puzzle solving than action. In the cases where there *are* action sequences, the game forces you to turn the iPhone or iPad horizontally, using the built in accelerometer switch the game into combat mode. When this happens the player has to time various button presses to block, dodge and attack the foe in question.

The aesthetics, both musical and visual, of *Sworcery* are probably the most notable about the game. What first strikes the viewer is likely the retro-inspired pixelated visuals. These are the work of Craig Adams as part of the Superbrothers illustration brand. Previous to the release of *Sworcery* Adams' work was known primarily in the context of editorial illustration, creating work that was published in *New York Times*, *Wired*, *Seed*, *The Globe and Mail* and *American Illustration*. Adams explained that creating the Superbrothers brand was a part of his business strategy after finishing his degree in illustration at Sheridan college. While doing freelance in illustration Adams also began to look for work inside the videogame industry, enrolling in a program at Seneca college in Toronto, where he was able to develop the skills necessary to gain an entry level position building art assets for the Toronto branch of the Japanese videogame developer Koei Canada. During this time the Superbrothers brand went dormant, only to rise up again upon his leaving that job. Adams described Koei as an important way for him to make a living at the time, paying better than freelancing illustration work, but one that was still creatively unfulfilling.

Upon leaving Koei Adams set about to restart the Superbrothers brand with the partnership of Capyberra Games (sometimes abbreviated as “Capy”) and the indie rock musician Jim Guthrie.¹⁸ Capyberra games was in charge of coding the game for the iOS platform, while Guthrie was to score the game. Adams was a big fan of Guthrie's previous solo work, which was predominately showcased in his solo albums, as well as being a part of several bands such as Royal City and the critically acclaimed Islands. Before working at Koei Adams had struck up a

¹⁸ Videogames being the product of a collaboration between independent musicians and developers are still relatively rare, except it seems, in Toronto. The locally produced videogame *Everyday Shooter*, was the first example of such a game developed in Toronto. Often the music in videogames is professionally produced by in-house or contracted musicians.

artistic relationship with Guthrie by producing two music videos with him: Guthrie created the music and Adams animated it. Now in the market for forming a new project, Adams tapped Guthrie for creating the music for *Sworcery*. This resulted in a collection of songs that the game's areas and scenes are based around. The music is reminiscent of Guthrie's earlier musical work which he produced by using a music program on a Sony Playstation. It is both “retro” in style and yet very contemporary. As the title *Superbrothers: Sword and Sworcery EP* suggests, the musical component of the game was central to the overall aesthetic and feel. Adams said that from the project's beginnings, this was the goal.

Finally there is an interesting component to *Sworcery* that I believe illustrates an artistic risk on the side of Adams. Accessible in the game is an object known as the “Megatome” - which serves as a pause menu of sorts where the player can access clues about the game. When in the Megatome you click on a the avatars of various characters in the game. When this is activated an temporal interface that resembles the news feed in the online micro-blogging service Twitter appears.

Information about the game and the character is communicated here, which relies to an extent on the users' familiarity with Twitter to understand. In these feeds the characters speak about how they are feeling, what the Sythian is up to and ways in which the player can control the game to their benefit. Its invites the user to consider the multitextual, discursive and temporal nature of digital media. All the things that have been said to the Sythian are available here in the Megatome. The inner thoughts of those in the game world are accessible in a way that many users are likely already familiar with in an age saturated by social media.

In addition to the Megatome's in-game Twitter clone, *Sworcery* can be connected to

Twitter to push in-game updates to their own Twitter stream. The game invites users to insert their Twitter log-in information into the game itself so people can share the contents of the game as they progress. When a new game is started, the game prompts the player to enter their Twitter details: “Our research shows that social support networks play a significant role in the outcome of this phase of the S:SS EP experiment.” By integrating the sociality of the world outside the game it playfully reminds the player that the game itself exists inside of a series of technological and social networks. When the player receives any kind of text in-game there is often the opportunity to broadcast this on Twitter, with pre-made tweets prepared by the game. They are often funny and vague, but the content always includes the hashtag “#sworcery” (hashtags being Twitter's built-in hyperlink search function). When you click on these hashtags in Twitter you are brought to a page displaying every current tweet that includes these tags, showing that others are playing the game and at various stages in the game's narrative. While many games have similar push functions associated with social media, *Sworcery*'s use of it remains a novel and interesting approach.

The Ontario Media Development Corporation

In early discussions with Craig Adams of Superbrothers Inc., I became aware of the Ontario Media Development Corporation (OMDC), which Superbrothers and Capyberra Games both successfully petitioned for grant funding in the process of creating *Sworcery*. As a government organization that specializes in supporting the burgeoning cultural sector of Ontario it serves as a lens through which to frame my discussion around government' interaction with the

development of videogames. In this chapter I present a brief discussion of what the OMDC is, and how it sees itself in relation to the creation of cultural content. Through interviews and primary documentation provided by the OMDC, I present the argument that the Ontario provincial government currently frames cultural creation through what could be considered a neo-liberal lens of economic development (cultural development is only useful insofar as it creates jobs and spurs economic development) but that it also plays an integral role in fostering the development of small videogame development studios which might not have exist otherwise. In addition to this it provides a platform on which spur the development of new and innovative games that challenge the hegemony of large, multimillion dollar blockbuster productions which often reflect the cultural heritage of the United States. The alternative is a market completely flooded with foreign developed games. I take issue with the emphasis on the economic instrumentality of culture that is embedded in the mandate of the OMDC, but acknowledge that under contemporary political pressures these mandates might be the only way to continue funding developers in the face of austerity and budget cuts that define the contemporary political climate of Canadian politics. Yet as I said above, this view is limiting to both parties (the state, developers).

Structuration: Policy Goals of the OMCD

The OMCD was created by the Ontario Ministry of Tourism and Culture to spur economic development in the media sector. It describes itself as the “central catalyst for the province's cultural media cluster including publishing, film and television, interactive digital

media, magazine publishing and music industries.” (OMDC, 2011) It describes itself doing this through a number of processes:

- (a) contributing to the continued expansion of a business environment in Ontario that is advantageous to the growth of the cultural media industry and to the ***growth of new employment, investment and production opportunities in Ontario***;
- (b) facilitating and supporting innovation, invention and excellence in Ontario's cultural media industry by stimulating creative production, format innovation and new modes of collaboration among sectors of the cultural media industry;
- (c) fostering and facilitating co-operation among entities within the cultural media industry between the public and private sectors to stimulate synergies in product development and the creation of products with ***original Canadian content***;
- (d) assisting in the promotion of marketing of Ontario's cultural media industry as a world-class leader;
- (e) administering provincial tax credit programs and such other programs and initiatives as may be required by legislation or a Minister of the Government of Ontario; and
- (f) acting as a catalyst for information, research and technological development in the cultural media industry provincially, nationally and internationally.

This mandate speaks more to a economic development, despite its focus on Ontario, and Canadian content. These passages talk about Canada – but not about artists and art having any special status or civic responsibility, instead it is about ownership of intellectual property residing with Canadians. This ownership, as the OMDC explains, is actually extremely important from the perspective of content creators. It allows them to build long-term brand strategies around single IP’s if they are successful, rather than selling them off to foreign corporations, as I explain in detail below. Still, this is as far as the “Canadian” content aspect of the OMDC goes.

The Digital Interactive Media Fund

The OMDC then functions as a multipurpose provincial organization to manage various media sectors through different grant and incentive programs, while at the same time conducting research that is advantageous to their continued operation. As a videogame *Sworcery* qualified for the OMDC's (2011b) support through their Interactive Digital Media Fund (IDMF). The IDMF describes its goals as the following:

- to support the creation of high quality, original, interactive digital media content products by Ontario companies;
- to assist in capitalizing on Ontario-based interactive digital media content production companies;
- to provide flexible funding options that support partnerships between Ontario interactive digital media companies and companies from other creative cluster industries; and
- to contribute to the financing of projects that make a positive contribution to the Ontario economy.

Beyond these goals, which clearly reflect the already stated goals of the OMDC, the IDMF is designed specifically to cater to the special needs that interactive media might need. It sets out the qualities it requires of company and the media that fit into this category. First and foremost in these requirements (and repeated numerous times throughout the documentation) is that the corporation (and all applicants at must at some point in the grant process become incorporated) be Canadian owned. They must also be Ontario-based and for-profit organizations.

Secondly are the requirements about what constitutes “Interactive Digital Media”. It says that projects must be:

- intended to be experienced by the end user on a digital media platform, network or device that is capable of interactivity and allows users to make decisions and

have control over the content and the form and the sequence in which it is presented through browsing, searching, selecting and making choices which has an impact on the user's experience of the content;

-be complete with an intention to release the project via an interactive digital media platform, network or device as the primary distribution channel;

-be intended for a consumer audience;

-be intended for use by individuals or groups of individuals;

-be intended to *educate, inform or entertain*;

-consist of a combination of at least two of text, sound (music, sound effects, voice etc) and images (pictures, animations, video, etc); and

-be suitable for *commercial exploitation*

[emphasis mine]

This specific list is interesting because it sets both technological constraints on the media itself (it needs to use a combination of audio *and* visual) as well as market concerns (must be economically exploitable).

There is also a heavy emphasis on original, proprietary content that doesn't rely on external copyright holders. The OMDC states in their documentation that this is a significant issue associated with small and medium sized development studios:

... interactive digital media companies often live from project to project and are therefore unable to make significant capital re-investments in their companies. These capital challenges mean that companies have very little negotiating leverage, particularly with international players, when selling their products. In many cases they must sacrifice ownership of their intellectual property – and therefore potential future revenue streams – to ensure that their projects actually reach completion (OMDC, 2011b).

As a result, the OMDC mandates that in projects that receive funding, 75% of the funds must go to proprietary products, with only 25% to those in joint ventures with foreign-owned IP. The main way in which the IDMF functions to aid videogame developers is to provide up to 150,000

dollars as a grant, capped at 50% of the total production budget.

Commodification: The Development of *Sworcery*

This frame that the OMCD set has resulted in a successful venture between the crown corporation, Superbrothers and Capyberra Games. Craig Adams said that “we could not have started our project if there wasn’t a way to get part of the costs offset by the OMDC.”

Particularly important in applying for the grant was the previous experience that Capyberra games had in working with the OMDC (where they had been the previous recipients for a number of games they developed). Adams specifically noted that it helped enormously that Kris Piotrowski, creative lead at Capyberra games, had previously worked for the OMDC. With this knowledge they were able to create a strong application that appealed directly to the mandates of the IMDF.

Adams elaborated on the direct impact on the fund for *Sworcery*'s development:

Yeah, it allowed us to get going, and I think it also gave us the confidence to, even though we were trying to design something that was going to be commercially viable, it definitely had in mind that we wanted it to be a good game. But we were sort of, I guess, especially initially, we were able to just like be okay, but let’s just strike out in our own direction. Let’s not worry about being super conservative in the design. Let’s just go in the direction we think it needs to go. And I think that if we had to raise all that money, maybe we would have been more conservative. Maybe there would have been, you know, more sort of safe design decisions. Maybe it would have been more fun, more coins. I don’t know.

The reference to 'coins' as a videogame trope is key here. The point is that any such tropes are considered safe design decisions – as they are able to build on the videogame grammar that players are already familiar with. Opting for a cerebral and aesthetic experience on the iOS platform is a distinct and risky business move in comparison with the most popular game on the

platform right now, *Angry Birds*¹⁹, which uses bright cartoonish colours, simple mechanics and point mechanisms to identify with a large audience.

Adams elaborates:

...but I mean, that's the kind of thing where maybe we let ourselves off the leash a little bit extra, early on. Then we kind of brought it back to being like a reasonably normal adventure game. But for a good while there, [Capyberra] basically just trusted me to just lead them off into the woods on this crazy adventure. So maybe that financial help allowed us to do that. You know, in Toronto, there's a lot of interesting film, comic and the music scene is pretty incredible. You know, you've got the NFB [National Film Board] just down the street which has a long history of making beautiful animated works. And so even though OMDC doesn't have a curatorial aspect the way that the NFB does, there's sort of a vibe to some of these Canadian institutions where you kind of want to do right by them.

You kind of want to honour the people who have made great work, whether it's like Frederic Back for making animated works like *The Man Who Planted Trees* funded by the SRC in Montreal, or the NFB animator Norman McLaren. So I think, you know, we had a sense of that and we had a sense that like hey, why not try to do something in that direction? Again, why not try to sort of, you know, chart our own course?

Here Adams brings up a number of interesting issues: the grant itself, which doesn't have any artistic or creative expectations, functions as a conduit of sorts for the ideas about creativity, Canadian-ness and quality that is expected from other prominent Canadian cultural policy organizations, like the National Film Board. It highlights an interesting link in how creators might subject themselves to the same expectations that other artists in Canada have to, even if it is not an overt one.

¹⁹ *Angry Birds*, developed by the Finnish studio Rovio, is one of the most popular games for iOS devices. The game consists of slinging wingless birds at structures in which a number of pigs reside, with the goal of causing the structure to tumble down and destroying the pigs. The mechanics of the game, based mostly on a simple physics model are what is most appealing about it. It can be likened to building a toy house out of building blocks and then throwing rocks at it.

Spatialization: Space, Place and the Role of Toronto's Culture, Institutions and Networks

Adams also spoke at length about the nature of building videogames in Toronto, and the importance of the city's creative clustering of arts and media developers. Here he speaks about how Toronto's culture of artistic collaboration played a central role in the development of *Sworcery*.

But Toronto represented to me just basically The Kids in the Hall and, you know, and it was a place I was curious about. Vancouver has like a, I guess every city has got their differences or whatever, but Toronto definitely seemed like, it was a busy place. People were busy doing things and there were, you know, schools and people I'd heard about and famous film directors and bands. It just sort of seemed like clearly there's something going on there. And when I started Superbrothers in 2003, I was like this is a Toronto concept. It has to start here, of all the places on earth. I think part of it was the music scene. I was listening to a lot of Jim Guthrie, I Am Robot & Proud, Caribou. We were friends with the people in The Hidden Cameras and Owen Pallet from Final Fantasy. There's just, you know, there's a very generous community of people doing incredibly good work in that crowd. And then, with Jim, it was me reaching out as a fan, having listened to his records a ton without having heard that he also makes music on his PlayStation. I don't know if this works in every other city but it definitely made sense to my head in Toronto that everybody is local.

What if I just send this guy some artwork? And then him being as generous as he is and that community being as generous as it is, sent me a whole unreleased record of that PlayStation music back in like 2004/2005. And that was the beginning in a big way. Even though I was charting this course, Superbrothers with this pixel art thing that I was getting magazine illustration jobs for, you know, I had hopes to make prototypes in games but I couldn't actually piece it together. When I sent this thing and got the record from Jim, I mean, it was this huge gift. And the music was so exactly in line with what I was trying to do. For whatever reason, it seemed like they were one thing and so I made that first music video. Even though I didn't know how, I just made it to sort of showcase one of the songs on the record and I proved to myself that I could do something like that. Actually, it's way easier to animate an entire music video than it is to learn how to program a prototype and troubleshoot it. So it was actually the path of least resistance.

This teases out Toronto's history of being the media capital of Canada. It is home to numerous

artists, media empires and cultural icons that have played a central role in building up the idea of “Canadian Culture.” The specific mention of the various musical artists is also important, as those he points out, such as Caribou and Owen Pallett also hints as the strong focus on independent creative work, which both of these artists embodied in for independent music at the time.

Adams then led into a discussion of the precedent that other small videogame development studios set for his own work, specifically the development of the videogame *N* by Metanet software in 2003. During this period of time Adams wasn't yet involved in the videogame industry:

I wasn't paying a lot of attention to games and I wasn't playing them, you know, for university or through art school that much. But I was interested. I was going to get back to it. At that time, you didn't hear about any small teams making anything. Everything was a boxed product made by a team of 20 or 30 or 40 people. And then *N* happened, showed up as a flash game online that you could play for free and it was wicked. It's a beautifully made thing. And then you find out that it's made by two people who went to U of T. They're pretty much my age. They're just mortals, and they had day jobs for years. And then they made *N+* for Xbox Live which is a phenomenal game, and that one was actually something you would buy for Xbox, and it worked out. And it was one of the colossal hits for Xbox Live in its early days and it allowed them to leave their day jobs and do this fulltime.

So you hear a story like that and it confirms that this is possible. And of course now, that story is, it's a narrative that you hear a lot. People are striking it rich with apps and games all over the place. But that was like such a new phenomenon and that wasn't happening in other cities in Canada, I don't think. And part of the reason there is, again, Vancouver, the video game industry goes so far back. It goes back to the '80s, you know. EA has been in Burnaby since forever and teams have been splitting off and forming their own companies. And people are spinning off from those companies and forming their own companies.

So they've got like seven generations of studios in that city but it's all coming from that place of “let's make a boxed product for an audience of video game enthusiasts.” In Edmonton, for whatever reason, BioWare showed up and ah, that's kind of an anomaly and there's not a lot of other things going on in the city, I don't think. Montreal has got a bit of a Vancouver effect where, you know, Paris, the Paris based company Ubisoft decided to set up a studio because it was easier to pay people in Montréal than it was to do the same thing in France. And there's obviously a big government intervention there to sort of allow that to happen in terms of tax breaks and everything else.²⁰ And they've grown to be a mega corporation with like probably 2,000 people and a school and a bunch of

²⁰ See Dyer-Witheford & Sharman (2005).

satellite studios and service studios, and then people break off and form their own studios. So they're already in their third generation there but because there's all these choices, if you're interested in video games in Vancouver or in Montreal, you're going to go and seek out a job and you're going to get into that system and you're going to rise through the ranks, maybe, but you're going to be in that hierarchy. And it's not going to make sense for you to break out of it because why would you? What's the alternative? There's nothing else out there.

This is a particularly important point to consider in the wider context of Toronto's videogame industry. The very lack of an "established" big-studio system in Toronto appears to have led to incubating a small, almost counter-cultural videogame development movement. Without the large studios of Electronic Arts or Ubisoft²¹ in Toronto, those interested in videogame development as a career had to strike out on their own, without the institutional support of an established industry. What studios that were a part of the large boxed product industry in the city were considered second-rate, as Adams elaborates:

In Toronto, there were companies that are mostly gone now, but they were all second rate. Pseudo Interactive was around for a bunch of years but, you know, they were just making B quality products. They were in that gap between blockbusting and interesting. They were neither blockbuster nor interesting. Where I used to work, Koei, which was an offshoot of a Japanese company called Koei and again, lured by tax breaks, set up a studio that ended up being sort of 40 people. And they flailed around and couldn't find a place. They basically closed up or downscaled a few months ago. But yeah, in terms of what's available, there was basically nothing in the city, you know, nothing that was creatively exciting. If you're aiming for the top, there's just nothing around. But then you hear this story about somebody just making it. And then Jon Mak, a classic story comes out of U of T. When he applied to Koei because he needed a job, and they didn't hire him. But he, you know, he made friends with Mare and Regan, you know, the guys that made *N*. So they were just like, well, just make your own games.

He was making his own games but then he went, he took a big breath and made *Everyday Shooter* which was a more accessible and simpler game than he'd made before. And then with something like the Independent Games Festival, IGF which is like the component of GDC, the Game Developers Conference, that's sort of like the Sundance Film Festival of video games, his game was able to find all this recognition to win an award and be honoured by his peers, and for the name of the project made by one guy in the basement in Toronto to be that year's next big thing which got him started with Sony.

Those guys paved the way. Jim Monroe²² set some incredible tone. He's an author

²¹ Ubisoft did open a studio in Toronto in 2010, but it is a smaller satellite of their larger studios in Montreal and Vancouver. It's opening marks the first major studio in the city.

²² Jim Munroe is a Canadian science fiction author, journalist and editor. He has published a number of novels and

in the city. He's also kind of a community organizer and he has been sort of bringing all these people together and, you know, like the Toronto Video Game Jam²³ which has been going for five years. They've got their own energy but then when you sort of bring them into proximity with all these other people that are doing things and sort of get everybody friendly even more incredible things happen.

So I guess what it means to make a game in Canada is we've got a proud history in that department, and in Toronto there's sort of this cool counter culture music influenced, art influenced DIY vibe video games that is sort of at odds with the normal industry. So that, you know, that's significant, I guess. That's definitely something I think we all felt. At Capy, they feel it pretty deeply as well...

So I think everybody feels it and everybody is inspired by it and supported by it but is also challenged by it, you know. It's like we've got to be honest with ourselves. We've got to make something that feels good in that context or whatever. What I'm really happy with is how much music there is in Toronto's games, or how much music is a factor. Everybody is influenced by many things but music, obviously, is a really big deal. Jon Mak's was a pretty significant step in that direction. But then you've got like *Dyad*, which is a collaboration with Jason DeGroot, who goes by the name 6955. So you know, a guy who's got a pretty decent discography, who's got his own sort of set of values, his own compositional ability, is combining forces with another friend and local creator, or Jon Mak's second project that he's working on now called Sound Shapes, ah, he's working with Shaw-Han Liem who is *I Am Robot & Proud*, who's got his own discography. He's actually a friend of Jim Guthrie's from years ago.

What Adams is describing is how Toronto's independent videogame development culture sprouted out other artistic communities in the city, rather than through big established companies. The medium sized companies that Adams described, such as Koei, were never a big player in the city, often churning out games that weren't big hits on the marketplace. This is in stark contrast to other major Canadian videogame development hubs like Montreal or Vancouver, which rely heavily on new companies rising out of the big development houses as employees

worked as managing editor of *Adbusters* in the 1990s. He is also a founding member of Toronto's independent videogame community, The Hand Eye Society.

²³ The Toronto Video Game Jam (known affectionately as TOjam) is a videogame development event held at George Brown college where a team is given only 3 days to create a videogame, no matter their skill level. (tojam.ca 2011)

leave to start their own, smaller company. This link between artistic communities centred around film production and music highlights some of the interesting ways that Toronto spatially organizes videogame production in a very unique way.

In addition to the collaborative nature of the city's videogame development culture, Adams comes back to what kind of role that state sponsored organizations like the OMDC play in fostering such an environment. It appears to Adams that it is the special mix of Toronto's unique culture *and* the ability of small developers to acquire start-up capital from the government.

There's this kind of cross pollination and kind of inspirational thing that's happening between the music and the game crowd and it's sort of multiplying the effect of either. And in all these cases in the background, if you talk to, you know, Mare and Regan who made *N+*, OMDC was there. They would have funded part of *N+*. The OMDC travel fund or the export fund, if you apply for that, can give you a certain amount of money to go on a trip to GDC [Game Developers Conference] which can be expensive, but you go there and you're able to make all these different connections or these different friendships or relationships that go on. If you go to Jon Mak, you know, I saw him speak at GDC three years ago. People were talking about how to make a game. He just says "you just make a game. You don't worry about it. You just kind of sit down and jam on it. Oh, and if you live in Canada, get a grant. That's how I did it." Like, he said that. Sorry if you're not in Canada, but if you're in Canada, there are options. So just fucking put your head down and go and do it. So yeah, and the background on his story, CAPY's story, *N+*'s, Metanet's story, there are these institutions.

What can we take away from what Adams says here? Simply, that the OMDC's role, while strictly financial on the surface, likely allowed Superbrothers and Capyberra (and as it appears to him, many of the other independent videogames created in Toronto) to build a cultural product that in all likelihood wouldn't have been able to be produced by such a small team with so little start-up capital with which to invest. In addition to this it was the very specific artistic and cultural scene of Toronto – musical, visual, and digital – that created a space where something as

experimental, as *Sworcery* could incubate. The early successes of other videogame developers like Jon Mak created a narrative of small team success. This narrative led to a space whereby such a small team – with 4 or 5 people working on one game could hope for economic success, especially in light of world-wide distribution networks enabled by Apple Computer's iTunes Music Store. This is in large part due to the iOS platform, which existed with a large built-in user base, and enough market segmentation to allow something as “interesting”, as Adams puts it, as *Sworcery* to find an audience. The iTunes music store allows creators to overcome geography, as well as eliminate the once awkward and costly process of distribution to chain stores.

This perfect storm of sorts enabled Adams and Capyberra Games to create an object which by all accounts is now an unmitigated economic success. At the time of interview interview with Adams *Sworcery* had achieved over 200,000 sales of individual units for the iPod and iPad. With the iPad version costing slightly more than the iPod version at 4.99 rather than 2.99, the sales have totalled more than \$600,000, all of this after Apple's fee of taking a fixed percentage of sales for allowing its distribution through the App store. In addition to these already existing profits (which account for around 2 months time on the marketplace), apps have the ability to continue to be sold indefinitely as long as the platform remains economically viable. Considering the ongoing market penetration of the iOS platform with the ongoing development of the iPhone and iPad by Apple, copies will likely still get sold over the next few years at a steady volume. This shows that the OMDC's focus on the economic instrumentality of culture “payed” off – even in a creative sense, which speaks to the power of such programs to incubate local culture. There is something to be said about how these programs, intended or not, will enable developers to create content that is interesting and pushes creative boundaries. Both

Adams and Cappy's profits are likely to turn into capital that will be reinvested into new creative ventures – helping to build on the already existing development ecosystem in Toronto.

Conclusions

Unlocking the Secrets of Videogames Through Political Economy

What this thesis has focused on broadly is the implication of videogames for the public sphere and public communication, and what such implication means for the ongoing development of the medium. It argued that videogames are texts that can engage in rhetorical practice, making them an important aspect of discourse in the public sphere. In addition to being texts that can be read, they build procedural literacy and lead subjects to consider multiple possibilities and understandings of systems that operate inside or computers *and* in the real world. I also made the claim that to understand how videogames fit into the public sphere one needed to understand the *political economy* of videogames, as they are not objects apart from the rest of society. Instead they are objects that come into being through social, cultural and economic relationships. They fit into the fabric of contemporary consumer capitalism. In keeping with a renewed interest in materializing communications I believe that understanding these relationships is key to understanding the communicative possibilities and implications of information technologies.

During the research for thesis it became apparent that if I was going to discuss the role of videogames in the public sphere I would need to understand them in context with past communications technologies, which lead me to investigate the ways in which such technologies were handled in the past by the state. The regularity with which the state regulated and supported past communications technologies, often for the “public good” seemed an ideal frame in which

to understand the current political economy of videogames. It also became apparent that despite the relative decline of communications regulatory regimes under neoliberalism, the state continued to have a direct interest in videogames and their use to address publics, spur economic growth and build the nation. *Americas Army*, the first videogame developed by a state for the express interest of interacting with the public illustrated that for me. No doubt the expressive qualities of videogames were apparent to the United States military, and as I showed, its development was a complex mix of ideology and economics. *Americas Army's* ability to sell a mode of citizenship to the public, beginning in 2003, marked the dawn of a new trend that certainly doesn't show any signs of stopping. While there is no doubt, as Drache (2009) says, a “decline in deference” to the state in today's information centric world, videogames like *Americas Army* will continue to be framed by governments as an important tool in the project of nation building.

More concretely, looking at the development of *Sworcery* showed that when the state is not concerned with building a direct ideological connection between videogames and the state, it does so by using it as a tool for economic development, in-line with the economic instrumentality of culture that neoliberalism has imposed. A close look shows that these programs spur effects that might or might not be directly anticipated by the state, in that the artifacts that are created, like *Sworcery*, end up being more culturally relevant and confrontational to in relation to the economics of the larger videogame industry. *Sworcery's* incubation in Toronto's independent videogame development community, with the help of the OMDC's IDMF fund, ended up creating a videogame deliberately unlike those that are created in the more established multi-billion dollar videogame development industry. Superbrothers' Craig

Adams made the point that it gave the development team at Superbrothers and Capy Games the ability to create something decidedly risky and put it into the public sphere. The fact that it has been a successful venture comes as no surprise, as the game was able to play with ideas, systems and aesthetics that are not often represented in the marketplace. The public sphere is richer for its existence, as it opens the player to an experience with technology, narrative, and time through systems uncommon in the form. This is due in part to Bogost's argument on ability of videogames to build procedural literacy through interactions with systems. A new approach to the medium like *Sworcery* can spur new ways of thinking about technology and how technology operates, and in turn, how society operates as a whole.

It also bears repeating that Mosco's points of entry – commodification, spatialization and structuration – were important critical tools that continue to show their relevance in contemporary communications scholarship. Using them allowed me a way to frame the different ways in which I approached the topic. These entry points string together the relationships between objects, showing how they are, as Mosco says, “mutually constituted and mutually determined.” Objects of all sorts are not islands unto themselves, and in conjunction with the growing field of Science and Technology Studies, there is much that critical political economy can add to understand the world. I believe that in the previous chapters these links were made clear: that even by looking at just two videogames as objects of study one can elucidate the wide ranging relationships that tie them together with the rest of the material world.

Gender Trouble

This being said, there are a number of aspects about *Sworcery* and its success, as well as the wider success of the independent Toronto videogame community that should be explored in the future research. For one, the sector itself still suffers from a gender imbalance that is emblematic of the wider industry, and culture, as a whole. As far as I have been able to ascertain, many of the videogames that could be described as economic successes do not have female designers,²⁴ something which many in the field of Canadian Game Studies (Bergstrom et al (2011); Taylor et al (2011); de Castell & Bryson, 1998) stress in their work on the gender disparities in the videogame industry and culture. This in part can be explained by the 'coding' of technology as a strictly male domain. That being said, it is also a product of a very specific and male coded *industry* whose games are still geared primarily towards hypermasculine desires.

This is a particularly important avenue for future research, especially considering the politics of recognition that Drache (2008) stresses. The overtly white and male workforce of the videogame industry severely restricts its ability to function as an ideal space for the dissemination of texts in the public sphere. The success of government programs that aid developers in creating their games to enrich the public sphere is contingent on these programs reaching out to people and publics whose stories and systems of understanding are missing from the current crop. *Sworcery* bucks this trend thematically, but future research could focus on what female developers have to say about Toronto's development culture, as well as the role that government organizations like the OMDC can play in helping their projects reach the market.

Toronto's videogame development scene however, also seems to bypass this trend at least in regards to the co-development of Metanet's previously mentioned *N* and *N+* by Mare

²⁴ A notable exception is Mare Sheppard of Metanet, who I discuss in more detail below. She has co-developed *N* and *N+*.

Shepherd. Her role in establishing Toronto's independent videogame development community should be commended, as well as her continued focus on fostering an environment for the future development of videogames by women with the establishment of the Difference Engine Initiative. (Woo, 2011) Organized through Toronto's Hand Eye Society and the OMDC Tiff Nexus, the program's goal is to shine a light on underrepresented groups (in this case, women) in videogame development by teaching the basics of videogame design for free.

This style of direct intervention into the community, to build the skills for those not a part of the community already, is certainly showcasing an activist stance in relation to utilizing videogames as a medium. If the public is to come to consensus by public-reason, enabled through the process of procedural rhetoric, it is only through the recognition of others and the stories of other that such an idealistic democratic form can take shape. I am inclined to think of the OMDC's involvement in the development of videogames to be a massive boon to the creative and representational possibilities of videogames – but that for the most part the more radical changes in representation currently fall short. The likelihood of more videogames representing a variety of such subjectivities supported by programs with an economic incentive similar to the OMDC is unlikely unless there are vast shifts in institutional cultures, especially education, to support the technological and business know-how of underrepresented persons with an interest in videogame design. Adams' education in illustration and design, as well as the completion of a post-bachelors college program in videogame development clearly played a large role in his ability to get a start in the industry, which then led to his eventual ability to prove to the OMDC his team's economic viability and receive a grant.

The goal of such organizations like the OMDC, which likely would support other new

and innovative games made by such underrepresented groups, should continue to foster these groups. Programs like the Difference Engine Initiative are thus key to this overall project. Further research on such programs is something I think would enrich the literature of videogames specifically, and the political economy of media in general.

Materializing Communications: Geography, Economics & Platforms

Future research should take this, and some other factors into account when looking at the future development of videogame centric cultural policy, as well as the importance thematically for the construction of *Americas Army* as a milestone in the history of videogames. The political economy of videogames, as objects and as an series of relations, is a growing field, and it will be exciting to see where it goes next. I would like to see more work being conducted in the field with a focus on the spatialization of communities like the indie game movement in Toronto. The role that cities play on the development of “creative industries” has been explored and described as clustering, has been the focus of popular urban theorists like Richard Florida. In this thesis this topic was raised, but extensive studies of videogame development with a specific focus on the role individual cities play would be an important contribution to the literature, considering the wide range of development cultures in cities like Vancouver, Toronto and Montreal. Specifically, this requires a critical take on the development of these industries and practices that removes the economic justification of those like Florida.

More attention to the political economy of new platforms like the iOS could will also play an important role in understanding how platforms are increasingly shaping content and

labour relations, both at the level of developing software in the developed world, but also in the developing. Nick Montfort and Ian Bogost's (2009) Platform Studies (of which *Racing the Beam* is the first) book series opens up a number of exciting routes for this new kind of study, which Lisa Nakamura (2011) has described as the new “return to the material”. The focus on the disparate factors that come together and play a role in shaping the ways in which objects are created, and the ways in which those objects then influence *other* objects is an exciting one, especially when paired with the rising continental philosophical fields of speculative realism and object oriented ontology. The possibilities for interventionist and radical critical research on information technologies are vast with the tools that critical political economy provides. It is encouraging to hear that there is a book currently being written in the Platform Studies series on Apple's iOS, and it will add depth to future work on games developed for the platform.

Videogames, New Publics and Radical Futures

This thesis also has entered into a discussion about the role and place of the citizen in contemporary society. It has put forward a decidedly optimistic take on the power of citizens to influence the world and be heard. This is an especially risky position at times, as there has been an intense discussion about the role of various communications technologies and their ability to influence political change. In the early part of 2011 the rise of the Arab Spring gave a large amount of Internet Utopians fuel to hail a new age of the empowered citizen, while it also became a frame for communications policy sceptics like Evgeny Morozov to frame their discussions about the failings of new technologies. Morozov and others have continually stressed that social media and the Internet are currently in the process of being enclosed by the state and

corporate interests – and that with time the radical possibilities of these technologies will fade. This criticism is taken to heart, and is something to be considered in relation to videogames.

Yet when discussing the power of videogames to be involved in radical politics the picture is decidedly more murky. There have yet to be any major movements that have been associated with videogames playing a prominent role. As was argued above this is because videogames have for so long been a part of a massive entertainment industry with an entrenched corporate structure. They have had little reason to be associated with politics. Yet as budgets and teams grow smaller and smaller, and as the methods of game design spread, the likelihood of new and meaningful political uses of videogames is guaranteed.

This democratizing effect of a new communications technology is no doubt going to find itself exploited by capitalists. This can be best attributed to the rise of the marketing fad of “Gamification”, which has become a buzzword for the use of game-like mechanics (leaderboards, points, etc) in non-game contexts. This marks, if not an enclosure, a reterritorialization of videogames by capitalism to achieve instrumental ends. Gamification trades on a behaviourist education paradigm, one that assumes human actors as objects which can be manipulated by games that use mechanics well. Once again people are foregrounded as consumers rather than citizens, and the ethics of such implementations of systems to manipulate publics needs to be considered and critically assessed in the same way that other communications systems were utilized by those in power.

This is what lies at the core of the Habermasian democratic project of communications, is that technologies have an important role to play in politics, rather than be simply an instrument of capitalist accumulation. They can be pleasurable, entertaining and fun while and politically

relevant to citizens. As critics we do a disservice to the medium if we continue to stress the strictly “fun” aspects any communications. Videogames, because of their focus on play, also need to be considered from this viewpoint – not from the perspective of utopians like Jane McGonigal, but as prosaic technologies that *are* going to play a role in the politics of power-relations of the contemporary state.

At the 2011 biennial conference of the Digital Games Research Association Franz Mäyrä had a “rant” session in which he lamented the discourse about videogames not being dangerous. He made the point that such discourse only serves to stifle talk about videogames as a meaningful medium. Instead he suggested that “games aren’t dangerous enough.” To me this means that instead of being dangerous to our health or socialization, that they are dangerous to the those forces which would enclose democracy. In Early Modern Europe it was the coffee houses, newspapers and books of the bourgeois class that was dangerous to the landed gentry and aristocratic power as it existed then. In the 21st century it is up to academics and for game designers like Craig Adams or Mare Sheppard to make sure that videogames are dangerous to power today. Oddly enough in Canada it is likely to be the state itself that helps artists and designers to realize the expressive potential of videogames, and understanding this process is key to understanding our collective futures as citizens.

Work Cited

- Adams, Craig. (2011). Introduction. *exp minus three*. Toronto: exp. Press.
- Anderson, B. (2006). *Imagined Communities: Reflections On The Origin and Spread of Nationalism*. London: Verso Press.
- AP. (2010, Nov 10). Cuba Denounces 'Virtual' Castro Plot In New Game. *Associated Press*. Retrieved from <http://finance.yahoo.com/news/Cuba-denounces-virtual-Castro-apf-2373678391.html?x=0&.v=4>
- Bar, F., & Sandvig, C. (2008). US Communication Policy After Convergence, *Media, Culture & Society*, 30 (4), 531–550.
- Baer, R. *Videogames: In the Beginning*. Springfield, N.J. Rolenta Press, 2005.
- Bogost, I. (2006a). Comparitive Video Game Criticism. *Games and Culture*, 1 (1) 41-46.
- Bogost, I. (2006b). *Unit Operations*. Cambridge: MIT Press.
- Bogost, I. (2007). *Persuasive Games: The Expressive Power of Videogames*. Cambridge: MIT Press.
- Bogost, I. (2010, Oct 4). Free Speech is not a Marketing Plan. *Gamasutra*. Retrieved from http://www.gamasutra.com/view/feature/6158/persuasive_games_free_speech_is_.php
- Castells, M. (2004). Informationalism, Networks, and the Network Society: A Theoretical Blueprint. In Castells, ed., *The Network Society: A Cross-Cultural Perspective*, Cheltenham, UK and Northampton, MA: Elgar. 3-45.
- Castronova, E. (2003). On Virtual Economies. *Game Studies*, 2 (3).

- Cassell, J., & Jenkins, H. (2008) From quake girls to desperate housewives: A decade of gender and computer games. In *Beyond Barbie and Mortal Kombat: New perspectives on gender and gaming*. Cambridge: MIT Press
- de Castell, S., & Bryson, M. (1998) Re-tooling play: Dystopia, dysphoria, and difference
- de Castell, S. & Jenson, J. (2007). *Worlds in Play: International Perspectives on Digital Games Research*. New York: Peter Lang.
- Caillois, R. (1961). *Man, Play, and Games*. New York: The Free Press of Glencoe.
- Coleman, S., & Dyer-Witheford, N. (2007). "Playing on the digital commons: collectives, capital and contestation in videogame culture." *Media, Culture & Society*, 29 (6): 934-953. New York: SAGE Publications.
- J. Denner, J., Sun, J., & Corneliussen, H. G. (2008) World of Warcraft as a playground for feminism. In H. G. Corneliussen and J. W. Rettberg, (Eds.), *Digital Culture, Play, and Identity: A World of Warcraft Reader* (pp. 63–86). Cambridge: MIT Press.
- Clarren, (2006, September 16). Virtually Dead in Iraq. *Salon.com*. Retrieved from <http://www.salon.com/entertainment/feature/2006/09/16/americasarmy/index.html>
- Cowen, D. (2008). *Military Workfare: The Soldier and Social Citizenship in Canada*. Toronto: University of Toronto Press.
- CRTC. (2011). The MAPL System – defining a Canadian Song. Ottawa: Canadian Radio-television and Telecommunications Commission. Retrieved from http://www.crtc.gc.ca/eng/info_sht/r1.htm
- Curse. (2011). World of Warcraft Subscriber Base Currently at 11.4 Million. Curse.com. Retrieved from <http://www.curse.com/articles/world-of-warcraft-news/956087.aspx>

- Der Derian, J. (2009). *Virtuous War*. New York: Routledge Press.
- Drache, D. (2008). *Defiant Publics*. Cambridge: Polity Press.
- Dyer-Witheford, N., & de Peuter, G. (2009). *Games of Empire: Global Capitalism and Video Games*. Minneapolis: University of Minnesota Press.
- Dyer-Witheford & Sharman. (2005). The Political Economy of Canada's Video and Computer Game Industry. *Canadian Journal of Communication*, 30 (2): 187-210. Toronto: Canadian Journal of Communications Corporation.
- ESAC. (2011). 2010: Essential Facts About The Canadian Video Game Industry. Toronto: Entertainment Software Association of Canada.
- Frasca, G. (2003). Simulation versus Narrative: Introduction to Ludology. In M. Wolf & B. Perron (Eds.), *The Video Game Theory Reader* (pg. 221-235). New York: Routledge.
- Foucault, M. (1990). *History of Sexuality: Vol 1. An Introduction*. New York: Vintage Press.
- Fraser, N. (1995). Transnationalising the Public Sphere. Retrieved from http://www.republicart.net/disc/publicum/fraser01_en.htm
- Goodale, G. (2002, May 31). Video game offers young recruits a peek at military life. *The Christian Science Monitor*. Retrieved from: <http://www.csmonitor.com/2002/0531/p18s01-11gn.html>
- Galloway, A. R. (2004). Social Realism in Gaming. *Game Studies*, 4 (1).
- Graham, P. (2006). Issues in Political Economy. In A. Albarran, S. Chan-Olmsted & M. Wirth, eds., *Handbook*.
- Grant, C. (2010, May 28). Interview: Call of Duty: Black Ops producer Dan Bunting. *Joystiq*. Retrieved from: <http://www.joystiq.com/2010/05/28/interview-call-of-duty-black-ops->

[producer-dan-bunting/](#)

- Habermas, J. (1991). *The Structural Transformation of the Public Sphere*. Cambridge: MIT Press.
- Hall, S. (1973). *Encoding and Decoding in the Television Discourse*. In Hall, S., Hobson, D., Lowe, A., & Willis, P. (Eds), *Culture, Media, Language: Working Papers in Cultural Studies, 1972-79*.
- Hardt, M. & Negri, A. (2004). *Empire*. New York: Penguin Press.
- Harvey, D. (2005). *A Brief History of Neoliberalism*. Oxford: Oxford University Press.
- Harvey, D. (2007). A Brief History of Neoliberalism, parts 1-5. Video lecture retrieved from <http://www.youtube.com/watch?v=Ni4GUd3HvHg>
- Hayek, F.A. (1994). *The Road to Serfdom: Fiftieth Anniversary Edition*. Chicago: University of Chicago Press.
- Hesmondhalgh, D. (2007). *The Cultural Industries*. London: Sage Publications.
- Huizinga, J. (1970) *Homo Ludens: A Study of the Play Element in Culture*. London: Maurice Temple Smith Ltd.
- Keay, D. (1987, October 31). Aids, education and the year 2000!. *Women's Own*.
- Kennedy, B. (2002, July 11). Uncle Sam Wants You (To Play This Game). *The New York Times*. Retrieved from: <http://query.nytimes.com/gst/fullpage.html?res=9B0DE2DE1330F932A25754C0A9649C8B63&sec=&spon=&scp=1&sq=wardynski&st=cse>
- Kennedy, H. W. (2002). Lara Croft: Feminist Icon or Cyberbimbo? On the Limits of Textual Analysis. *Game Studies*, 2 (2).

- Klabbers, J. H. G. (2011). Tensions Between Meaning Construction and Persuasion in Games [Review of the book *Persuasive Games: The Expressive Power of Videogames* by I. Bogost]. *Game Studies*, 11 (2). Retrieved from http://gamestudies.org/1102/articles/klabbers_book_review
- Klein, N. (2008). *The Shock Doctrine: The Rise of Disaster Capitalism*. New York: Picador.
- Kline, S., Dyer-Witheford, N., & de Peuter, G. (2003). *Digital Play: The Interaction of Technology, Culture, and Marketing*. Montreal: McGill Queens University Press.
- Lorimer, R., Gasher, M., & Skinner, D. (2008). *Mass Communication in Canada, 6th Edition*. Oxford: Oxford University Press.
- Lax, S. (2009). *Media and Communication Technologies: A Critical Introduction*. London: Palgrave Macmillan.
- Lugo, J., Sampson, T. & Lossada, M. (2002) Latin America's New Culture Industries Play Old Games: From the Banana Republic to Donkey Kong. *Game Studies*, 2 (2).
- McGonigal, J. (2010). Gaming Can Make A Better World. *Ted.com*. Retrieved from http://www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world.html
- McGonigal, J. (2011) Reality is Broken: Why Games Make Us Better And How They Can Change The World. New York: Penguin.
- McLeroy, C. (2008). History of Military Gaming. *Army.mil*. Retrieved from: <http://www.army.mil/-news/2008/08/27/11936-history-of-military-gaming/>
- McWhertor, M. (2010). Cuba Slames Call of Duty: Black Ops As 'Perverse' Propaganda For Sociopaths. *Kotaku*. Retrieved from: <http://kotaku.com/5686777/cuba-slams-call-of-duty-black-ops-as-perverse-game-for-sociopaths>

- Montfort, N. & Bogost, I. (2009). *Racing The Beam*. Cambridge: MIT Press.
- Morozov, E. (2011). *The Net Delusion: The Dark Side of Internet Freedom*. New York: Public Affairs.
- Mosco, V. (1996) *The Political Economy of Communication*. Los Angeles: Sage Publications.
- Murry, J. H. (1997). *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. New York: The Free Press.
- Nakamura, L. (2011) Race, Labor and Indigeneity: The Birth of New Media in the American West. Conference presentation for the Canadian Communications Association.
- NPD Group. (2010, Jan 14). "2009 Video Game industry and PC game software sales reach \$20.2 billion." Retrieved from http://www.npd.com/press/releases/press_100114.html.
- OMDC. (2011a). 2009-2010 Year in Review. Toronto: Ontario Media Development Corporation
- OMDC. (2011b). Industry Profile: Interactive Digital Media. Toronto: Ontario Media Development Corporation.
- OMDC. (2011c). Ontario Media Development Corporation. [website] retrieved from <http://www.omdc.on.ca/Page3137.aspx>
- Pereria, C. (2010, October 1). The Taliban Removed from Medal of Honor Multiplayer. *Iup.com*. Retrieved from: <http://www.iup.com/news/taliban-removed-medal-honor-multiplayer>
- Pigna, K. (2010, October 2). U.S. Army "Surprised" by Taliban in Medal of Honor Multiplayer. *Iup.com*. Retrieved from: <http://www.iup.com/news/army-surprised-taliban-medal-honor>
- Raboy, M. & Shtern, J. (2010). *Media Divides: Communication Rights and the Right to Communicate in Canada*. Vancouver: University of British Columbia Press
- Rodriguez, H. (2006). The Playful and the Serious: An approximation to Huizinga's *Homo*

- Ludens. Game Studies*, 6 (1).
- Simon, B. (2011) Critical Theory, Political Economy and Game Studies: A Review of 'Games of Empire: Global Capitalism and Videogames'. *Game Studies*, 11 (2).
- Singer, P. W. (2009). *Wired For War: The Robotics Revolution and Conflict in the 21st Century*. New York: Penguin.
- Shiller, D. (2003). Digital Capitalism: A Status Report on the Corporate Commonwealth of Information. In Valdivia, A. (Ed), *A Companion to Media Studies* (137-156). Blackwell Publishing.
- Turkle, S. (1997). Computational Technologies and Images of the Self. *Social Research*, 64. Cambridge: MIT Press.
- Taylor, N., Jenson, J., & de Castell, S. (2011). Cheerleaders / booth babes / *Halo* hoes: pro-gaming, gender and jobs for the boys. *Digital Creativity*, 20. (4). 239-252.
- Warner, M. (2002). *Publics and Counterpublics*. *Public Culture*, 14(1): 49-90.
- Williams, R. (1958). Culture is Ordinary. In Szeman, I., Kaposy, T. (Eds) (2011) *Cultural Theory: An Anthology*. Oxford: Blackwell.
- Wolf, J.P. & Bernard, P. (2003). *The Videogame Theory Reader*. New York: Routledge Press.
- Wu, T. (2011). *The Master Switch: The Rise and Fall of Information Empires*. New York: Knopff Press.
- Woo, J. (2011, July). New Toronto Initiative Supports First-Time Female Game Developers. *Torontoist.com*. Retrieved from http://torontoist.com/2011/07/new_toronto_initiative_supports_first-time_female_game_developers.php

Žižek, S. (2009). *First as Tragedy, Then as Farce*. New York: Verso.