CREATIVITY AND ITS DISCONTENTS:
A CASE STUDY OF PRECARIOUS PLAYBOUR IN THE VIDEO GAME INDUSTRY

BY

ERGİN BULUT

DISSERTATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Communications
in the Graduate College of the
University of Illinois at Urbana-Champaign, 2014

Urbana, Illinois

Doctoral Committee:

      Professor Cameron McCarthy, Chair
      Assistant Professor Anita S. Chan
      Professor Clifford Christians
      Professor Angharad Valdivia
      Assistant Professor Greig de Peuter

ABSTRACT

Considered to be a blindspot until recently, labor has now become a popular research topic

within media and communication studies. This dissertation is an attempt to contribute to the

emergent scholarship on media labor, critically using the concepts of precarity and immaterial

labor. The concept of precarity is useful not only to understand labor in the post-Fordist economy

but also the experience of game developers who perform immaterial labor to earn their living,

where leisure is indistinguishable from labor. Creating ephemeral images and experiences, these

immaterial laborers work in a perpetual innovation machine within which producing a video

game means also producing the life of a studio. In this respect, this dissertation is an

ethnographic study that draws on the insights of political economy of culture and communication

in order to illuminate how video game developers work, play, and live. Critically deploying the

concept of immaterial labor, I document the transition of a game studio from its garage days to a

corporate structure within which precarity does not disappear but rather changes form and

intensifies. Tensions between autonomy and control regarding creative production are revealed

and the attempts of the studio to cultivate communicative workers to labor in a flexible work

environment are discussed through the lens of governmentality. I aim to contribute to the

literature on immaterial labor by underlining the significance of the production of space and new

materialities for sustaining the creative class, as well as point to the vitality of unpaid domestic

labor for reproducing labor power. I show the stratified nature of immaterial laborers where

precarity is multi-formed across different kinds of employees and layers within the organization

of the labor process. Moreover, contrary to what some theorists have argued, I contend that the

desire to collaborate and create attributed to the immaterial laborers does not necessarily lead to

progressive modes of political organization for reasons of personal histories, lack of experience

in organizing, and simply precarity. Ultimately, I make the argument that precarity is endemic to the game industry, where the line between waged and non-waged time has become blurred. Such precarious experience, the dissertation demonstrates, can even be seen in the flagship studio of a major publisher in the industry where criticism of work practices are articulated by developers, who seem to be indifferent towards alternative modes of working and living.

ACKNOWLEDGEMENTS

This dissertation would not have been possible without the game developers at Super Mario who shared their work experience during difficult times. Thank you! My hope is that this dissertation contributes to a better understanding of how people in the video game industry work and how better modes of work can be imagined and invented.

My committee has been supportive of my work. Cameron McCarthy has been a caring mentor since the beginning of my doctoral studies at the University of Illinois. I will fondly remember our academic and political discussions outside the classroom. Clifford Christians was extremely generous with his time in helping me get a good grasp of philosophy of technology. Our weekly meetings have been one of the most rewarding learning experiences throughout my life. Lisa Nakamura's digital media theory seminar and timely recommendations as to how I can frame my research have been valuable. With her intellectual energy, Anita Say Chan has forced me to think beyond my comfort zone. Angharad Valdivia has supported my research within and beyond the Institute of Communications Research and taught my cohort and me how to navigate the shifting terrain of the academic world in the age of neoliberalism. Since our first meeting at IAMCR in Istanbul, Greig de Peuter has been extremely generous with his time and labor in helping me find a direction for this research. Despite being in Canada, he has contributed to this research as if he were in Champaign-Urbana. I am hoping this is the beginning of future collaborations.

Fazal Rizvi, Michael Peters, Dan Schiller, Zsuzsa Gille, and John Nerone – of course – have been wonderful professors to learn from. I feel privileged to have attended their seminars. Despite meeting him towards the end of my doctoral studies, James Hay has been a joy to work with and learn from. Working with Paula Chakravartty has been enjoyable and rewarding in

iv

And A(rnau)-M(artina)-A(licia). I had a chance to know Arnau and Martina a year before they left Champaign-Urbana. It's obviously my fault. And the last "A" of AMA… Thank you Alicia for bringing genuine joy to my life in America, where everything is supposed to be fun. Thank you for listening to my complaints about America and its upbeat citizens. I appreciate it, as Americans would say!

Finally, I want to thank my mom and dad for being wonderful parents. Mom's affective labor and care is vital to who I am. She didn't have the opportunity to have education beyond primary school but did everything so that her two sons would. Dad has always valued our education and never refrained from any sacrifices. I dedicate this dissertation to them.

TABLE OF CONTENTS

INTRODUCTION: DEFINING THE PLAYGROUND at STUDIO SUPER MARIO

This dissertation is concerned with the working lives of video game developers employed at a medium sized video game studio (Studio Super Mario)[1] in the United States. Through ethnographic work, it seeks to examine how members of the much-hailed "creative class" analyzed by Richard Florida (2005) collaborate with each other to produce immersive virtual worlds. It tells the story of video game developers from their early days when they were independent to the times when a major publisher in the industry (Digital Creatives) bought their studio out, and then had to sell it to another company following bankruptcy. In contrast with the glamour usually associated with creative labor, this is a more complicated story of precarity with respect to creative labor. Despite the financial security initially introduced after being bought out by the publicly-traded Digital Creatives at the beginning of the millennium, the lives of the game developers at Super Mario came to be structured by the competitive logics of a perpetual innovation-and-production machine. This machine is strictly hit-driven, meaning that producing a game also means "producing the lifetime of the studio," as a project manager once put it. It is within these dynamics that game developers work to secure a fun and rewarding working life.

For its theoretical framework, this project draws on work on the political economy of communication and culture (Schiller, 1999; Mosco 2009; McKercher & Mosco, 2007), cultural studies and critical theory (Kellner, 1989; 1997), new media and video game studies (Nakamura & Chow-White, 2011; Nakamura, 2009; Everett & Caldwell, 2003; O'Donnell, 2008; Leonard, 2009), production studies (Mayer, Banks & Caldwell, 2009), and autonomist Marxism (Dyer-Witheford, 1999; Dyer-Witheford & de Peuter, 2009). In a narrow sense, this project is about labor. However, like any intellectual inquiry that investigates labor, it is also about social life. It

---

[1] Throughout the dissertation, I chose to use Super Mario as a pseudonym for the studio where I carried out my research. Digital Creatives is the pseudonym for the parent company that owned Super Mario, which has nothing to do with the well-known game Super Mario.

delves into the material conditions for the reproduction of game developers' lives as far as the domestic sphere and geography are concerned. In this sense, this dissertation can be considered an inquiry into the *lives* of game developers. Based on Toby Miller's call, "follow the money, follow the labor" (2006, p. 10), this project also aims to link game studies with feminist political economy and urban studies and explore the material conditions of the *reproduction* of video game labor (de Peuter, 2012; Kerr, 2013; Jarrett, 2013; Federici, 2012; Weeks, 2011). It is *not* an attempt "to counteract the labor blindspot" (de Peuter, 2010) within communication studies since this blindspot has been productively addressed by a variety of scholars. Rather, the project can be regarded as a modest contribution to the recent scholarly interest in creative labor in its intersection with communication and media industries (Cohen, 2012; de Peuter, 2010; 2011; Brophy, 2008; 2011; Scholz, 2012; Fuchs, 2010; Mayer, 2011; Banks, 2007; Hesmondhalgh and Baker, 2011a; Ross, 2003; 2009).

In terms of its theoretical background, ethnographic perspective, and almost unprecedented access to a major studio, this dissertation constitutes a unique contribution to the exploration of precarious labor in the gaming industry. I attempt to bring together the scholarship around political economy, theories of immaterial labor, and cultural studies with its emphasis on the everyday lives of human subjects. I simultaneously acknowledge the dynamic of perpetual innovation that is characteristic of the industry and investigate the constraints and contradictions navigated by video game developers in their material settings. As the term "*playbor*"[2] in the title of the dissertation suggests, I demonstrate the ways in which video game developers *play* and

---

[2] Playbor is a term I borrow from Julian Kücklich's (2005) work where he interrogates how video game modders – semi professional and skilled video game fans – engage in a hybrid form of work and play and ultimately produce value for the video game industry in their free time. As Kücklich suggests, the very dynamics of modders' playbour are such that fans of video games are almost involved in processes of self-exploitation on voluntary terms. While modders might end up getting jobs in the industry, the highly protective intellectual property regimes also put them at risk. The fusion of play and labor along with the processes in which desire is integrated into production is a fundamental working dynamic within the game industry in general.

labor in a highly competitive industry and strive to reproduce their social lives with the help of the unpaid domestic labor supplied by their spouses.

Video games are undoubtedly one of the most popular digital media forms that have inspired utopian hopes or caused social anxieties, just like any cultural form or technology when new. A mythic aura has emerged around how digital technologies and video games operate. In his important work *The Digital Sublime*, Vincent Mosco (2004, p.3) argues that myths about new technologies "matter greatly" because they "animate individuals and societies by providing paths to transcendence that lift people out of banality of everyday life." Mosco (2004, p. 31) powerfully links the notion of myth with that of cyberspace, suggesting that "myths are depoliticized speech because they purify social relations by eliminating the tensions and conflicts that animate the political life of a community." For Mosco, myths persist not because they are lies but rather because they involve active participation in the formation of particular forms of subjectivity. In this respect, video games and the amount of labor that fuel the industry have not been immune from these myths, which imply salvation, liberation, and creativity.

Scholars such as Ian Bogost (2011) and Jane McGonigal (2011) have addressed the practical and psychological uses of video games and how they might better organize our lives. Indeed, a considerable amount of popular enthusiasm has erupted with respect to the various uses of digital games, which range from helping "disabled children navigate real-world environments" (Coughlan, 2012) to education (Ferenstein, 2011; Cifaldi, 2011, Curtis, 2012a; Curtis 2012b), choosing potential employees during interviews (Orland, 2011a) and military purposes (Ungergleider, 2011).

Beyond simulating life itself, video games have also generated enthusiasm as an industry due to the broader financial recession and the declining economic growth in the age of

deindustrialization. First, video games are perceived as an ever-growing market especially with the development of mobile devices that enable "casual gaming." Because of this, states within the USA are willing to provide tax incentives for video game companies, which are quite aggressive in pursuing such initiatives (Kocieniewski, 2011; Orland, 2011b; de Peuter, 2012). This phenomenon is not limited to the USA. The Shadow Culture Secretary (Labour) in the UK was involved in launching the Creative Industries Network to facilitate Games Tax Relief to the industry (Rose, 2011b). Indeed, the popular perception of the gaming industry is that it is crisis-prone and leads to endless growth. These arguments regarding economic growth help the Electronic Software Association (ESA) in their lobbying efforts in the Congress to counter claims of violence associated with games, as well as to promote freedom of speech and enact regulations against piracy. Indeed, ESA has actively sought to underline the revenue generating and popular aspects of video games by stating that games are not just kids' business and appeal to the broader society.[3]

Just to give an example, the circulation of news about the most successful video-game franchises such as *Call of Duty* feeds into this perception that the industry is a growth machine. In a way, it really is. For instance, *Call of Duty Modern Warfare 3* made "more than $1 billion in sales, just 16 days after launch" (Rose, 2011c). The successful advent of social games and mobile gaming has also boosted the image of the video game industry as a desirable economic sector. For instance, it has been suggested that video game investments in 2011 were nearly twice the amount of what they were in 2010 and the majority of the action took place in social, mobile, browser-based massively multiplayer online games (MMOs) and cloud gaming (Rose,

---

[3] According to ESA, American adults (average player is 37 years old) actively play games and the industry contributes to the American economy (the value added to the US GDP is $ 4.9 billion per year).

2011d).[4]

Video game studies have been in addressing some of these pressing issues, from a variety of perspectives: political economy and labor (Dyer-Witheford & de Peuter, 2009; Schumacher, 2006; Williams, 2002; Kucklich, 2009; Deuze, 2007; Deuze, Martin, & Allen, 2007; Kerr, 2006), gender (Chess, 2011; Jenson, & de Castell, 2010; Cassell & Jenkins, 1998; Consalvo, 2003), transnationalism and race (Consalvo, 2009; Nakamura, 2009), platform studies and technology (Montfort & Bogost, 2009), actor network theory and globalization (O'Donnell, 2009; 2012), convergence and labor (Postigo, 2008; 2010), geography of production and space (Johns, 2006; Kerr, 2013), as well as resistance and critical play (Flanagan, 2009; Raley, 2009).[5]

Drawing on the insights of this literature, my project specifically looks at the dynamics of production in its historical and spatial specificity using the critical lens of precarity with its multiform facets (Gill, 2007; de Peuter, 2010), and the concept of immaterial labor. In addition to investigating the specificities of the labor process, this project analyzes the discursive construction of the geographical space within which production is materialized. It complicates the literature on the creative city by focusing on a site that is outside mainstream creative clusters and the discourse of the global city (Sassen, 2002). Additionally, the project looks at the conditions for the social reproduction of labor power and therefore raises questions about the role of unpaid domestic labor in sustaining the industry. Moreover, the study reveals the precarious labor of testers, who are generally marginalized within game studies. Finally, my work tells the story of how the business decisions and the following bankruptcy of Digital Creatives adversely

---

[4] This same report "did note that console game investment is still accelerating, but that investment has "no guarantee of success, with major console publisher strategies appearing to have converged on fewer franchises, refreshed more often with higher marketing budgets," making the console business an oligopoly and a *precarious* situation for weaker corporations or independent studios.
[5] We need to note that the discipline has already become global. For transnational perspectives on the industry and its culture, see (Huntemann & Aslinger, 2013; Binark & Bayraktutan-Sutcu, 2008; Jin, 2010).

impacted its most successful studio, and rendered the glamorously represented immaterial game laborers precarious. Ultimately, this study investigates why such precarious laborers do not consider unionization as a viable option for their well-being. In conversation with some of the theorists of immaterial labor who have almost produced an intrinsically revolutionary subject (Hardt & Negri, 2000; Raley, 2007),[6] I contend that the game developers in my research site live precarious lives as immaterial laborers. Even when bought by a major publisher, their precarity did not disappear, but rather changed its form and conditions. While the precarity of highly educated game developers is significantly different from the precarity of immigrant workers, precarious labor at the other extreme of the economic spectrum, the hit-driven logic of the industry and its nature as a perpetual innovation machine do not leave much space for leisure, which, within the networks of communicative capitalism, increasingly becomes labor (Terranova, 2000; Dean, 2009). In this sense, the project foregrounds the materiality of production, the often uneven and contradictory nature of work in the digital game industry and its extended platform into the micro-urban spaces of the home, the cafe and other sites of recreation and leisure that are normally thought to be outside of work (Gregg, 2011).

Throughout this dissertation, I make the argument that the myth around creative labor needs to be critically addressed because it is through these myths that the super-exploitation of labor and processes of alienation become invisible in the age of digital capitalism. The popular

---

[6] In particular, Michael Hardt and Antonio Negri have produced this image of a revolutionary subject that has the potential to organize and resist oppressive structures of global capitalism in a nomadic manner and without the formal political structures of the 1960s. More specific to the gaming industry, Rita Raley's *Tactical Media* is an ambitious theorization of visual arts and video games in their complex relationship to global capitalism. From the very beginning of her work, Raley takes a decidedly poststructuralist and more specifically Deleuzian approach and claims that streets are dead. Raley argues that, within the fractured environment of post-Fordism, critical media practices, as part of the resistance, become nomadic. Such projects, as she describes in her book, "are not oriented toward the grand, sweeping revolutionary event; rather, they engage in a micropolitics of disruption, intervention, and education" (p. 1). In this sense, the problematic features of immaterial laborers have been acknowledged both by the theorists (Hardt & Negri, 2000) and other scholars, who underline the embodied aspects and friction that are not always associated with immaterial labor (Papadopoulos, 2006; Toscano, 2011).

construction of the video game industry as a cool industry to work for has disguised the precarious work experience of development studios, both independent and otherwise. The construction of the game industry as a growth machine and its convergence with hegemonic discourses around post-industrialism and creativity (Bell, 1976; Florida, 2005) bear important implications for understanding the labor process within the industry precisely because it is far from stable. Nor is it immune to the repercussions of the recent global financial meltdown, which can clearly be understood as a structural crisis of global capitalism. For instance, *Kotaku Australia* published an incomplete global list, compiled by a member of Neogaf.com, of 121 video game studios that have shut down globally since 2006 (Plunkett, 2012). Thus precarity is at the heart of what the Italian Marxists call 'immaterial labor' in relation to communication and media industries (Brophy, 2008, 2011; de Peuter, 2011; Schumacher, 2006; Kucklich, 2009; Lovink & Rossiter, 2007).

The Research Site

In March 2010 when I arrived at the site, Studio Super Mario employed 239 people including artists, programmers, designers, audio designers, producers, project managers, studio directors, and vice presidents, as well as staff in quality assurance (game testers), human resources, finance, information technology, office administration, and marketing. By the time I left the site in the summer of 2013, the studio had 186 full time employees and 26 temporary testers. Between the first lay off at the studio (April 2011) and the acquisition by their new parent company (January 2013), 52 people had left the studio. My discussions with some of the game developers who quit and the management revealed that while the financial condition of the former parent company – Digital Creatives – was not the sole reason for their departure, it definitely was a significant factor in the decisions that the developers made.

Game development is indeed a complicated process, "a creative collaborative practice," through which immaterial laborers work together to produce a game that does well in the market (O'Donnell, 2009; 2012). To collaborate, team members typically communicate pervasively in meetings, informal gatherings, studio hallways, emails, forums, instant messaging, Facebook, etc. As the team meetings in which I participated and my conversations with the developers confirmed, communication is crucial for the maintenance of team spirit and the production of a cohesive game. In this sense, it is not a coincidence that the studio has posters on the walls constantly reminding the developers of the broader vision and direction of their project and of their focus as a studio. In this respect, communication itself in the game industry has itself become a form of labor (Brophy, 2008) within which different actors work not only on the game but also on their subjectivities to become good team players. Who, then, are the parties involved in these pervasive communicative practices?

Programmers typically write the code for a game, read code written by others, or are involved in developing support infrastructures for the studio. When a new console is introduced, programmers try to decode its secrets and its magic, to construct larger and more beautiful games on it. As many of the programmers I talked to mention, their primary role is to create a game that runs smoothly. In the words of Casey O'Donnell (2008, p. 93), "the core of engineering for games is the idea of managing a game's state. This includes both the running simulation of the game's rules as defined by designers, and the maintenance and putting into motion the art assets created by artists." Programmers operate within the affordances and limitations of code, budget, and time, as well as the desires and the demands of designers and producers.

Artists, on the other hand, are responsible for the aesthetics of the game. Artists of different sorts produce the environment in the game, characters, and interfaces. The artists in the

industry work closely with sophisticated technological tools. Unless they are involved in the concept design with designers (see below), they typically begin to "work" after projects enter the production phase. In the case of Studio Super Mario, artists have a peculiar position in that some of the environment art is produced in China, which initially posed a threat to the artists and created anxiety about job security. Yet, as important as job security was, many artists I talked to complained about how they had to become managers of the artists in China, staying lost in corporate spreadsheets as a result, and ultimately missed producing art.

Designers are the stars of the game industry. Their primary concern is to make a game fun, challenging, compelling, and competitive in the market, and, for this, they need to play a lot of games to learn from other practices in the industry. In the case of Super Mario, designers and employees who work closely with design meet regularly, exchange ideas, and share industry publications in order to create their own design culture. The appeal of the profession is such that game design schools and degrees have emerged in the recent years.

Testers (Quality Assurance, QA) are the most vulnerable section of the workforce in the studio since only a small sector of them has permanent positions, while the majority is hired on a temporary basis. The vulnerability of testers is derived from their temporary employment status. While there are usually 11 permanent testers in the studio, there are 10-15 temporary testers any given time and this number fluctuates depending on the status of the project. As I was concluding my research, there were 50 temporary testers (28 on site, 14 outsourced, and 8 for localization). At the same time, it is important to remember that there were 102 employees at the QA facility when the majority of the workforce (84.3 %) was laid off in 2009. These numbers make clear the vulnerability of testers. In general, testers are responsible for helping the core development group (designers, programmers, and artists) to release a relatively bug-free game,

though they don't have much agency in the broader creative process. The fact that there is simply no game without any bugs cannot just be explained with respect to the quality of the work of the testers, because the scope of games produced by the studio is gigantic and involves a lot of work from myriad workers. Yet, as explained above, testers do not have as much creative impact as they wish.

Artists, designers, and programmers have their own leads but the studio still employs producers and project managers who are in charge of the whole team. Leads (programmer, artist, designer) act as a bridge between his/her fellow team of artists/designers/programmers and the producers or the project managers. In a way, they communicate the concerns or work schedules of their fellow workers to the upper management and vice versa. Project managers, on the other hand, make sure that resources are allocated to team members and the team is on schedule. They remind team members what needs to be done in a given time. As will be clear in the dissertation, project managers at times end up being a source of discontent for the creative team. Producers, on the other hand, are responsible for the production of a cohesive game that has to do well in the market. They are the ones who communicate between the studio and the parent company. Their assistant producers are in touch with the team members, depending on the phase of the project and the tasks to complete.

Ultimately, the team in Studio Super Mario consists of a workforce (mostly white and male in terms of demographics) with different levels of cultural capital, skills, personalities, personal histories, and work experiences that need to be managed and harnessed in a productive way. For instance, when experienced staff left the studio due to the unfavorable financial conditions of the parent company, this not only demoralized the team but also meant difficulties in terms of recruitment and replacing lost talent. Similarly, creative production means battles to

fight with other disciplines. It means frustrations when insufficient information is communicated from management to the immaterial laborers who enjoy communicative and transparent networks of collaboration among themselves and at their own level. This is why the studio transitioned to a flexible work environment policy to broaden such spaces in order to maximize the productivity of immaterial labor, which the management finds hard to measure and manage.

Outline of the Dissertation

In chapter 1, "Theorizing Immaterial Labor in the Gaming Industry," I provide the theoretical framework that undergirds this dissertation. Investigating the broad and vibrant literature on creative production, I propose two concepts to understand the labor process in the game industry: immaterial labor and precarity. In this chapter, I engage in a conversation with alternative concepts, point to their strengths and weaknesses, and provide the framework within which I use them while deploying immaterial labor as my guiding concept. I point to the necessity of politicizing work and recuperating such useful concepts as alienation and exploitation that are materialized in the form of overtime and intellectual property over which publishers have complete control. I attempt to define the glamour of immaterial labor, the tensions within it between autonomy and control, and its tendency towards precarity. This chapter also underlines some of the problems with the concept of immaterial labor and, by foregrounding the question of space and political organization, offers critical contributions to it.

In the following chapter, I lay out the methodology of the dissertation and describe the tensions that underlie this project. In addition to the positionality of the researcher, I describe the extended case method as an inspiration for this dissertation and draw attention not only to the tensions between theory and qualitative research, but also the difficulties of grasping the mundane and the ordinary in relation to social totality. This chapter, "Methodology:

11

Contextualizing the Research Site, Uses of Photography, and Rethinking Theory," proposes the use of photography and visual methods to grasp the particularities of the everyday within digital workplaces.

Chapter 3, "From the Garage Days to the Flagship Studio," provides an oral history of how the studio transitioned from its earlier days of being independent to a corporate-structured studio after being bought out by Digital Creatives. This chapter makes use of analysis of the tensions between autonomy and control as underlined by David Hesmondhalgh and Sarah Baker (2011a) and examines the "trade-offs" with respect to financial security, autonomy, and the introduction of a formal management structure.

In chapter 4, "Gaming the City: Production and Revitalization of Downtown Space," I look specifically at the ways in which the peculiar needs of immaterial labor necessitated relocation of the studio and in turn, quite contingently, brought about the revitalization of a mid-sized downtown, along the lines of the "creative city" discourse. Drawing on the literature that deconstructs the "creative-cities script" (Peck, 2005; Ross, 2007), this chapter demonstrates how the "production of space," to use Henri Lefebvre's (1991) term, can be a useful term to investigate how discourses, imaginaries, and local alliances can converge around neoliberal public-private partnerships that fetishize creativity, privilege middle class values, and promote art as the engine of economic growth.

Chapter 5, "The Self-Regulating Game Developer in the Affective Workplace," invites the reader to delve into the specificities of creative production. The approach I undertake here is inspired not by actor-network theory but rather political economy and autonomous Marxism. That is to say, this chapter focuses on the difficulties in measuring the productivity of immaterial laborers who enjoy the freedom of digital networks where one can both work and play. I

examine the governmental logic of turning workplaces into playgrounds and the attempts to construct a communicative laborer, and further illuminate the affective aspects of immaterial labor through photography. The battles for the labor of love and tensions within the domestic sphere are also revealed.

The next chapter, "Playboring in the Tester Pit: Video Game Testing Alongside the Pendulum of Dream Job and Dead-End Job," takes the focus off the privileged creative class to the "precogs" (de Peuter, 2010), namely testers. In this chapter, the reader will see the multiform nature of precarity and how it impacts passionate video game playborers. While the creative class enjoys flexibility and freedom, testers navigate precarious employment conditions. These testers go through processes of what I call, following Harry Braverman (1998), "the degradation of fun." Facing the threat of a large reserve army of labor and not possessing enough occupational skills, testers articulate feelings of expendability and second-class citizenship vis-à-vis the rest of the full-time employees.

The final chapter, "'Being the Deluxe Suite on Titanic' or the Discontents of Creativity", is in conversation with Chapter 3 and sharply reflects the precarity of Studio Super Mario as a whole. While being bought out by Digital Creatives initially brought financial relief for the developers, it did not terminate precarity but rather took it into a more complicated and networked phase. As the narratives from this chapter will demonstrate, the well-being of game developers is not just related to how hard they work, although this was what the management kept telling them during the hard times of bankruptcy. Rather, being part of a publicly traded company subjected the studio to the volatilities of the stock market, and the decisions of the parent company, with which the developers disagreed most of the time. In their shrewd analysis, "growth for growth's sake" and the logics of a competitive market where major players want to

expand forever did not make sense and put the flagship studio of Digital Creatives in a precarious position. While their IP record convinced them that there would eventually be a buyer after the declaration of bankruptcy, some of the corporate candidates for their future parent company made the developers anxious. Moreover, some of the developers had already decided to leave their beloved studio and seek fun and job security elsewhere.

Ultimately, this dissertation can be seen as a critical contribution to studies of the political economy of communication and the now-vibrant sub-discipline of media labor. Drawing on the useful insights of the political economy of media industries and cultural studies of labor (Deuze, 2007; Winseck & Jin, 2011; McKercher & Mosco, 2007; Banks, 2007; Hesmondhalgh & Baker, 2011a), I offer the concept of immaterial labor to illuminate how the gaming industry "*playbors.*" I hope to provide an entry point to examine video game labor through the lenses of immaterial labor and precarity, making use as well of the tradition of cultural studies with its focus on the importance of the everyday. To reiterate, this project is about labor but the implications of it go beyond the workplace. Rather, they are tightly related to the domestic sphere and the city, each with their own precarity impacted by the crisis of the global market economy. As Antonio Gramsci (2000) remarked, times of crisis are those when the old is dying and the new cannot be born. It seems to me that debates regarding the status of labor in creative industries should be thought beyond the technological crisis of digitality in the media industries. Rather, I think that the debates regarding labor and the crisis of the social reproduction of life should be linked to the broader societal disorientations we are experiencing. As scholars of media and communication studies, we are excited by the events of the new and sometimes suffer from historical amnesia with respect to diagnosing ruptures in the formation of social relations. In this sense, I hope the following chapters succeed in finding a balance in making the

continuities clear, while pointing to the pains of a new, although not necessarily better, social

formation that digital capitalism is bringing.

CHAPTER 1

THEORIZING IMMATERIAL LABOR IN THE GAMING INDUSTRY

Politicizing Labor in the Creative Industries

Governments across the world have jumped on the discourse of creativity and have begun

implementing public policies suggested by the major promoters of the discourse (Florida, 2005;

Landry, 2008). Critical scholarship has also paid attention to the excitement with respect to the

creative economy, the creative city, and in our case creative labor. Once marginalized within

critical cultural studies and even in political economy, the issue of labor has almost become the

new favorite topic in that the labor "blind spot has begun to recede" (de Peuter, 2011, p. 2).

Indeed, recent years have witnessed a magnificent rise in the number of works that critically

address labor practices in the creative industries, the Internet, and in the world of digital gaming

(Scholz, 2012; Burston, Dyer-Witheford & Hearn, 2010; Dyer-Witheford & de Peuter, 2009;

Fuchs, 2010; Brophy, 2008; Cohen, 2012). Because of the significant shifts from traditional

conditions of labor witnessed in the age of digital capitalism, scholars have had to develop

different conceptual tools to examine labor in the creative industries such as "creative labor"

(Hesmondhalgh and Baker, 2011a), "cultural work" (Banks, 2007), or immaterial labor

(Lazzarato, 1996; Hardt & Negri, 2000).

This dissertation draws on some of the insights of such concepts as "creative labor" and

"cultural work" especially in terms of how control is exercised in the creative workplace or how

tensions emerge in terms of art and commerce. Indeed, the use of ethnographic work to grasp the

complexities of creative labor and its specificity are vital contributions to better understanding

the political economy of creative labor in media industries. In the present study, "creative labor"

and "cultural work" are useful especially for understanding the ways in which game developers

16

experienced processes of corporatization (see chapter 3) and expressed their discontent about

what Bill Ryan calls "formatting" as a "form of creative control based on corporate attempts to

confront the uncertainties of the cultural marketplace in a context of expanded production"

(1982, p. 160). These notions do provide the conceptual space through which the researcher can

get to understand the "trade-off" between autonomy and financial security, but, like other

concepts, have their limitations. For that reason, I privilege the term "immaterial labor" to

illuminate how people work in the gaming industry. Let me briefly explain why "immaterial

labor,"works better.

In developing their notion of "creative labor," David Hesmondhalgh and Sarah Baker

(2011a) argue that the political-economic analysis of communication, such as that of Catherine

McKercher and Vincent Mosco (2007), misses the specificity of creative labor.[7] For

Hesmondhalgh and Baker, creativity is ambivalent and has positive aspects (in contrast to labor

under traditional capitalism) and "in spite of many problems associated with it … we should not

lose sight of the aspiration to human freedom that it embodies" (Hesmondhalgh and Baker,

2011a, p. 65). Drawing on a highly eclectic and complicated body of literature, they ask if it is

"possible to do good work in the cultural (or media, or creative) industries" (2011b, p. 394).

While not absolutely rejecting the contributions of the Marxist theory of alienation, they seem,

however, to constrain Marx's analysis of labor to a set of "ethical problems." They do

acknowledge aspects of alienation within creative labor but rather draw on terms such as "good

work," "bad work," and "dignity," characterizing "good work" thus:

> … good and bad work (*terms we prefer to unalienated and alienated labour*). This
> framework consists of the following elements of good work: decent pay, hours and
> safety; autonomy; interest and involvement; sociality; esteem and self-esteem; self-
> realization; work-life balance; security (2011a, p. 17; emphasis is mine).

---

[7] It is indeed true that the tradition of political economy has not paid enough attention to issues of labor and
subjectivity and it has been cultural studies that have brought subjectivity into the discussion in a systematized way.

In an era of neoliberalism when one is lucky to even find a job, these aspects are indeed vital to sustaining a good life. However, what is at stake when "good work" is constrained to these characteristics? Might that risk depoliticizing work? Might the categories of "good" and "bad" work hinder our rethinking work beyond the constraints of the market and its impositions, which as the case studied here shows, result in precarity? Might those "good" features of work, such as freedom, actually also pave the way for precarity or at least make it seem tolerable since employees enjoy the workplace and the good pay? What seems to connect Mark Banks's (2007) "cultural work" with Hesmondhalgh and Baker's "creative labor" (2011a) is that they seem to converge around the idea that it is more possible to do "good work" in the cultural industries than is assumed for traditional labor within capitalism.

These concepts offer useful insights for attending to the subjective aspects of labor process and the negotiations undertaken by creative workers with respect to autonomy and governmental control (see chapter 3,5 and 6). Nevertheless, we need to politicize the discussion of "good and bad work" when it is subjectivity and the soul of the worker that media corporations want. While these frameworks do attend to subjectivity in a nuanced manner, "good work" and "bad work", perhaps in a contradictory way, do not seem to me to grasp the ways in which subjectivity itself has become a factor of production within game development. Moreover, almost all developers at Super Mario had varying levels of access to the aspects of "good work" defined above but were not able to avoid precarity, which is inextricable from aspects of good work such as openness, freedom, and autonomy. These aspects of good work are precisely what corporate governmental strategies deploy to maximize surplus value extraction with which media employees may not have an issue at all, as long as their creative autonomy is guaranteed.

What is striking in my study is that these aspects of "good work" do not seem to do away with the precarious nature of game development. As my final chapter will reveal, lack of security sometimes erases all the joy and sociality derived from what Hesmondhalgh and Baker consider good work. In other words, even when one possesses all the features of "good work," there might still be alienation because there is no security or a clear future for one's job. As will be clear throughout the dissertation (especially in chapter 7), alienation, exploitation and the political nature of work – rather than its dignity – offer powerful tools with which to grasp the constant fragmentation that game workers are exposed to in a highly dynamic, and sometimes unstable, industry. Indeed, working at a flagship studio does not make one's place safe since it is subject to technological changes in the perpetual cycles of console innovation, financial instability in the uncertainty of stock markets, and the direction of decisions taken by a parent company.

Although I draw on the useful insights provided by the concepts of "creative labor" and "cultural work," especially in terms of attending to the everyday negotiations and meaning-making processes of game developers, I choose to deploy primarily the concept of immaterial labor[8] for understanding labor practices in the gaming industry. First of all, immaterial labor, by deploying the term "labor" in a Marxist sense, takes seriously the dialectical struggle between capital and labor in that the former's existence depends on the exploitation and control of the latter through automation, lengthening the workday, introducing flexible work environments or turning workplaces into rebellious playgrounds. In this sense, features of "good work" are understood through the historical struggle between capital and labor. Secondly, this concept enables us to approach intellectual property as the material embodiment of exploitation and

---

[8] I will elaborate more on the concept but briefly; immaterial labor is "the labor that produces the informational and cultural content of the commodity" (Lazzarato, 1996, p. 132). This is a kind of labor used mostly for producing images or products that are not tangible in the traditional sense. It is also the kind of labor that consumers increasingly perform within online environments such as Facebook and MySpace.

alienation where game developers are disassociated from their own products and labor. Thirdly, as part of "good work," sociality and communication are vital to the productivity of immaterial labor. Immaterial laborers want to communicate and "playbor" and owners of capital are happy to provide the required working conditions. Finally, juxtaposed to creative labor and cultural work, the concept of immaterial labor is more productive as it rethinks exploitation and alienation in the digitized workplace. Most importantly, the concept of immaterial labor allows us to see the dynamics of what Kathi Weeks (2011) calls "the privatization of work."

What are, then, the problems of seeing work as a private matter and what is the power of "immaterial labor" in this regard? In her groundbreaking *The Problem With Work*, Weeks starts with a seemingly simple but important question: "Why do we work so much and so hard" (2011, p. 1)? Part of her response revolves around "the privatization of work," which is particularly important in analyzing labor in the broader creative industries and particularly game industry. Privatization of work implies that citizens understand work just like they understand marriage, as a private matter. This perspective reveals useful insights as to how we can possibly understand the ways in which work, in the contemporary neoliberal moment,[9] ends up being purely a private, economic and mathematical 'thing,' rather than a social relationship that occupies a significant space in the public sphere.

This is not to suggest that privatization of work and the discourse around work is purely a product of contemporary neoliberalism. Rather, as Weeks demonstrates, the privatization of work goes back to John Locke and is intricately linked to the discourse of private property. This discourse is then challenged by industrialization, as industrialization takes work out of the

---

[9] In my definition of neoliberalism, I draw largely on the work of David Harvey (2005) who defines neoliberalism as the "restoration of class power" in a way that benefits the capitalist classes. For the micro-processes and governmental logics of how neoliberalism is materially experienced and reproduced, the work of Aihwa Ong (2006) and Michel Foucault (2008) also provide foundations as to how I understand neoliberalism in general and communications and media in particular (Hay, 2011).

household and makes it public. However, as Weeks forcefully argues, there are important processes that entrench the privatization of work, one of which is reification. Through reification, a hegemonic process in the neoliberal moment, we begin to see work not as a political process, but as concretized private action. Our work relations, wages and workplaces all become reified and are naturalized. They turn into things. This reification becomes even stronger in the era of neoliberalism. As Michel Foucault (2008) argues in *The Birth of Biopolitics*, workers are increasingly encouraged to see their labor as capital to invest in.

This apolitical perception of labor, its reduction to *a factor* in production, or just a variant in a mathematical equation, is by no means new. As stated above, it can be found in the language of classical political economy, which regards work as just one factor among many within the broader market transactions. What is more important, classical political economy mostly focuses on the realm of exchange, and on the efficiency of supply and demand and how they are realized in the market. Labor as a creative and political factor is not necessarily a concern for classical political economy.

It is with Karl Marx (1867/1990, p. 280) that we leave the sphere of exchange and enter "the hidden abode of production, on whose threshold there hangs the notice 'No admittance except on business." In other words, in Marx's theorization, work becomes intertwined with politics and struggle, and that is why his politicized understanding of labor, as a major pillar of immaterial labor, is indispensable for understanding video game production as part of the creative industries. At the center of Marx's critique of classical political economy lies the problem of the naturalization of relations of production. For him, relations of production are not natural (as in classical political economy), but social and as is the constitution of private property as well. Private property and waged labor have emerged not naturally but through brute force,

struggle, and dispossession. As Michael Denning argues, "capitalism begins not with the offer of work, but with the imperative to earn a living" (2010, p. 80). That is to say, neither work nor wage are natural or given relations. This is why the relationship between labor and capital is a decidedly political – not just ethical, *pace* Hesmondhalgh and Baker – process where historical actors struggle over profits, time, space, and the control of labor process. By making the move from exchange to production, then, Marx achieves an understanding of work "as the locus of capitalist valorization" (Weeks, 2011, p. 6). The prioritization of production within the broader social totality means understanding work as "neither natural precursor nor peripheral byproduct of capitalist production, but rather as its central mechanism (the wage) and lifeblood (work)" (Weeks, 2011, p. 6).

Against this background of politicizing work, how do we understand the link between exploitation and alienation in the creative industries, where creative workers are hailed as the owners of their means of production and imagination? How can we think about the relative autonomy that is diminished, as Nicole Cohen (2012) demonstrates in her case of freelancers, where unpaid labor time and intellectual property regimes intensify exploitation?

What allows us to critically investigate how developers' passion turns into self-surveillance and illuminate the thin line between autonomy and precarity is precisely the concepts of alienation and exploitation (de Peuter, 2010). In explaining and pointing to the inextricable significance of exploitation and alienation for theorizing immaterial labor in the gaming industry, Mark Andrejevic's (2009) work on YouTube and his reading of Marx's *Economic and Philosophic Manuscripts of 1844* is particularly useful. This is a productive way of thinking about labor in the gaming industry precisely because Andrejevic's framework enables us to rethink and re-assess the claims regarding the abundance of autonomy, creativity,

and maximum control over the labor process in the so-called creative industries and more specifically the gaming industry. Despite the charge against Marx's humanistic approach to labor, the *1844 Manuscripts* sober us in terms of how we can rethink labor, relative autonomy, and freedom in the creative industries. In his *1844 Manuscripts*, he articulates the irreconcilable relationship between capital and labor:

> It is true that labour produces for the rich wonderful things – but for the worker it produces privation. It produces palaces – but for the worker, hovels. It produces beauty – but for the worker, deformity. It replaces labour by machines – but some of the workers it throws back to a barbarous type of labour, and the other workers it turns into machines. It produces intelligence – but for the worker idiocy, cretinism.
> (http://www.marxists.org/archive/marx/works/1844/manuscripts/labour.htm)

From this perspective, it is not a surprise that creative workers are given relative autonomy since it is essential for surplus value extraction. For instance, in the case of my research site, game developers are provided with free soda, snacks, and beer during team meetings. The studio owns a pool table, a ping-pong table, and a margarita machine for the service of the game developers, who can customize their workplaces as they wish, and who can also benefit from the flexible work environment policy and work whenever they want.

Additionally, they enjoy the digital networks through which they can instantly communicate with each other, get into Nerf gun fights, stream a movie through Netflix, and play as they work. From this, it becomes evident that in the circuits of digital game production, "capitalist productivity derives from its expropriation and exploitation of communicative processes" (Dean, 2012, p. 128). It is only natural that capitalism broadens the horizons of autonomy, facilitates cooperation and communication across workers, workplaces, and nations when by doing so it increases its profits (Marx 1867/1990; Marx & Engels, 2001). As I will discuss more in detail soon, in the creative industries where immaterial labor is the hegemonic workforce, "communication is to the socialized worker that the wage was to the mass worker"

(Negri, 1989, p. 118; cited in Dyer-Witheford, 1999, p. 85). In this respect, capital is only happy to support the production of communicative and collaborative capacities of workers precisely because the former's livelihood depends on enhancing the channels of communication of the latter and exploiting its desires for creative production.

Grounding our understanding of the dynamics of exploitation, Marx's *1844 Manuscripts* helps to demystify the above-mentioned "fun" aspects of exploitation under digital capitalism and provides a critical lens through which alienation can be grasped in the creative workplace. In his work, Marx elaborates on alienation where the workers' attachment to their product is diminished. While exploitation is at the center of the wage relation between capital and labor, as we have seen, in liberal democratic societies this relationship is constructed as a natural, equal, and mathematical one. However, alienation appears as the process through which laborers are deprived of their means of production and their products. In this respect, no matter how much relative autonomy the producers might be given, alienation within the gaming industry is manifested as corporate ownership of any intellectual property created. Game producers have to sign non-disclosure agreements (NDAs) as part of their employment and to waive any intellectual ownership of what they produce. As I discuss further in the dissertation (see chapter 7), game developers are subject to strict scheduling and game content demands by their parent company, yet from which there were at times no clear signs with respect to future strategies and direction. How can we otherwise understand the fact that a game developer said "Thanks for buying us," as the new owners of their studio walked in to the studio to greet the developers? In this respect, no matter how much they might love their jobs, developers are alienated from the outcome of creative production – intellectual property in the case of game production – in that they do not have much control over the decisions of what game to produce next, processes of

how and when to file for bankruptcy, or even access to the moment when Digital Creatives was up for sale through an auction.

Thus, as Nicole Cohen (2012) rightly points out, a Marxist framework for understanding labor (cultural, creative, immaterial) is not only useful, but also necessary, for bringing exploitation and alienation back into the picture. It alerts us to conceive of a more fluid and dialectical relationship between labor and capital, where there is resistance and processes of antagonisms. It is through these "cycles of struggles" (Dyer-Witheford, 1999) that we can historically situate and understand the hegemonic position of immaterial labor in the post-Fordist economy. The conceptual framework provided by immaterial labor, broadens one's analysis beyond control and management, and takes issues of unpaid labor and intellectual property into account. What is it, then, about the concept of immaterial labor that enables us to escape the trap of "the privatization of work" and politicize it? What is the historical context within which it emerged? The next section defines and contextualizes immaterial labor.

Immaterial Labor: Context, Definition, and Limitations

Two potential starting points for contextualizing and defining immaterial labor can be suggested: the work of the Regulation School[10] which explains the transition from Fordism to post-Fordism, and Michael Hardt and Antonio Negri's (2000) *Empire*.

Fordism is a term is derived from the name of Henry Ford, who recognized that "mass production meant mass consumption, a new system of the reproduction of labor power, a new politics of labor control and management, a new aesthetics and psychology" (Harvey, 1990, p.

---

[10] Rejecting a simple economism and attending "the complexity and multidimensionality of modern capitalism" (Rustin, 1989, p. 54), the Regulation School offers two central concepts: 1) a regime of accumulation; and 2) a mode of social and political regulation. The "regime of accumulation" "describes the stabilization over a long period of the allocation of the net product between consumption and accumulation; it implies some correspondence between the transformation of both the conditions of production and the conditions of reproduction of wage earners" (Harvey, 1990, p. 121). That is, capitalism is not only about economics and production. In order for a stable regime of accumulation and extraction of surplus value to exist, a mode of regulation is vital. It matters, then, how schools, hospitals, geographical space, media companies, technologies and their content are constituted. Subjectivities matter.

126). Introducing the term "Fordism" in the U.S. context, Antonio Gramsci stated "hegemony

here is born in the factory and requires for its exercise a minute quantity of professional political

and ideological intermediaries" (Gramsci, 2000, pp. 278-279). He insightfully linked Henry

Ford's factory and his rationalization of work with his attempts to "intervene in the private lives

of his employees and to control how they spent their wages" (Gramsci, 2000, p. 291). These

social experiments and interventions in everyday lives of workers conducted by Ford clearly

reveal the extent to which Fordism is beyond economics. In this sense, Gramsci invites us to

think of Fordism less as "a mere system of mass production and more as a total system of life"

(Harvey, 1990, p. 135).

The historically contingent accord of labor and capital under Fordism shattered in the

early 1970s to which capital responded by:

> the internationalization of its operations, transferring 'Fordist' forms of production to less
> developed countries, while maintaining crucial command and research functions in the
> metropolises; the imposition of more stringent market disciplines on capital and labor,
> through the international deregulation of trade, movements of capital, and labour; the
> internal marketization of operations within large firms, through the institution of
> management by local profit-centres; the development of new technologies and forms of
> production and marketing" (Rustin, 1989, p. 55).

It is precisely this political-economic context against which the notion of immaterial labor and

Empire (Hardt & Negri, 2000) can be situated.

In *Empire* (2000), Hardt & Negri (2000) make the now common argument that

information has become a key value resource in the contemporary economy. While their analysis

is a "hybrid between workerist Marxism and the perspectives of French post-structuralism"

(Negri, 2008, p. 13), Jodi Dean (2004), a vocal critic of Hardt and Negri's work, argues that

information, networks, and spectacle are fundamental to the functioning of global capitalism.

This informatization of the economy has transformed labor and led to the hegemonic emergence of immaterial and affective labor.[11]

Autonomist Marxism,[12] the theoretical and political framework of *Empire*, offers a crucial concept, "cycles of struggle," that can be used to understand the transition to post-Fordism from the perspective of labor. In its account of this transition, the notion of "cycles of struggle" recognizes labor's agency in contrast to the one-sided stories that prioritize capital in the march of history. That is to say, "resistance and reappropriation, sabotage and invention power are, in autonomist analysis, parts of the repertoire of struggle" (Dyer-Witheford, 1999, p. 71). Complementing the framework of the Regulation School, this conceptual apparatus enables us to schematically draw three major cycles: the professional worker, the mass worker and the socialized worker.[13]

The cycle of the professional worker, in the autonomist historical narrative, runs from the "mid-nineteenth century to World War I" and it is a "position occupied by skilled workers, now absorbed within a mechanized factory system but still in possession of craft knowledge and technical competencies" (Dyer-Witheford, 1999, p. 73). Situated within the conflict between capital and labor, the professional worker is subjected to capital's assault to mainstream the labor process and deskill labor. Then Taylorism comes onto the historical scene and creates a "new working class-subject – the mass worker," who is "no longer able to control production" but still

---

[11] Manuel Castells (1989) has also written on the informatization of the economy, which provides a useful mapping of the global economy but operationalizes a somewhat technologically determinist understanding of history. Seeing information technologies at the center of historical change bears the risk of reducing history to machinery, symbols, and information, rather than including the dimension of political struggle, part of which is carried out in the workplace.

[12] For a detailed history of the tradition, see (Dyer Witheford, 1999).

[13] One needs to be aware of the "sensitive use of the cycles-of struggle concept demands allowance for unevenness, overlap, regional and national variation, and so on" (Moulier, 1986; cited in Dyer-Witheford, 1999, p. 72). But at the same time, this classification of the cycles of labor does provide "an analysis of the information revolution that situates it not as the product of ineluctable scientific progress, but of social conflict" (Dyer-Witheford, 1999, p. 72). This is also how, I believe, we can avoid understandings of globalization and of the network society that are fundamentally telling a story that can be read as bearing symptoms of technological determinism which sometimes can be seen in scholars such as Manuel Castells (2009).

able to engage in "interruption and sabotage" (Dyer-Witheford, 1999, p. 73). Nevertheless, this process of hegemony is never complete. Capital launched its attack on the mass-worker as well, because high wages and shop-floor militancy attempted to impede the restructuring attempts of capital.

This is where the third cycle of struggle produced the socialized worker. In this current phase, it is argued that work has leaked beyond factory walls and turned our lives into factories. Through processes of dismantling the temporal and spatial barriers of value extraction and destabilizing the main support structures of the mass-worker, an important aspect of reorganization of labor comes into being: "the blurring of waged and non-waged time." Through education, media consumption, and undoubtedly digital gameplay, we turn into productive subjects. This is the moment of real subsumption where capitalist production today has

> either directly appropriated the production of culture, beliefs, and desires
> or it has indirectly linked them to the production and circulation of
> commodities. It is difficult perhaps to think of any commodity that can
> be separated from its attendant "lifestyle" or subculture" (Read, 2003, p.
> 2).[14]

At the same time, we get paid for only a portion of our productive activities. That is, "capital persists in paying only for a tiny segment of the life activity it expropriates" (Dyer-Witheford, 1999, p. 81). Antonio Negri's statement that "communication is to the socialized worker that the wage was to the mass worker" (Negri, 1989, p. 118; cited in Dyer-Witheford, 1999, p. 85), makes very apparent how the playful personalities of video game workers become essentialized in the popular discourse rather than understood as historical constructions that emerge within the

---

[14] The usability tests carried out in the studio, for instance, would confirm this. Either game developers from the studio or players from the gaming community would be invited to play video games in the rooms that are specifically designed to provide feedback to make the game better. The players would be recorded with a couple of cameras that would focus in their faces, hands, and the entire body. As this experiment took place, they would also be interviewed and tell how they feel about the game. This information, in qualitative and quantitative form, then is relayed to the designers who then incorporate it into production.

communicative networks of contemporary capitalism. From an early age, video game workers are socialized within play as a highly productive material practice. It is within these spaces that the passionate developers start their training which may not necessarily involve programming but play, which is now a productive activity for training consumer citizens, flexible workers, and soldiers of the imperial order (Dyer-Witheford & de Peuter, 2009). It is within this historical context of the intersection of spectacle and informatization of the economy that immaterial labor becomes hegemonic.

Maurizio Lazzarato (1996, p. 132) defines immaterial labor as "the labor that produces the informational and cultural content of the commodity." In Lazzarato's analysis, there are two aspects of immaterial labor. The *informational content* aspect is related to the fact that employable skills are "involving cybernetics and computer control." In this sense, programmers in the video game industry, for instance, would definitely be workers who command those skills. The *cultural content* aspect, on the other hand, refers directly to the activities that are traditionally thought of as non-work. They are "the kinds of activities involved in defining and fixing cultural and artistic standards, fashions, tastes, consumer norms, and more strategically, public opinion" (Lazzarato, 1996, p. 132). Gamers who are running fan blogs or are involved in modding practices can possibly be related to this second aspect. Promoting perpetual innovation, immaterial labor "materializes needs, the imaginary, consumer tastes, and so forth, and these products in turn become powerful producers of needs, images, tastes" (Lazzarato, 1996, p. 137). As Lazzarato further argues with respect to immaterial labor, subjectivity and the soul of the employees are put to work where they are "expected to become active subjects" (Lazzarato, 1996, p. 134). Contemporary organizations are increasingly turning into spaces "where a collective learning process becomes the heart of the productivity." As much fun as it might seem

to belong to the club of the immaterial laborers, membership comes with costs such as "precariousness, hyperexploitation, mobility, and hierarchy" (Lazzarato, 1996, p. 136). While popular representations of immaterial workers present bright pictures most of the time, such as playing games at work or playing soccer in the fields of Electronic Arts, Lazzarato cautions us to think that "behind the label of the independent 'self-employed' worker, what we actually find is an intellectual proletarian, but who is recognized as such only by the employers who exploit him or her" (Lazzarato, 1996, p. 136).[15]

Within the processes of proletarianization of immaterial labor, Antonio Negri argues that "we are thus in a situation where labour time on the one hand, and on the other, the criterion of measure of this time (and hence law of value) become less and less important as central quantifying elements of production" (Negri, 2008, p. 63).[16] For him, communicative and linguistic connections will determine the value of production. He notes that "the discourse on the law of value (typical of Marx and of classical economics) is tied to a specific phase in the organization of labour; a phase in which labour actually could be measured in the terms required by classical economic theory" (Negri, 2008, p. 39). In this respect, Negri makes two central arguments for the status of labor. In the first, we're living in a utopia where the role of the worker is only to oversee the machinery and have more free time to enjoy. However, the utopia is far from being realized. Rather, we are living, in Negri's second argument, in a time of biopolitical production where "capitalist development and the capitalist creation of value are

---

[15] The notion of "proletarian" is quite crucial here in the sense that while immaterial workers do enjoy spaces of autonomy and might be able to command more control of their own labor process, when it comes to intellectual property, they are indeed intellectual proletarians, for whom Walter Benjamin, in *The Author as Producer* (1934/2008), made cautionary remarks years ago.

[16] Alison Hearn (2010a) challenges this claim in her work on reality TV workers and argues that the labor is still subject to the value demands of capital and equally subject to monetization. She states that no matter how diffused contemporary forms of labor might be, it is still possible for capital to regulate labor and measure value. David Camfield (2007) articulates similar charges against Hardt and Negri and asserts that one cannot readily assume that immaterial labor is predestined to escape from the control zone of capital. Chapter 6 on the precarious labor of game testers will also challenge the claims regarding the immeasurability of immaterial labor.

based more and more on the concept of social capture of value" (2008, p. 64). He continues to argue that "in the post-Fordist phase control passes more through television than through the discipline of the factory, through the imaginary and the mind rather than through direct discipline exercised over bodies" (2008, p. 71).

One might rightly ask the question here: what does playing games have to do with labor? Or, what do Hardt and Negri have to do with playing video games? And what is the utility of deploying immaterial labor in describing labor practices in the video game industry?

First of all, as discussed above, spectacle is central to the perpetuation of imperial power, and video games have a large role to play in the perpetuation of images of war, anxiety, and disease (Dyer-Witheford & de Peuter, 2009; Mejia, 2012). Video games teach their audience how to social-network, make war, multitask, and to love to play and work – features all central to the training of tomorrow's immaterial laborers. However, and perhaps more importantly, video games have historically been one of the laboratories of the materialization of immaterial labor that fuses play with work, hacking, rebellion, and creativity, which has then been re-territorialized as sources of value first by Atari and then other video game companies. Today, the modest laboratories of the past contrast with the present highly profitable, transnational publishing houses that put avid gamers' desire to work for long hours. As one developer who at some point left the studio told me, game studios "want more than just the cubicle walls. They want you to feel like you're having fun and you're enjoying yourself." In that sense, workers in the video game industry are paradigmatic of the immaterial laborers of *Empire* (Dyer-Witheford and de Peuter, 2009).

Video game workers, as argued by Lazzarato (1996), strive for perpetual innovation in the technological cycles of new consoles and are ready to convert their tastes, spaces of

collective communication, and play into value for giant publishers. As it has been again argued by Lazzarato (1996), they are, to modify David Harvey's (2003) term, equally susceptible to processes of "accumulation by [intellectual] dispossession." The dynamics of the industry are such that while new frontiers for profit generation open with respect to mobile gaming, core console games are subject to intense competition that depend not only on the quality of the game made but also where a game studio is geographically located, whether a studio is owned by a publicly traded company, or whether the studio benefits from certain tax benefits that nation-states, claiming to be in crisis, are more than willing to provide in order to attract the "cool" workers.

In this sense, immaterial labor is a powerful conceptual tool that allows us to enter "the hidden abode of production" in the gaming industry. Especially in the moment of real subsumption, where subjectivity, intimacy, love, and social relations are put to work, it is meaningful to take Christian Fuchs's (2010, p. 179) call that the strict dichotomy between "capital as one class and wage labor as the other class" needs to be overcome. To make my position clear, using the concept of immaterial labor does not necessarily mean to argue that other forms of labor are obsolete. Rather, as Jason Read notes, "it is to suggest that there is an articulation, a relation of relations, that asserts the dominance of immaterial labor over other forms of production" (2003, p. 127). In this sense, immaterial labor is not necessarily corresponding to the software aristocracy only; it includes care work and affective work. What is even more important is that software aristocracy is not immune from proletarianization, exploitation, and alienation precisely because "immaterial labor is often labor off the clock: it is not measured by the workday or week but by the project. The irregularity of work, and with it the irregularity of pay, becomes an aspect of control and exploitation" (Read, 2003, p. 128). It

involves processes of "dreaming in code" (Lucas, 2010). That is to say immaterial labor enables us to see the articulation of older and new logics of capitalism under post-Fordism, which is "better seen as one ideal-typical model or strategy of production and regulation, co-present with others in a complex historical ensemble" (Rustin, 1989, p. 61), rather than a radical historical rupture. Its power derives from foregrounding the hegemonic status of linguistic and communicative capacities that are used for value extraction through spatial and temporal processes (see chapter 5) where leisure time increasingly becomes subject to the logic of capital.

Despite its strengths in foregrounding the exploitative relations that come with the broadening of communicative spaces and the irregularities of work schedules in the game industry, immaterial labor does have some limitations, particularly in de-emphasizing imperialism, race, gender, and the geographic dislocations of technological advantage and disadvantage, of colonies and metropolises. Scholars across the spectrum have criticized discarding the notion of imperialism in the face of the invasion of Iraq and Afghanistan (Brennan, 2009; Passavant & Dean, 2004; Harvey, 2003).[17] Nick Dyer-Witheford and Greig de Peuter (2009) point to the ways in which immaterial labor is hegemonic only because racialized and gendered bodies are integrated – with their insecurely constituted toil – into the market to reproduce the "fun spaces" of immaterial laborers, who are mostly white and male. Additionally, the success of the affective networks of game workers strictly depend on the materiality of the geographical location of a studio, or "electronic factories, e-waste dumps, and coltan mines" (Dyer-Witheford & de Peuter, 2009, p. 5), as well as historical colonial links (Dunn, 2004). In this sense, Brophy (2008) is right in arguing that the concept of immaterial labor risks being cut off from materialist analysis and becoming a highly esoteric theory that erases colonial links and

---

[17] Negri later substantially responded to these claims by saying that "I do not deny that United States is a global power" and "there is no globalization without regulation" (2008, pp. 3-20).

assumes a very fluid world that operates only in rhizomatic structures. It is important to remember that there is a history of struggle inherent to the concept of immaterial labor itself; a strong critique of gender and colonialism cannot be easily dismissed from it. Precarity and socializations of labor are historically intrinsic to women's labor in and outside the house (Federici, 2012; Jarrett, 2013; Dalla Costa and James, 1972; McRobbie, 2011). Finally, drawing on the findings from my interviews, I argue that some theorists of immaterial labor (specifically see Hardt & Negri, 2000; Raley, 2007) have almost esoterically produced an essentially revolutionary subject of immaterial labor, who is almost automatically inclined to revolt. Such analyses of immaterial labor have missed the importance of local politics, personal histories, and the broader libertarian attitude among game developers who are not inclined towards unionization or alternative modes of work. In this respect, the term as it has been deployed (apart from the more nuanced analyses such as Dyer-Witheford, 1999; de Peuter 2010 and 2011; Lucas, 2010; Read, 2003, Brophy, 2008) has largely missed, due to lack of insights that ethnography can provide, the articulation of these ideological attitudes and labor practices. Having contextualized and defined immaterial labor, the following sections describe its attractions, tensions, and the tendency towards precarity, which will be further explicated drawing on ethnographic data (chapter 3, 5, 6, and 7).

Immaterial Labor: The Attractions and the Glamour

Working in the gaming industry is mostly associated with fun, partying, or a "dream job," as one of the game testers once mentioned. Indeed, popular representations of video game industry such as the movie *Grandma's Boy* (Goossen, 2006) or the T-shirt worn by a video game developer at Super Mario announcing that he works to support his video game habit attests to the material aspects of employment in the industry where work is fun. Game developers throughout my

interviews underlined the fun and cooperative aspects of creating something "cool," seeing their final products on the shelves, and telling others that they were part of it. On the one hand, there is an ideological dimension of creativity (Arviddson et.al., 2010) in terms of having a cool job that is admired in the society. On the other hand, video game developers, despite crunch[18] times, frictions with their parent company or the brutal materiality of temporary employment, love their work.

Indeed, what is at stake is a "vocabulary of love" (Gill & Pratt, 2008, p. 15) that can be explained by ideological forces, not as false consciousness but rather as a "material and concrete" reality and practice (Arviddson et.al., 2010, p. 297). The creative lifestyle through which the developers feel like "the masters of the universe," as the real estate developer who was involved in the relocation of the game studio (see chapter 4) put it, does provide a material force for accelerating processes where the line between work and leisure is blurred. The developers get to do "research" at home by playing video games or to watch Netflix for "inspiration" at work. In fact, this glamour is one of the major entry points to understand immaterial labor within the game industry. How else can one possibly understand the fact that a tester at the time of Digital Creatives' bankruptcy once told me that he would still choose temporary employment to test video games *without* benefits, rather than putting up with a boring job *with* benefits. In that sense, the game industry is an exemplary space for analyzing the materialization of immaterial labor both historically and in the contemporary moment, since it fuses work with play, leisure with labor, and establishes exploitative relations of affect, sacrifice, and desire.

---

[18] Crunch is the time during which game developers work long hours in order to meet a deadline or finish their project. Depending on the team and the resources, the duration of crunch varies. Regardless, developers are expected to work long hours during these periods of their projects. They are also informed about the long hours during their job interviews. In this sense, it is not a surprise.

The fact that governments see gaming industry as venues for economic growth and that new educational institutions have been opened to train the workforce contribute to the expansion of glamour around game labor (Kocieniewski, 2011). This was particularly visible in the school visits that the game developers paid to nearby educational institutions to meet with students who aspired to get a job in the industry. It is through these communicative spaces that the glamour of immaterial labor is transferred across generations.

The gendered aspect of immaterial production can also be seen in what I call a kind of "masculine camaraderie" which glorifies sacrificial labor, in that developers proudly talk about being in the trenches and working long hours for the success of their game. Nerf guns, game tournaments, bad movie nights, drinking, dirty jokes and laughter, construct the gendered material reality of the "extension of the dorm room" or the "fraternity house mentality" as one of the spouses of the game developers underlined during my interview. This masculinity cannot be thought of independently of the libertarian work ethic and values that underlie the creative industries, which rely on the countercultural values of the 1960s (Turner, 2006).

Tensions Between Autonomy and Control

Immaterial laborers in the game studio are given the temporal and spatial freedom so that they can enjoy and expand their creative processes (see Chapter 5). To create the conditions for this freedom, the studio switched to a flexible work environment policy to let the developers decide when to work, as long as they complete the allocated tasks. Spatially, they work in aesthetically designed workspaces and organize group activities to alleviate the boredom of work and reduce the intensity of crunch. However, capital's historical logic of extracting surplus value is far from obsolete. Flexible work environment policy, in this sense, comes with the discourse of "self-

responsibility" in which the management decided not to "baby-sit" the immaterial labor force, the productivity of which they found hard to manage and measure.

As Studio Super Mario itself got larger after being bought out by Digital Creatives at the beginning of the millennium, so did the game content they had to produce. This was relevant especially for art content and some artists felt the threat of outsourcing, which forced them to sometimes be the managers of their fellow artists in China through spreadsheets, rather than performing art, which is their passion. The merger with Digital Creatives also enabled the studio to acquire the license to produce games for big consoles. Yet, this advantage at the same time introduced the pressure of marketing in that the studio had now moved to an upper league and was competing with major titles. Transitioning from a garage culture to a corporate one would also bring about discontent among the more experienced members of the studio since they did not want to be given orders by project managers who did not necessarily know the peculiarities of creative work.

Competing with major publishers and big titles takes us to the issue of crunch, which means extension of work hours for months. The cost of crunching, as Chapter 5 will demonstrate, will manifest itself in the form of mental and physical burnout as seen among jaded programmers. Moreover, the price of success will also be borne by the unpaid labor of the spouses of the developers, who at times would describe themselves as "Minecraft widows" due to their husbands' passion for games.

Although it introduced greater financial security, being part of a publicly traded company later on meant more and more discontents in that the developers' access to any private financial information was no longer feasible. The value of the stocks they had initially bought had now

become almost nothing, which further diminished their trust in Digital Creatives' capabilities to

take Super Mario to a stable future (see Chapter 7).

Finally, the blurring of work and play, especially in the case of Quality Assurance (QA or

testers) would make this specific section of the workforce subject to temporary employment and

more disposable. Lacking the necessary occupational skills to become part of the core

development team and having to compete with the reserve army of labor that wanted their jobs,

testers found themselves in a situation where they were hired, laid-off, and re-hired when

projects needed more warm bodies. In this sense, this sector of the workforce has less autonomy

and is more vulnerable to precarity, another guiding concept of my analysis, along with

immaterial labor.

The Tendency Towards Precarity as an Existential Condition

The demise of a non-standard employment pattern or the increasing hegemony of a precarious

employment pattern during the last 4-5 decades has impacted not only blue-collar work but also

creative industries. For Enda Brophy (2006), precarity;

> refers to the growing insecurity brought on by the flexible management of the global
> work force within post-Fordist capitalism. Formally, precarity entails a range of labour
> conditions that escape the traditionally understood Fordist relationship to labour: a job for
> life, dependable benefits, steady work rhythms, union protection, a fairly clear separation
> between work and free time, a social safety net if all else failed, and so on.

In our times, precarity with respect to work has gone global. As Ivor Southwood describes:

> Work, of whatever sort, might begin or end anywhere at a moment's notice, and the
> burden is always on the worker to create the next opportunity and surf between roles. The
> individual must exist in a state of constant readiness. Predictable income, savings, the
> fixed category of "occupation": all belong to another historical world (2011, p. 15).

The condition described by Southwood is striking but his statement is in need of qualification,

because precarity is experienced differently across various social groups. Moreover, this

experience cannot be thought independently of the impact of space on the negotiation of

precarity. Critical scholarship has aptly foregrounded the multi-form of precarity within creative and immaterial labor (de Peuter, 2010; 2011; Gill 2007; Gill & Pratt, 2008). In his contextualization of precarity within post-Fordism, Greig de Peuter (2011, p. 3) writes:

> If income instability, lack of a safety net, an erratic work schedule, uncertainty about continuing employment, the blurring of work and nonwork time, and the absence of collective representation are among its indices, then precarity is certainly nothing new.

Brett Neilson and Ned Rossiter (2008, p. 54) similarly argue "if we look at capitalism in a wider historical and geographical scope, it is precarity that is the norm [and] Fordism [is the] exception." Igor Southwood also states that "the articulation of precarity in recent years is rather due to its discovery among those who had not expected it" (2011, p. 17). While one needs to take these arguments seriously in order not to be trapped by the feeling that "all this is new," it is also to be noted that the notion and experience of precarity is closely related to the crisis of Fordism and the switch to what David Harvey (1990) calls the flexible accumulation regime. As a response to this crisis, firms and companies across the world have restructured operations, as a result shattering of lifetime employment patterns and emergence of casualized labor (Sennett, 1999). While scholarship has attended to the processes of precarization and informalization of media labor in this context (Banks, 2007; Deuze, 2007; Hesmondhalgh and Baker, 2011a; Neff et al., 2005), the multiform nature of precarity has not been emphasized enough.

I understand precarity not necessarily as a brand new aspect of capitalism but rather as an increasingly hegemonic form of employment that has been *rediscovered* by the capitalist class to respond to the crisis of capitalism. As has been suggested (Brophy, 2011; Cohen, 2012; de Peuter, 2011; Gill, 2007) precarity is not uniform, and this applies to the video game industry. It is relationally constituted through such processes as ownership of different levels of occupational skills, blurring of work and play, swinging between pleasure and pain (McRobbie 2003), and

what I call "the degradation of fun" (Chapter 6). In this sense, precarity and flexibility are materialized in varying degrees depending on the occupational skills of the immaterial laborer, the size and availability of the reserve army of labor, the presence or lack of alternative workplaces in a given geography, and uneven power relations with respect to geographies of production, gender, and race.

However, there is a need to further theorize precarity as a concept that is beyond the short-term job contract. Precarity within the creative industries needs to be understood as an existential condition. In the mainstream and even the critical discourse, precarity is taken for granted and perceived to be natural, just like a natural disaster, which cannot be avoided. Unemployment or casual employment is explained with respect to supply and demand curves. However, the conditions of precarity, to quote Stuart Hall's definition of "New Times", "are both 'out there', changing our conditions of life, and 'in here', working on us. In part, it is us who are being re-made" (Hall, 1988; quoted in Southwood, 2011, p. 8). In other words, conditions of precarity produce subjects who in turn act in various ways in their everyday lives.

In the case of employees at Super Mario, when the studio is only as secure as the success of the former project, precarity means more than intermittent work. As Lauren Berlant suggests, precarity refers "a way of life", "an affective atmosphere", or "an existential truth about contingencies of living" (2011, p. 192). "This instability requires", Berlant argues, "embarking on an intensified and stressed out learning curve about how to maintain footing, bearings, a way of being, and new modes of composure amid unraveling institutions and social relations of reciprocity" (2011, p. 197). Then, in the realm of creative work, precarity goes beyond short-term projects. It almost means permanent indebtedness to capital where the creative class needs

to constantly work, still love it, and remain hopeful. After all, hope, hard work, and successful projects are what will secure a stable future for the studio and the video game industry.

In addition to hope, precarity in the gaming industry is prolonged for another reason. The industry, just like the world of academia, is quite small. New or potential employees are advised not "to burn the bridges", confirming the argument that "the aberrant individual would only damage himself, ruining his chances, and the system would go as smoothly as before" (Southwood, 2011, p. 18). Moreover, in the flexible workplace, one's colleagues become the customer "to whom one has to continuously sell oneself" (Southwood, 2011, p. 25). However, perhaps what is more crucial here is the articulation of hope with the ideological condition where "the façade of work as a place of fulfillment and a source of continuity and stability detracts attention from its fundamental placelessness and from the true insecurity of its transient workers/non-workers" (Southwood, 2011, p. 22). In other words, no matter how precarious it might be, work, as the ultimate source of self-realization, still is a powerful force in which game developers are highly invested as far as the idea of seeing their product on the shelves is concerned.

In the case of Super Mario, most members of the core development team are on a standard employment pattern except for the QA personnel and some artists who are hired on a contractual basis. The existence of a core workforce that has matured in the studio is mostly related to the fact that there are no other studios in the area to which immaterial laborers can job-hop. On the other hand, while those core employees can be regarded as safe sections of the workforce, my analysis (see chapter 7) demonstrates that even these employees are not immune to processes of different levels of precarization and insecurity. To give an example, from the workplace to the household, the game developers and their families that I spoke to complained

about the lack of communication from Digital Creatives, which put them in an anxious position.

Some of these talented developers had to leave their beloved game studio, which in turn rendered

the remaining workforce in a liminal position because they had to overwork themselves due to

losing senior talent. In this sense, evidence from my research site supports existing research that

the upper scales of immaterial labor are not immune from varying levels of precarity (de Peuter,

2010; 2011; Ross, 2009; Gill 2007; McRobbie 2003; Lorey, 2006, Neff et.al., 2005; Neff, 2012).

The hit-driven logic of the industry indeed renders the whole studio precarious. As one project

manager once told me, when they produce a game, they produce "the lifetime" of a studio. While

the immaterial game developers do enjoy spaces and practices of autonomy, they are also

expected to perform with self-responsibility, to be proactive, and to hold each other accountable

if anyone fails in the team. In this respect, as Angela McRobbie (2003) argues, being a desirable

game developer requires or comes with "endless self-disciplining, the burden of self-assessment,

and the handling of self-promotion as well as the privatization of disappointment and the

internalization of grievances." As one game tester who attended a game design school once told

me, habituation to such tensions between autonomy and precarity is already learned during

college years (Ashton, 2011).[19]

**Immaterial Labor within Media/Communication and Game Studies: Towards a Modest
Contribution**

The scholarly work around immaterial labor ranges from extensive historical and theoretical

accounts (Dyer-Witheford, 1999) to how online spaces like MySpace capitalize on the creative

and affective labor power of young people (Cote & Pybus, 2007; 2011). Using Anthony

Giddens's concept of the "empty self," Alison Hearn (2010b) draws attention to the ways in

---

[19] This is not to mean that precarity leaves no room for organizing. Critical scholarship has addressed issues of precarity and immaterial labor's experimentations with organizing (Rodino-Colocino, 2007; Brophy, 2008; de Peuter, 2013) and I will come back to this issue in the conclusion.

which formerly private relations become digitally diffused and go public on online platforms. Hearn demonstrates how our comments about different products or experiences are commodified through various ways including feedback mechanisms, rating mechanisms, tracking user information, webcrawlers, key words searches (2010b, pp., 430-431). Vincent Manzerolle (2010, p. 460) echoes Hearn and in addition evokes Dallas Smythe's notion of audience commodity to argue that "realization of surplus value in the sphere of circulation occurs through the intervention of capital in the materialization of social communicative, co-operative and cognitive capacities of audiences." Tiziana Terranova (2000) demonstrates how the Internet is a cultural construction of unpaid, pleasurable, and exploited voluntary labor. In the 'new' economy of the advanced capitalist world, she argues, we are being transformed into digital laborers (paid or unpaid) through the re-articulation of desire and digital technologies. Nicole Cohen (2008) updates Dallas Smythe's work and argues that digital technologies enable the formation of a more active audience commodity under post-Fordist capitalism. Through an empirical analysis of Facebook press releases, Cohen demonstrates how in the contemporary condition, "capital reacts to a dynamic from below" and paves the way for a moment where "capitalist social relations and market forces extend into multiple aspects of social life" (2008, p. 18). Mark Andrejevic (2008) explores how the productivity of reality TV fans is harnessed and encouraged by content producers. Taking the discussion of immaterial labor to the offline workspace, Abe Walker (2011) investigates Google's 20 % time policy, which gives Google employees the chance to allocate 20 % of their time to anything they want to work on. Walker (2011) argues that this policy actually increases exploitation through self-surveillance of productivity because the employees work even harder during their time to be able to deliver to the company. Besides looking at the intersection of academic labor and immaterial labor in previous work (Gregg,

2009), Melissa Gregg (2011, p. 172) demonstrates the domestic implications of immaterial labor whose productivity materializes through the affective networks of new communication technologies and ultimately calls for "a labor politics of love" to "fight this corporatization of intimacy."

There are a number of scholars who have deployed the concept of immaterial labor to analyze labor practices in the game industry. A fundamental introduction of the concept to the field of game studies is *Games of Empire* (Dyer-Witheford & de Peuter, 2009). It is perhaps one of the few – if not the only – approaches to grapple with the totality of global capitalism by focusing on labor, aesthetics, simulation, and desire. Deriving their theory of Empire from Italian Autonomist Marxism, with reservations and criticism, they make the assertion that within the digitally connected infrastructures of global capitalism, the video game industry and its commodities "simulate identities as citizen-soldiers, free-agent workers, cyborg adventures, and corporate criminals; virtual play trains flexible personalities for flexible jobs, shapes subjects for militarized markets and makes becoming a neoliberal subject fun" (Dyer-Witheford & de Peuter, 2009, xxx). What is complementary to their theory of Empire and the notion of immaterial labor is the notion of cognitive capitalism, which refers to the ways in which capitalism has been transformed within the last four decades and knowledge has become central to production. Different from liberal theories of the knowledge economy, the theory of cognitive capitalism suggests that, in our contemporary world, the boundaries between work and life have become more blurred, moving towards a condition where knowledge, taste and desire themselves become factors of production.[20]

---

[20] In these few words, it is impossible to render the depth of analysis in *Games of Empire.* However, the history documented by Dyer-Witheford & de Peuter demonstrates how the playbor of engineers in the department of defense was historically captured and commodified by the industry. Textual analysis of games such as GTA will tell how race, ideology, and capital interact within digital worlds (see Leonard, 2009).

Leif Schumacher (2006) disagrees with theorists of immaterial labor, suggesting the new economy is characterized not by new forms of labor but a new articulation of information technologies and the deployment of labor subsumption under the Fordist economy. Analyzing lawsuits in the gaming industry, Schumacher argues that the notion of creativity that is used with respect to immaterial laborers is limited and states that immaterial labor "seems to be carried out under conditions that are more characteristic of some of the old production paradigms" (2006, p.145). While not directly using the concept of immaterial labor, Hector Postigo (2010) analyzes modding practices in their relation to participatory culture. Postigo (2010) argues that while there is "a moral economy to the discourse of modding," he also warns by concluding that "users themselves remain for the most part, just visitors in the media landscape. The empire is alive and well" (Postigo, 2010, pp. 5-9). Julian Kucklich (2009) draws on the Italian Autonomist Marxist framework and considers virtual worlds to be spaces of social productivity, precarious governmentality, and the emergent hegemony of the ideology of play. Lin Zhang and Anthony YH Fung (2013) examines the role of online gaming guilds – as a secondary industry or as an intermediary – between the 'real' industry and the consumers and investigates the unpaid labor of guild laborers in supporting innovation in a highly hierarchical manner. Zhang and Fung's (2013) analysis is particularly helpful in demonstrating the organization of affective labor along the logics of industry. Renyi Hong and Vivian Hsueh-Hua Chen (2013) have written a valuable analysis of game modding not only from the perspective of labor but how technological affordances intensify labor processes through which modders evaluate and calibrate their own productivity. Jin and Chee (2008) have written a socio-historical analysis of the rise of an online gaming empire in South Korea and underlined the significance of governmental infrastructure, the existence of professional gamers, and PC bangs in building such an empire. Arviddson and

Sandvik (2007) see play itself as a kind of immaterial labor, which produces value for the industry through processes of "co-design, co-development, and performance." In *Gaming: Essays on Algorithmic Culture,* Alexander Galloway (2006, p. 2) differentiates video games from photographs and films by stating that they are "actions" involving "large numbers of organic machines and inorganic machines." Galloway's choice of *operator,* rather than player, signals the immense amount of immaterial labor that is invested when one plays a game. It is the "affective, active, mobile quality" (Galloway, 2006, p. 69) of the games that make them more appealing to gamers, who become immaterial laborers in the digital networks. McKenzie Wark's analysis (2007) draws on Jean Baudrillard and Gilles Deleuze and situates video games within what he calls "the gamification of the world." The gamification of the real world has important ramifications because, as Wark states,

> Work becomes play. Work demands not just one's mind and body but also one's soul. You have to be a team player … Work becomes a gamespace, but no games are freely chosen any more. (2007, para 11).

Thomas Malaby's (2009) ethnography of Second Life illustrates the materialization of "complex processes of governance, games, and creativity" (2009, p. 4). Despite not deploying the term, his ethnography of Linden Lab demonstrates the ethos of the immaterial laborers, embracing uncertainty and chaos or "a deep faith in technology with a rejection of vertical authority" (Malaby, 2009, p. 8). Combining game-like attitudes to creativity and embracing open-mindedness, the immaterial laborers at Linden display an attitude of technoliberalism in some kind of a post-bureaucratic institution. Tom Boellstorff's work on the residents of Second Life, on the other hand, defines a world that is applicable to how immaterial labor works online through consumption. In the world of Second Life, defined as "creationist capitalism," "self-fulfillment becomes a means of production" (2009, p. 206) in this world:

The prosumer has become a kind of minor god, and we find not predestination but a performative notion of production . . . just as Christ is seen in dominant Christian traditions to unite the human and the divine, so creationist capitalism unites production and consumption ... Workers are not just sellers of labor power, but creators of their own worlds ... This presumes the possibility, indeed the necessity, of *production without alienation; it equates creation with the species being of the human*. (Boellstorff, pp. 208-209. Emphasis is mine)

In Boellstorff's analysis, the notion of alienation and how it becomes less tenable (or more dispensable) is crucial in order to understand subjectivity within new media economics and game labor because members of the modding community, dwellers of virtual worlds or the very producers within the industry indeed might be aware of mechanisms of exploitation but still emphasize how much they enjoy what they do. It is through the discourse of freedom, creativity and the practices of user-generated content that Second Life has thrived and appealed to residents, who are immaterial laborers working and creating for free. While not necessarily within the framework of immaterial labor, Deuze et. al. (2007, p. 348) explores how the broader political economic structure and the aspirations of game workers interact. It is through their analysis that we understand how "individualized and pragmatic work-style in game development" and willingness to work long hours are constituted. Taking this discussion to the realm of video game design education, Daniel Ashton (2011) contextualizes the upgrade culture within the game industry and links it to the notion of an economy of perpetual innovation. Ashton particularly emphasizes the experience of video game design students, their concerns and anxieties in the cultivation of a flexible self. Drawing on a governmentality framework and on qualitative research with game design students, Ashton illustrates how the upgrading the self and keeping up with the latest technologies is a major cultural ethos among the design students.

Conclusion: A Contribution to Rethinking Immaterial Labor

In this chapter, I provided a theoretical discussion of the term immaterial labor and surveyed its status within media studies in general and game studies in particular. I argued that despite its

problems, the term is valuable for understanding labor practices in the gaming industry. With the struggle between capital and labor at its center, the notion of immaterial labor productively complicates the discussion around labor practices in the game industry. The term enables us to understand work beyond the dichotomy of "good and bad," does not resort to such referents as dignity, and takes the discussion beyond ethics. Rather, it decidedly approaches work as a political matter, which has increasingly become private in the moment of biopolitical production, where subjectivity, desire, love, passion, affect, and fear are all put to work. This is indeed one of the specificities of game labor. Additionally, the term is useful for understanding the labor process without limiting oneself to the notion of relative autonomy at work. As the narratives in this dissertation will demonstrate, capturing immaterial labor and measuring its productivity presented problems for the studio, which ended up implementing a flexible work environment policy to let the game developers enjoy creativity and freedom. In this respect, the studio was, and still is, only happy to provide the communicative networks for the immaterial laborers so that they can enjoy the conditions of "good work." At the same time, immaterial laborers at the studio subscribe to the libertarian ideology with the utmost emphasis on individual creativity, and in that sense are not necessarily open to the idea of experimenting with unionization or alternative ways of making themselves less vulnerable to the industry. Furthermore, there seems to be a thin line between autonomy and precarity in that the former is conducive to the latter. At the same time, precarity is an issue that needs to be understood beyond the realm of economy or the short-term job contract. Rather, it is an existential condition mediated through the urban and domestic space. While precarity is a global problem, the solution is seen as highly individual, such as moving to another studio, quitting the industry, or starting one's own business. That is to say, the developers enjoy the affective and communicative networks but do not naturally

48

consider organized ways of resistance to alienation from their means of production and

imagination.

Finally, analyses of immaterial labor within game studies need to take the question of

space into consideration. While there have been critical analyses of space with respect to

production and geography (Johns, 2006; Kerr, 2013), the spatial aspect to be interlinked with the

analysis of immaterial labor goes beyond production networks. Rather, the spatial perspective

needs to further focus on the locality and the material and discursive construction of space. It

seems that theoretical analyses of immaterial labor mostly focus on virtual (digital) networks and

ignore the role of physical space, geography, familial links, and local politics in understanding

the conditions for the social reproduction of immaterial game laborers or the conditions through

which they negotiate precarity. As my case study reveals, the internal labor market of the game

studio and the labor pool comprised of former employees is crucial for recruitment. For instance,

some of my interviewees obtained a job in the studio through familial links. At the same time,

labor fluidity or the desire to job-hop is not necessarily applicable to all geographies. In

gathering my data, I was quite surprised by the fact that it was not uncommon to find employees

who have histories as long as 17 years in the same studio. If these historical and spatial

relationships are ignored in analysis of how immaterial laborers work, then we are left with the

feeling that immaterial labor is all about desire and fluidity. Yet, politics and actors in the local

and regional level (see chapter 4) have a significant role in transforming space into a productive

assemblage so that immaterial laborers can be more productive and the studio can successfully

recruit and retain talent. Additionally, the assumption that immaterial laborers are situated within

affective networks of other immaterial laborers, and that this will automatically enable a

revolution, is contestable. While immaterial laborers do enjoy co-creative activities, they are also

competitive, aspiring, and careerist workers. As it has been argued, "the emphasis upon affect as positive, transgressive potential has made it difficult for autonomist writers to see the other roles affect may play – not simply in resisting capital but binding us to it" (Gill & Pratt, 2008, p. 21). Depending on the geography and history of class struggles and labor unions, these workers might actually be against communal forms of production. In this sense, revolution and autonomy as a feature of "good work" are not guaranteed. As one of the programmers stated quite sharply, "yes, we can make a game but we don't have distribution networks. We don't have sales and all that. We need them." Ultimately, my study revealed that unions were not within the imaginary of these workers, even when they felt like they were in "the deluxe suit on Titanic" only a year before their parent company filed for bankruptcy. Forming a union is "a little bit like biting the hand that feeds you," a programmer stated. In this respect, precarity is strongly related to the formation of immaterial laborers' subjectivity (de Peuter, 2010) and this may very well weaken the prospects for organizing or alternative ways of working. The conditions of precarity lead us to question the assumptions about immaterial laborers, who are assumed to intrinsically enjoy switching between studios and positions, and are naturally open to experimentation. Yet, under the conditions of an unstable economy and shaky grounds of the gaming industry, such claims are not always easy to sustain. As a lead designer told me, sometimes people just want to know who they will be working for and not worry about what the next stage of their lives will be like. While the prospect of working in different projects is exciting, the immaterial laborers within Super Mario also yearn for a place-bounded identity that is subject to erosion due to conditions of precarious production and the dynamism intrinsic to the industry.

CHAPTER 2

METHODOLOGY: CONTEXTUALIZING THE RESEARCH SITE, USES OF
PHOTOGRAPHY, AND RETHINKING THEORY

Positionality of the Researcher: You'd Better Start Playing Video Games for Research

Having established the theoretical framework of the project, I now move on to discuss some of the processes through which this dissertation came into being. In this chapter, I situate myself as a researcher within the broader project and discuss the peculiarities of doing ethnographic work on the subjectivity of immaterial laborers within game development. Moreover, I talk about the relationship between social theory and ethnography and finally propose photography as a useful process to uncover some of the dynamics of video game labor.

I studied translation and interpreting for my undergraduate degree. Upon graduation, I started working at Turkey's first cable news television station, NTV, where I was employed at the foreign news desk. Employment at the foreign news desk meant that one needed to get used to irregular working hours. Given the geography within which Turkey is located, foreign news desk didn't find it difficult to find issues to cover. In addition to irregular hours, I was only able to become eligible for benefits after I worked for 1,5 years at this TV station. Experiencing insecure working conditions at an institution that used to be regarded as a role model for news broadcast alerted me to the precarious working conditions in the media industries. At times, I was asked to come to work for a 15-minute translation of Formula 1 speeches about which I barely cared. Granted, a car came to pick me up from my house to do these minor tasks. However, the fact that this was done during my vacation days, which were also irregular, was a hint of the ways in which media work was not as fun as it was portrayed. It is the experience of precarity and irregular work hours that prompted the idea of writing a dissertation on media work.

However, the idea to do dissertation research in a game studio was never an idea I had in mind. My dedication to do such a study was strengthened after attending *Digital Labor: Internet as Playground and Factory*, a very important academic conference in New York City, which opened my eyes to the changing terrain of labor, as well as new venues and tactics for surplus-value extraction in the spectacle economy. The blurring of the distinction between labor and leisure, waged and non-waged time was a major theme of the conference, and made me think that doing research in the game industry would be an option.

Inspired by this conference and with the help of a friend in contacting individuals at the studio, I wrote to Studio Super Mario and asked whether they would let me study them. Even though I possessed enough social capital to at least hope to secure access to a corporate site, I was trying not to be too hopeful precisely because corporate sites are not always accessible. I waited for a response for about two months and decided to look for alternatives, when right around that time, the studio invited me to discuss my research with them. I met them, shared the broad framework of my research, was given access, and signed a non-disclosure agreement (NDA) regarding all intellectual property.

My joy at getting access to the research site was soon replaced by concerns and anxieties, though. Not because of the NDA I had signed — I was not interested in the secret game projects of the studio and nor did I have the skills or networks to capitalize on such projects — but because I no longer considered myself to be an avid gamer. I used to play a lot of video games in high school and was immersed within these new virtual worlds. At the same time, I had to regulate my playing schedule in order to get into my preferred college. After realizing this goal, the lure of playing games had not totally passed but my initial enthusiasm had faded. In addition, I did not have a personal computer in my dorm room. In order to get back to the world of gaming

for my research, I had to buy a used X-Box system and some games to catch up. The studio also kindly allowed me to play their games on my console. Now, I was playing games not for fun but research and work.

The privacy of the individuals and the identity of Super Mario and Digital Creatives served as the Sword of Damocles throughout this research. While anonymizing the individuals was a relatively easy task, it was a more tricky issue for both the studio and the parent company, given the geography and the process of bankruptcy, which I discuss in Chapter 7. The industry is small and so is the field of video game studies. To give an example, as I contacted a game studies scholar to discuss his research, he returned my email by telling me where I was doing my ethnography since one of his former students was employed at Super Mario. Under these circumstances, I chose to paraphrase (especially in chapter 4 and 7) some of the quotes from documents and industry magazines in order to maximize the privacy of individuals and the studio. I have kept these documents and links as pdf files but these will not be used as direct citations in the references.

Tensions with respect to ethnographic research are not limited to the "technicalities" of the constraints on the use of human subjects monitored by the local Institutional Research Board (IRB). Studying social relations by listening to human beings brings emotions into the picture. For instance, when I received the news of bankruptcy, I got excited since this would support my arguments regarding precarity. Yet, only 10 seconds after that, my alienation from my own work hit me. How could I possibly get excited when people might be at the brink of losing their jobs? I knew those people, some of whom had already been fired and re-hired. How could their precarity excite me? Had I bought too much into the promises of the academic world, which by no means is exempt from proletarianization through processes of the euphemism called adjunct faculty?

While still remaining a critical researcher, the fieldwork actually taught me to be more sympathetic to these practices. People have jobs and their employment is precarious. Additionally, some insightful developers, if not all, do criticize work practices in the industry and have self-reflexivity with respect to their own professions as far as race and gender representations are concerned.

Another concern I had was about the relationship between being a critical scholar and the dynamics of the industry, and the kind of game content that Super Mario produced. How would my relationship be with the game developers as far as politics of creative production is concerned? Indeed, while it took time to have a smooth relationship with the developers in terms of my outsider status, issues such as race and unions always proved to be harder to talk about. Gender, sexuality, and violence were easier to discuss. For one, the availability of customization in their games enabled the game developers to make arguments for a more liberal game that endorsed different gender representations. At the same time, while some of the developers kept relatively quiet in terms of representation of race, a few of them were open to discussing the consumption of marginalized cultures and violence in video games (Leonard, 2009). Some even went further to state that violence, as leisure activity, is engrained in the culture of the U.S. and therefore provided a critique of the history of their own country.

These tensions raise questions about the role of theory and metareflection for the researcher vis-à-vis research subjects, both individuals and corporations; yet the practicalities of ethnographic research — the process of data collection, the methodology of extended case method — also underline theoretical issues to be explored.

Grasping the Totality Through the Mundane and the Emotional

Ethnographic work is traditionally conceived as studying bounded communities and providing interpretations of social relations as they unfold within a community. In what follows, I juxtapose this classic definition with my own case, detail the human subjects I encountered, the processes of data collection, and reflect on the role of theory in ethnographic method.

Having obtained IRB approval and gotten the green light from the studio, I first encountered my research participants in a meeting where they discussed financial issues, retention, crunch, and future plans. At the beginning of this meeting, the president of the studio announced my name and simultaneously put my picture on the large screen. I was given a warm welcome by the game developers, who seemed to be a pretty light-hearted group of people, mostly comprised of white men. At that time, I did not know much about the financial power or the competitive edge of Digital Creatives, and it would take time for me to learn that they were in financial difficulties.

Fast-forward 2.5 years and the studio would find itself in a completely different situation. The publicly-traded Digital Creatives had filed for bankruptcy, and Super Mario was sold to a private company, the owners of which were in town to meet the team. Everyone was excited, and I got permission to attend the meeting. Everything was real time, just like the stock market. The money for Super Mario had just been transferred to the bank account of Digital Creatives that used to own the studio. And here I was in the meeting but *not* in the same room with the new owners and half of the team. They were on the third floor, while I was on the second floor with the rest of the developers, watching the new owners on a large screen that was brought to us via a camera located on the upper floor. If people had questions about their future or other issues, they

asked another employee on the second floor to send a text message to the IT staff on the third floor, who then would ask the question in person to the new owners of the studio.

All of this is to say that the organization I studied constituted a highly mediated and networked environment that posed peculiar difficulties for research. While people had face-to-face work during meetings, a lot of work was done via email, forums, spreadsheets, conference calls, skype, and VPN. At the same time, the computerization of work had reached a level at which, as an artist once mentioned, the computer had become the canvas of the game developers. Despite my expectations to have a lot of interaction with the game developers, they were working on their computers with total immersion. I was not always able to ask them questions since wearing a headphone indicated that they did not want any interruption.

As part of my observations, I started attending team meetings of different sorts. Some of these meetings included any kind of developer (programmer, designer, producer, artist), while some were comprised of just one kind. I also participated in studio-wide meetings. I was once invited to a game launch party, where developers celebrated the release of a game at a bar. I observed game testers as they worked in the testing room. Further, I participated in two in-house training programs. One of these targeted testers who were formerly laid off and now being rehired at the studio. The other one lasted for about a month (two different sections) and was comprised of different kinds of employees across the studio, where the aim was to cultivate certain communication skills.

For over two and a half years, I collected ethnographic data at Studio Super Mario, my principal research site. I conducted semi-structured interviews with 56 different individuals that include managers, programmers, artists, designers, producers, testers, spouses of developers, a city official, and a real estate developer. I tried to start these interviews with open-ended

questions to make the process as fluid as possible. I then followed up with specific questions regarding their work. Sometimes, the events that unfolded in and outside the studio dictated the direction of these interviews in terms of what was to be prioritized. One indication of having achieved fluidity in these conversations is that my research participants not only helped with recruiting other developers but also sent me links that they thought I would find useful for my research.

In addition to these individual interviews, I conducted three focus group interviews. The studio kindly gave me a computer station on which to work, which shifted a couple of times since developers had to relocate due to the changes in the composition of the teams. This allowed me to have access to some work related emails and forums, which I did not use in the dissertation. However, these online spaces gave me an idea of the informal culture at the studio which was surprisingly not easy to explore despite the stereotypical perception about creative class as comprised of accessible, extroverted people. In other words, these online spaces helped me figure out what the developers did in their free time to socialize with their colleagues.

Despite traditional ways of doing ethnographic work, I was feeling some uneasiness with respect to the research. In addition to intricate issues of representation of race and violence in video games, I possessed a desire to have access to the totality of social relations within which the developers worked, lived, and played. Since I did not have the occupational skills to work as a developer, my only access to information was through interviews. I actually wanted to be in the minds of the immaterial laborers all the time to understand how their days went, how they communicated and worked with their colleagues. I equally wanted to be in the hallways of Digital Creatives to explore how they saw the market and perceived the future of the studios they owned. There were times that I wished I could have been in China to talk to people who

produced art content for Super Mario. I wanted to be on e-mail lists and company forums. In sum, I wanted to grasp the totality of game production. Yet, was that ever possible? How is it possible to understand "what kinds of forces - laws, technologies, collaborations, and workplace cultures for example - shape video game development?" as Casey O'Donnell (2008, p. 15) asks? Indeed, the question may be how do we study organizations, which are structured

> in a network of satellites, relay stations, and databases that coordinate the retrieval and delivery of public and private information . . . [and which] operate at greater speeds . . . permit simulations of offline interaction, speedy circulation of social signs and meanings, rapid decomposition and recomposition of messages, and increased transience of socially significant symbols [or are simply] aterritorial. (Howard, 2002, pp. 552-554)

Howard's questions summarize my frustrations during my fieldwork and pave the way for discussing the frameworks that I draw on for my methodology.

These questions and frustrations regarding the desire to grasp totality are not very different from what Michael Burawoy (2000) describes in *Global Ethnography* in terms of the theoretical and methodological difficulties that researchers face in the networks of digital capitalism. As Burawoy vividly describes with respect to his own research, "it was impossible to appreciate the fate of Manchester textiles without knowing about America's slave South or the progress of colonization in India" (2000, p. 1). This applies to my own case, as well. It was impossible to understand the fate of Super Mario without comprehending the stock prices of Digital Creatives, whose own fate depended on a set of complex factors such as sales of their other games, performance of certain products, or the market sales of the competitors. The fate of Digital Creatives, on the other hand, would potentially have a big impact on the financial operations of the city where Super Mario is located, because the city downtown hosts up to 200 game developers, who lunch, dine, or take coffee breaks and feed the economy of the city. If "the local dissolves into ephemeral imagery while the global becomes invisible" as Burawoy (2000,

p. 2) suggests, how viable would it be to consider grasping totality through qualitative research, when it is considered to be dead or impossible?

These macro conditions are further exacerbated by the researcher's own affordances, or lack thereof, in terms of embedding himself into the field. As mentioned above, I did not have the skills to be employed or work for free in a game studio. Additionally, apart from the team meetings, design meetings, and usability tests, there was no space to observe the developers when they interacted with each other. As they work, the developers wear headsets, the universal sign that one is focused. And to my surprise, not all the developers were easy to talk to. The immaterial laborers, who I assumed to be people very open to communication and sharing the affective aspects of their work, were not that easy to get hold of. As the real estate developer who was involved in building the plaza for the developers to relocate to when the studio got larger suggested (see chapter 4), people from the area where the studio is located are not typically the same as the stereotypical members of the creative class from more dynamic regions such as New York or Silicon Valley. In one sense, just as I did, the real estate developer had similar stereotypical images of creative workers as highly extroverted and willing to talk about their work experience. Yet, these expectations of mine were clearly unrealistic to a certain extent. Even aside from personalities, these game developers just had a lot of work to do. The question of method thus became: How does one interact with game developers who are intimate in the studio with other developers but not necessarily with outsiders? If subjectivity is put to work in these workspaces, how could it be explored? If the researcher is not also an employee in these industries and workspaces, what are the methodological challenges? How do we materialize the immateriality and ephemerality of creative production in its fluidity? How does one grasp the aesthetic value that employees attach to their labor and the very commodity/experience they

59

produce every day? How does one immerse himself/herself in the production of ephemerality that changes every single day with the contribution of approximately 200 people to whom a researcher cannot have instant and simultaneous access?

Recently, scholars have attended to some of the intricacies of doing research within such networked environments and proposed "electronic eavesdropping" (Smith, 2004), studying emails (Beaulieu and Hoybye, 2011), and mapping e-mail traffic (Sack, 2000). While I was included on some email lists at Super Mario, the intricate issue of intellectual property prohibited my disclosure of content impinging on questions of intellectual property. However, the emails did not prove to be useless, revealing, for instance, the way work is organized, the local work hierarchy, and how tasks are divided. One area in which online information was particularly helpful was related to the ways in which work was carried out during times of concentrated efforts to make, for instance, a demo of the game to show for industry press or executives from the parent company. Those email exchanges would reveal the intensification of work and the concentrated efforts to hit a particular deadline under the flexible production conditions of an immaterial good and experience.

However, my fieldwork was not really a cyber-ethnography, either. I was more interested in the working conditions of game employees, intense competition in the market, and the financial downturn in general. I was particularly interested in the role of the intersection of the mundane and subjective aspects of labor and this particularly was a relatively barren field of research, especially with respect to immaterial labor. Michael Burawoy (1978), for instance, criticized Harry Braverman's labor process theory for not being attentive to the subjective dimensions of the labor process and argued that "the productive process must itself be seen as an inseparable combination of its economic, political, and ideological aspects" (Burawoy, 1978, p.

251).[21] Gabriela Coleman also notes in her extensive article on the challenges of ethnographic research in the digital terrain, "the devil is in the details" and this "does not imply a delinking from totalities or global processes" (Coleman, 2010, p. 497). How have scholars then addressed these challenges? Besides traditional methods such as interviews and surveys, what methods can be implemented when one studies the ephemerality of a commodity and the passion of employees for their work? How do we understand desire, affect, and aesthetics at work? How do we visualize social relationships and the ordinary in an aesthetically designed and fun workplace?

Thus we see that studying emotions, immateriality, and aesthetics in the labor process is a challenging task for a number of reasons. To begin with, emotions are not always visible unless they are expressed explicitly or the researcher is skilled or lucky enough to detect such moments. Secondly, interviews, whether structured or open-ended, limit the participants in certain ways. Finally, the scholarly literature on these aspects is also just beginning to analyze and theorize them: "writers on organizations have successfully written out emotions, to the extent that it is often impossible to detect their existence" (Fineman, 1993, p. 1). That is, the experience of aesthetics and passion has been wiped out of formal analysis. The realm of the aesthetics and the visual become a scholarly blindspot and scholars have indeed found ways "not to see work" (Strangleman, 2004).

Nevertheless, there has been a revival on the more subjective aspects of the labor process and organizational settings. A pioneering work in this realm is that of Arlie Hochschild (1983) in which the author aptly demonstrated how feelings become a realm of commercialization and how social actors actively involved in emotional labor manage their inner feelings. Deploying Marcel Mauss's theory of gift exchange and exchange of aesthetics from a feminist perspective,

---

[21] For a similar thread of criticism, see (Burawoy 1979; Knights and Willmott, 1990; Meiksins 1994).

Tyler & Taylor (1998) investigate the case of flight attendants and argue that the body becomes a site for aesthetic habituation and accumulation of techniques precisely because of the essentialist perceptions about what it means to be a woman. They argue that there is "an exchange beyond contract" (1998, p. 169) where "there is no obligation on the part of the customer to repay the gift" (1998, p. 170). In a similar vein, Hancock & Tyler (2000) explore how the bodies of flight attendants occupy time and space in a particularly aestheticized manner so as to maintain employment in the industry and aptly incorporate the notion of instrumentalization of aesthetics with the insights of labor process theory. Witz, Warhurst and Nickson approach aesthetics in three ways (aesthetics of organization, aesthetics in organization and aesthetics as organization) and suggest that employees are becoming more and more like hardware, as opposed to software, in the interactive service industry in that "the identity of an organization is portrayed through its marketing material, product design, and physical environment" (2003, p. 35). Focusing on call centers, telecommunications, and the financial sector, Alteroff and Knights (2003) underline the centrality of play to managerial attempts to increase efficiency. While these studies are more related to the intersection of labor and aesthetics there are methodological issues to address with respect to the visual.[22]

The visual realm becomes even more of an acute problem when researching organizations with creative employees that produce visual and ephemeral experiences to which they are personally attached. In this respect, how does one understand and document the fetish for commodities and the aesthetic experience of the workplace? While scholars have addressed video game production through the lens of science and technology studies and ethnography in a

---

[22] The literature extends far beyond the studies cited here, but is beyond the scope of the present dissertation. I need also to mention that Nick Hedges and Huw Beynon's (1982) *Born To Work* is one of the classical studies which visually demonstrates the experience of factory floor. Beynon and Hedges also incorporate text into their analysis as what they call "expanded caption" (1982, p. 6). Hassard and Holliday's (1998) *Organization Representation* offers a set of chapters on the relationship between work, the visual, and aesthetics.

transnational setting (O'Donnell, 2008; 2009), understanding video game labor and its constitutive subjective aspects requires new methods, among which visual ethnography (Pink, 2001) plays a key role. Sarah Pink (2001) provides a detailed history and politics of using photography in ethnographic research and presents various cases of using photography in qualitative research, among which viewing both the ethnographer's and the informants' photos emerge as strong options.[23] Samantha Warren (2002) has deployed this latter option (informants' photos) specifically in the information sector. Indeed, as she (Warren, 2008, p. 561) argues, when the issue is doing research in aesthetically designed and digitally mediated workplaces where work becomes immaterial, there emerges a "clear need for the material world to be brought within the aesthetic frame of reference." As Daniel Miller also asserts in *Material Culture and Consumption* (1987), individuals identify with material objects more than we assume and are aware of. Writing within the tradition of what he calls material culture studies, he (Miller, 2005) invites us to reconsider why some – not all – things matter and then constructs a theory of materiality that considers things more than just objects and attempts to break the dualism between subjects and objects. He further wants to point to the plurality of materialism where some things and people matter more than others. As he argues, "objects are important not because they are evident and physically constrain or enable, but often precisely because we do not 'see' them" (Miller, 2005, p. 5).

Following up on these considerations, in addition to semi-structured interviews,

---

[23] There has been scholarship on the uses and productive aspects of photography as a visual methodology. Meyer (1991), for instance, makes a useful argument in that visual research provides a multidimensional construction of information as opposed to bare text. Kunter & Bell (2006) argue that visual data can provide venues through which organizational members can articulate dissent and resistance as well as demonstrate the longitudinal development of an organization, and also provide useful insights and concrete examples about how a binary between text and image is not sustainable. Along with its uses, visual data in research has its drawbacks too. While the embodied nature of visual research raises question about objectivity, which has to do with all kinds of research, it also makes one question the cultural baggage of the researcher in terms of what is photographed. As Kunter and Bell (2006) further put it, there are issues of access, as well as legal and ethical concerns.

participant observation, and focus groups, I implemented photography to illuminate the subjective and emotional aspects of labor in the game industry. Photo elicitation did lead to conversations that my regular observations or set of interview questions were not delving into. It excavated feelings of nostalgia, which paved the way for exploring some of the ideas in the next chapter. I also conducted – only twice – what I call "playful interviews" during which I asked two designers to take me to a certain section of the game and depict the joys and frustrations of working in that particular project. These helped me to assemble the fragments of the labor process diffused in e-mail lists, chat boxes, and computer screens. These exercises did provide clues about the really rapidly changing nature of video game production and presented entry points for understanding the constitution of immaterial labor, which is not always revealed through a structured set of interview questions. Ultimately, through photography and these playful conversations, it became possible to explore the machinic subjectivities of game developers whose lives are embedded within e-mail chains, office chairs, parking lots, and outdoor scenes where they enjoy their moments of escape from the hectic life of game development.

Rethinking Critical Social Theory and Ethnography

When I was doing my interviews, I did develop a definitive a priori set of questions. Nevertheless, precisely because of the dynamic nature of the industry, game development, and the peculiar time period during which I conducted my research, the interview questions shifted towards what was going on at the time of the interview. For instance, if I was doing an interview when the stock prices of Digital Creatives was falling, then this topic would constitute a major part of the interview. When the first layoffs hit the studio, then my questions revolved around that particular issue. At the same time, the beginning of my field work was such that I felt the

discrepancy between the fluid, Deleuzian theoretical frameworks that had permeated the field of game studies (Galloway, 2006; Dyer-Witheford & de Peuter, 2009) and the rather "stable" – at least initially – conditions at Super Mario. I did not have the feeling that developers were working within Deleuzian rhizomatic networks. I was expecting people to run like crazy from this room to that room; well, that was not happening. I was expecting high turnover rates; that wasn't really happening either. My expectations regarding a potential instability were just not there. I was meeting people who had worked in the studio for more than ten years. Many of them had actually started their careers at Super Mario. How could that possibly happen? This took me to the issue of space and forced me to explore its relationship with game development (chapter 4).

From my research participants, I was learning two peculiar aspects of their work experience. Actually, they had been unfolding for a while but it took some time for me to first actually hear about them and then really understand their impact. One was the financial crisis of 2008. While the studio was relatively successful in terms of the games they produced, the crisis was affecting Digital Creatives in broader ways that were coupled with some of their investment decisions. In 2009, the first visible and physically close damage had come to the surface, and a quality assurance facility located nearby was closed. Before the closure, this facility was testing games not only for Super Mario but also for Digital Creatives. Yet there existed a language gap as to how this event was described: the QA employees named this a layoff, while management at Super Mario did not. The studio's logic was simple: QA employees were not primarily working for the studio and therefore, it was not necessarily a layoff. For the studio to name an event a layoff, we would have to wait till April 2011, when 16 employees from the core development team (programmers, artists, assistant producers) were laid off. These layoffs constituted a turning

point for Super Mario in that they experienced what they considered their first real layoff. Until then, they had been boasting about the fact that layoffs were not an issue for their studio. Then, both the employees and I actually learned at least two things from the layoffs of April 2011. First of all, no studio is immune to layoffs; I witnessed first hand that instability is a problem intrinsic to the industry, materially shaped by many factors: game sales, talent pool, legal infrastructures, the nation state, technology and its planned obsolescence. Secondly, how studios react to changes in the market, stock prices of corporations, how the public perceives your corporate identity, and the city where a studio is located have a tremendous impact on whether a studio can or cannot survive.

These tensions between theory and material culture require consideration of the relationship between theory and qualitative research. While it is impossible to deny what Burawoy (2000) calls global forces – broadly, the accumulation strategies of capitalism – it is equally hard to deny that "capitalism [has] always thrived on the production of difference", or to deny its "unstable and crisis-prone" nature (Harvey, 2001, pp. 121-122). In this respect, at the heart of my methodology lies the fragmentary, disorienting nature of global capitalism and its dialectical relationship with totality. That is to say, I strive to pay attention to historical and spatial specificities without losing sight of the totality. As David Frisby (1985, p. 190) states with respect to the fragment, "the fragment remains the gateway to the totality rather than the latter shedding light upon the former." In that sense, it is the pendulum-like relationship between the fragment and the totality that informs the methodology of this project. That is to say, the dynamics of global capitalism were in constant interaction with the particularities of the Super Mario work force, the location of the studio, local histories, actors, and social relations. By totality, I am referring to the fact that this studio and its labor practices cannot just be studied in

isolation. Rather, they need to be understood in their networked relation with its corporate headquarters, their vendors in China, the stock market, and the geographical setting and domestic labor that provide the conditions for the social reproduction of labor power. In this sense, this study thus draws on the contributions of the extended case method.

The extended case method, as proposed by Burawoy (1991, p. 280) "derives generalizations by constituting the social situation as anomalous with regard to some preexisting theory, which is then reconstructed." That is to say, ethnographic study is carried out to reconstruct existing social theories, as opposed to grounded theory, which aims to generate theories based on empirical data. The extended case method accepts the fact that knowledge is partial and approaches ethnographic work not simply as a confirmation of a theory. Rather, it approaches theory as a 'failure' to fully reconstruct a social reality. Usefully for my work here, the extended case method takes history and space seriously and reconstructs traditional ethnography beyond any timeless and spaceless setting. It aims to "confound conventional stereotypes of participant observation as atheoretical, ahistorical, and micro" and to "reconstruct, revise, or simply elaborate preexisting theories to accommodate its empirical findings to wider contexts of determination" (Burawoy, 2000, p. 25).

For the purposes of this research, the extended case method has enabled me to contribute to the concept of immaterial labor, which in general has not paid much attention to the question of space, the role of internal labor markets, or the contribution of domestic labor. Most of the time, theorists of immaterial labor have paid greater attention to the rhizomatic networks of the digital than the physical structures that are equally important (Galloway & Thacker, 2007). Similarly, theories of immaterial labor generally only nod toward the fundamental role of domestic labor (except for the outstanding feminist scholarship of Silvia Federici, Kathi Weeks,

and Kylie Jarrett) in reproducing immaterial laborers. In this respect, the present study contributes to theories of immaterial labor within a spatially defined setting that is constantly remade by local actors. It moves out of and back into the studio and links the labor force to the bodies and unpaid labor of spouses. Additionally, by inserting the question of space into the picture, I also hope to complicate theories of immaterial labor by underlining the significance of the locality with its physical infrastructures and particular politics.

Ultimately, my research project is informed by the extended case method and, because of its attention to the actual conditions of work, therefore acknowledges the fun and exploitative nature of immaterial labor, its glamorous aspects, and its tendency towards precarity, underlined in the preceding chapter. It is through these lenses — an extended case study of immaterial labor and its precarity — that the following chapters tell the story of game developers whose livelihood depend on hard work, self-responsibility, collaboration, fun urban spaces, sound domestic relationships, and the broader forces of the video game industry, beginning with the history of how the studio transitioned from its earlier garage days into a corporate structure.

CHAPTER 3

FROM THE GARAGE DAYS TO THE FLAGSHIP STUDIO

Introduction

This chapter documents the story of how Super Mario went through a complex transition from

being an independent studio to being integrated into a highly corporate structure after being

bought out by Digital Creatives. In that sense, this chapter explores how labor power in the

studio came to be managed after acquisition. Furthermore, it provides clues – to be further

examined in chapter 7 –as to how precarity of game developers does not disappear even after

being bought out by a major player in the game industry. The chapter thus mainly interrogates

the relationship between the autonomy of immaterial labor and commercialization or the

dynamics of what Bill Ryan (1992, p. 2) calls "the corporate form of a capitalist cultural

commodity production." Drawing on both classical studies of labor process (Braverman, 1998)

and more contemporary analyses of creative and immaterial labor (Hesmondhalgh & Baker,

2011a; Dyer-Witheford, 1999), I provide a microanalysis of the political economy of culture and

examine the tensions of moving towards a corporate structure of culture. This new corporate

form, I argue, is still strictly a cultural one that relies heavily on what Richard Barbrook and

Andy Cameron call the "Californian ideology" as a combination of "the freewheeling spirit of

the hippies and the entrepreneurial zeal of the yuppies" (1996, p. 45). The story in this chapter is

the story of the immaterial game laborers – the virtual class – who are more difficult "to subject

to the discipline of the assembly-line" or to be replaced "by machines" (1996, p. 49). My

analysis reveals that being bought out by Digital Creatives led to a contradictory situation where

financial security came with increased size of the development team, the burden of a tiresome

bureaucracy, and corporate demands – mostly related to marketing – that were not always

welcomed by the developers. In a way, this chapter sheds light on the dynamics of what Bill Ryan calls "formatting," which can be defined as a "form of creative control based on corporate attempts to confront the uncertainties of the cultural marketplace in a context of expanded production" (1992, p. 160). With formatting, the immaterial game developers felt that their communicative capacities were mainstreamed with the advent of "red tape," which they did not particularly enjoy. It is these tensions of not being able to communicate experience and knowledge in the way they desired that alienated the developers who were part of the garage days, which embodied a "not invented here" syndrome and therefore caused frictions with project managers.

As far as the political economy of communication is concerned, analyses about conglomeration most often conceal the complex processes of commodification of the communication commons. As Dyer-Witheford and de Peuter (2009) demonstrate, the video game industry is no exception in terms of how the imagination of creative workers has become subject to market forces. Indeed, the industry is exemplary of an enclosure movement that has reterritorialized programmers' midnight moments of hacking and digital utopianism and brought about a multi-billion industry that now operates transnationally within an oligopolistic structure.[24] The joy of hacking is important to underline because it is strictly tied to the desire for autonomy, creativity, and struggle, all of which are intricately tied to the creative nature of the unique commodity in capitalism: labor power. In *Capital*, Marx refers to the moment where

---

[24] Although the enclosure movement has historically taken place on land, which is different from the video game industry, there are similarities in terms of how laborers are kicked out of their spaces and moments of creativity, and are forced to sell their labor power. An important distinction of the contemporary moment is that the work ethos within digital production networks and start-ups is that people engaged with such processes are willing to commodify their labor power and have large returns on their investment. In this respect, logics of a neoliberal governmentality are at play in our contemporary moment.

labor power is sold in the market. He underlines the peculiarity of labor power by saying that it is:

> a commodity whose use-value possesses the peculiar property of being a source of value, whose actual consumption is therefore itself an objectification of labor, hence creation of value. The possessor of money does find such a special commodity in the market: the capacity for labor, in other words labor-power. (1876/1990, p. 270)

Inviting us to go beyond the realm of exchange and enter "the hidden abode of production," Marx wants to undermine any simple notion of "freedom" (1876/1990, p. 280) usually associated with the market, in that being free refers to two things. On the one hand, the laborer, in a capitalist economy, is free *to* engage in transactions. S/he is free to decide whether or not to work. On the other hand, this historical subjectivity also means freedom *from* the means of production (Harvey, 2010). That is to say, while capitalism is revolutionary in terms of setting labor-power free from its place-bound feudal duties, it also frees artisans and craftwork from their own means of production through processes of dispossession.

However, especially with the advent of office and computerized jobs, disagreement with Marx's critical analysis of labor has emerged. Grouped as part of the "liberal-democratic theories of the knowledge workers" by Enda Brophy (2008), scholars such as Daniel Bell, Fritz Machlup and Peter Drucker would challenge Marxist analyses of labor and argue that the new economy would bring the liberation of workers and terminate alienation. It was only with Harry Braverman's (1998) seminal *Labor and Monopoly Capital* that a reinvigorated treatment of the labor process would flourish to contest Bell and others. Braverman argues that under capitalism, work is streamlined and degraded for the purposes of surplus value creation and this has not changed under circumstances of monopoly capitalism. Trying to counteract the charges of technological determinism against Marxism, Braverman argues that it is not technology but commodity relations that determine social relations. He claims that once commodities transform

71

into capital under specific historical conditions, capital in turn transforms technology in order to reproduce itself. For him, white-collar office jobs that were once privileged are not exempt from Taylorist principles and can be subjected to calculation and degradation. In other words, in the age of white-collar jobs, the antagonism between capital and labor is far from over.

Braverman's insightful perspective, if not the whole analysis, has been usefully deployed within the field of media and communication studies. A pioneering work in this terrain was Bill Ryan's (1992) *Making Capital from Culture*, which examines the mechanisms of capitalist production in culture industries and looks at issues ranging from the star system to marketing and distribution. As we have seen, Mark Banks (2007) deploys the notion of "cultural work" to understand this kind of labor primarily focusing on workers' subjectivities, arguing that these workers are frequently "openly antagonistic to these [capitalist] values" (Banks, 2007, p. 184). While Ryan's distinction of art and commerce and Banks's emphasis on subjectivity are useful for thinking about the transition of the game studio that I discuss in this chapter, the view of the artist as almost like an anti-capitalist producer – "art is incompatible with the imperatives of accumulation" (Ryan, 1992, p. 34) – needs to be rethought, especially bringing in the insights from scholars such as Richard Barbrook and Andy Cameron (1996) and Luc Boltanski and Eve Chiapello (2005). As all of these scholars argue, artistic critique and rebellion have become central pillars of the new digital workplace. Indeed, as this chapter in particular and the dissertation in general demonstrate, market forces and the ideological pillars of start-up culture are too strong to ignore in the formation of employee subjectivities. While immaterial game laborers are hard to control and manage, conditions of survival in the oligopolistic structures of the industry seem to push the workers to strive to be bought out and enter relations of finance

and stock markets. As we will see in this chapter, the game developers are willing to produce highly desirable demos and catch the attention of a major publisher to secure finance.

In addition to Ryan's and Banks's scholarship, other critical analyses of media production have pointed to the continuities of the capitalist mode of production as far as labor is concerned. Uniting themes in such criticism have been the materiality of production in the "new economy" and continuities with respect to the role of knowledge in capitalist production (Huws, 2003; Downey, 2002; McKercher & Mosco, 2007). Other scholars have contested the notion that there is no place for degradation of labor in the new economy (Head, 2003; Brophy, 2008; 2011). The consequences of flexibility in relation to exploitation have been well documented both in traditional and new media workplaces (Rodino-Colocino, 2007; Ross, 2003; Cohen, 2012; Deuze, 2007; Neff, 2012), and the novelty of a creative economy in relation to television have been aptly challenged with the argument that a labor hierarchy and a star system is well intact despite the transformations of the broader TV economy (Mayer, 2011). More recently, critical media studies has responded to the "convergence thesis" and pointed rather to processes of value extraction and enclosures within online spaces (Scholz, 2012; Fuchs, 2010; Nakamura, 2009; Andrejevic, 2007; Boyle, 2003; Kucklich, 2009). More specifically in game studies, Dyer-Witheford and de Peuter (2009) have written the most extensive work on the political economy of the industry, exploitative labor practices, and cultural analysis of major franchises.

It is in the light of critical political economy, the concept of the degradation of labor, and the tensions between autonomy and control that this chapter documents the dynamics of what the game developers called "the trade-off" between financial security and autonomy. This trade-off reveals the interactions and struggle between what Raymond Williams (1977) calls the residual (read: garage) and the emergent (read: publicly traded/corporate) cultures, where frictions occur

due to the requirements of Digital Creatives to streamline – as much as possible – creative production. When the elements of the emergent culture such as project managers entered the story to streamline the labor process, immaterial laborers had feelings of discontent since their communicative capacities had to be subsumed under the logic of bureaucracy and a requirement to report to the project managers. Indeed, as programmer Karl would tell me in an interview, the buyout process was a complex one full of tensions in relation to autonomy. While never an "overriding fear," the protection of autonomy within a garage spirit certainly emerged as an issue among the game developers. As Alex, another programmer, also stated, they didn't want to be like one of the big notorious publishers, which would "come in, put all their guys and totally screw the company up." What follows, then, is the story of the "main fear" of losing control to "a bunch of Bobs and business guys that didn't know anything about games."

Corporatization and the End of Garage Culture

It is now a cliché to hear politicians, businessmen, or educational institutions preach innovation, passion for ideas, problem solving, and collaboration as the main pillars of success in the market. These buzzwords are especially hegemonic when it comes to the world of new media production. What is interesting about the endorsement of these exciting and ostensibly rebellious ideas is that they have been appropriated, as the works of Fred Turner (2006) and Richard Barbrook and Andy Cameron (1996) have demonstrated, from the radical atmosphere in the counter-culture of the West Coast and successfully implemented into new media business guided by digital utopianism and libertarianism.

Directly linked to the principles of "Californian Ideology," the gaming industry, with its entrepreneurial-spirited employees and start-ups, is no different. At the same time, entrepreneurialism is not helpful by itself since competition is tough. While the number of new

markets has increased with the emergence of online spaces and of Asia as a major market, the

prospects for success are still limited due to the structure of the industry.[25]

Within a tough competition environment where studios frequently fail, Studio Super

Mario stands as an anomaly in terms of its long history without a failure. However, its attainment

of flagship-studio status within Digital Creatives did not necessarily mean a smooth and linear

story. On the contrary, Super Mario's story is one that is woven through precarity, ups and

downs, and frictions, which is generally the case in achieving success. As I was told and has

been documented in the literature, being an independent studio means constantly working on

demos and portfolios to build a relation of trust with publishers and involves compulsory

networking under stressful deadlines (Neff et.al., 2005). The struggle to produce good demos

does – and did – involve times of crises when a publisher lost faith into a project, meaning that

the developers had to find another publisher. As Alex stated:[26]

> Where's the next stream of income gonna come from? What's our next project gonna be because we're really busy, finishing the current one. We don't have time to start up something. There is gonna be this big gap where we've got nothing.

In this sense, being bought out by Digital Creatives was a relief, according to Matthew:

> As we were shopping around trying to find publishers. So, it was actually nice now this feeling of, ok, we never have to go through that again. Right. And, we don't worry so much about, you know, if this one title doesn't sell, then, you know, we're all out of jobs kind of thing.

Financial security did require major changes within the studio, though.

Leaving the garage days of 10 employees to become an organization of more than 230

employees meant at least three major nodes of transition. First of all, it required an expansion

---

[25] For the vibrant and almost chaotic history of game studios, their adventures, and business connections, see the appendix for a chart of the failures, mergers, and volatility within the industry. The image can be seen at a better quality at http://gamesareevil.com/wp-content/uploads/2010/03/History-of-Video-Game-Development-Studios-Flow-Chart-2.jpg

[26] All quotations from Super Mario personnel are from my field notes, transcriptions of recorded conversations, and other forms of communication. They will be quoted throughout without further indication of their source.

towards a considerable amount of labor force to create hours of gameplay for the parent company and the new console generation. Secondly, managing this large workforce came with spatial and organizational restructuring. In this sense, project managers came into the picture where the developers had to move to a larger compound (see next chapter). While the number of employees was minute in the early garage days of the studio, the culture at the studio has changed considerably. The large number of new recruitments was vital for the studio because they now had to produce blockbusters, which was not possible during their garage days. The advent of new employees signaled a rearticulation of social relations at the studio and a cultural shift. In contrast to the modest days of garage culture, the studio today is located in a commercial plaza, occupying two floors. Its organizational structure has complex divisions from finance to human resources, project managers, producers, and associate producers, all of whom need to wear badges. Finally, and perhaps most importantly, the corporatization of the garage culture brought profound changes in the culture of Super Mario.

To understand the ethos of the garage days, the following photo taken by a tech-artist who witnessed the whole transition is helpful. Taken by one of the long-time employees – Ronaldo – in the studio,[27] this photo doesn't seem to fit with the stereotypical notion of the glamorous work environment of a video designer, but does represent the work environment when the studio was independent. While the objects in the picture are quite ordinary, the affective social relations the picture embodies are helpful to grasp the dimension of the move towards a corporate structure and the garage spirit of the earlier days:

---

[27] I will refer to some of these photographs in Chapter 5, as well.

Figure 1: Desks from days of independence in the store

>Ronaldo: It's significant because when we started the studio, those were our desks …
>And, so we didn't have, we moved around a lot. So we didn't have desks, like, we have
>here. We had a bunch of banquet tables that, 6 and 8 feet that we would just move around
>so we could put our work out. Like a computer and stuff. And I think, actually it wasn't
>until we moved into this building that we actually have what most people would associate
>with an office. Up until then, it was, your 30 dollar banquet table we had bought at
>Staples. And we would, guys would use those for a long time. Until they broke basically.

Then, this photo first of all reveals a spatial and physical reconfiguration. It acts as a reminder

for the employees in that they are now in a new corporate context. The needs – for instance, for

fancier chairs – were kept at a minimum where the only concern was oriented towards getting the

demo out and finding ways to secure funding. The transition and the relocation have a meaning

that is beyond the objects, though. It is closely tied to material aspects of living. The ways in

which the developers moved from their former office to the new one sharply reveals the

withering of the garage culture: before the studio was bought up by the parent company, the

president of the studio would "get a truck" and the employees would participate in the whole

moving process. Yet, as Ronaldo told, corporatization meant formal arrangements for relocation:

> When we moved here, they had movers. It was kind of this big transition moment where you know, we're packing our stuff into boxes and they're being marked, shipping labels and everything. It was very professional I guess, however you may wanna call. We didn't really do any of the moving ourselves.

For Ronaldo, this was a "pivotal moment" which signaled at a "big disassociation point" since they were not in a position to move themselves. As he further mentioned, it signaled the end of the garage culture:

> But if you compare now to then, we were still pretty much like in a garage. So, which is, kind of ironic given that what we used to work on is now sitting in a storage.

If Raymond Williams (1977) is right in suggesting that "culture is ordinary," then it is meaningful to examine mundane objects and material practices in order to detect the ethos of the garage culture and the direction of the later shift in the studio. Back in the day, the rituals for celebrations were intimately organized around close friendships and existing familial links. For instance, Karl, who worked in the studio for more than 17 years, mentioned that they used to have "parties in people's houses." He actually hosted the first Christmas party in his own house. Now, the parties are organized in large bars or clubs where the personality of the host disappears. Moreover, the work rhythm of the garage culture was supported by the life style of the stereotypical creative worker, which in turn guaranteed its success. That is to say, the entrepreneurial garage spirit was sustained through the aspiring young male who did either not have a family to look after or did have a family where the household was mainly sustained by women who had to perform unpaid labor when their partners would be absolutely dedicated to their work (see chapter 5). As Alex once told me, "all guys started off fairly either single or pretty close to it, no kids." Indeed, without such sacrificial labor,[28] the studio might not have achieved its flagship status, as Alex suggested:

---

[28] The remarks of the developers almost hint at a glorification of the garage days and nostalgia. In one sense, it is understandable for these long-time employees to make such statements because they want to underline how much

It was just a personal sacrifice from a number of people and ridiculous hours that we pulled it off and, I think, you know, I'm not sure where we'd be today probably nowhere if we hadn't managed to pull that pedal off.

Indeed, this is how the developers worked during the garage days described by Karl as part of "this total entrepreneurial company" where they "were all sort of in charge of the stuff" that they built. I asked Alex about the status of the programming culture when the studio was independent. Was it more about hacking or was it business related? Apparently there were not much radical or anti-capitalist seeds of imagination as it is sometimes attributed to new media companies. According to Karl, the president of the company "was a great programmer but he was, always equally great at business stuff." As he confidently put it, "they had a pretty solid grasp of the business ends of things that always felt like a, you know, business; not just a bunch of hobbyists getting together hoping it works out." The entrepreneurial spirit, then, was always strong. As Karl further told me, this aspirational attitude manifested itself among programmers who had a "self-centeredness about them that they sort of know better than the next guy." These entrepreneurial and competitive programmers did indeed "love to just craft their code in a way that they like," which would constitute a conflict with the project managers who wanted to be in charge of the completion of tasks in a timely manner, rather than experimenting with code, art, or technology in general.

Ultimately, the culture at the start-up game studio was a mesh up of pride, ego, and a strong work ethic sustained by a distinct lifestyle. As Matthew succinctly summarized it, the creative ego and fetish for cool production was a major pillar of the materialization of the Californian ideology, in that the developers thought "this is what we're doing, that nobody has ever done before and you know. We're revolutionizing blah, blah, blah." As Gina Neff,

---

they worked and what it meant for the success of the studio. At the same time, this glorification also reveals the ways in which they indeed worked hard and at times got burnt by the process.

Elizabeth Wissinger and Sharon Zukin (2005, p. 331) describe in regard to new media and fashion workers, game developers were both the hip cultural workers and the "the Stakhanovites – or norm-making shock workers of the new economy." It was this entrepreneurial, youthful and sometimes egocentric culture that fuelled the creative juices of the immaterial labor power in the studio. It is through these material practices of personal sacrifice that the studio caught the attention of Digital Creatives and resolved the issue of financial security for the company and for themselves. At the same time, it was this same financial relief that introduced the production of large-scale console games, which in turn rearticulated an intensification of sacrificial labor processes. While the rush for finding publishers to sell demos was over, becoming part of a corporate structure required major cultural shifts and organizational changes, creating moments of dissent on the sides of the developers.

With Financial Security Comes "Shades of Dedication"

What happens when financial security comes to a start-up whose future depends on the potential success of a demo? What are the implications as far as an individuals' attachment to their jobs is concerned? As the accounts of the developers below reveal, a buyout process is never just economic. It is about culture as well because the advent of corporatization re-arranges the ways in which immaterial laborers communicate and work with each other. Now that they had been bought out and had more resources to compete with major franchises, questions about work ethic emerged. As the studio instantly hired many more people to enlarge its talent pool for large-scale game production, the nature of teamwork shifted such that employees' attitudes to work came under scrutiny. As Matthew put it:

> Well I mean, really, back then, people, people in the company I think we're just willing to go to really great lengths, unbelievable lengths sometimes to, to really buoy the company up to, to really, you know, put the best foot forward. And now, it's a lot more corporate. There's more, it's a job now.

Ronaldo echoed Matthew since "there were a lot of fewer shades of dedication" when they were independent.

The garage culture cannot possibly only be limited to issues of dedication. In other words, the nostalgia towards what sounds like some version of craft production in itself cannot account for the garage culture. Rather, this was constituted by an overlap of the smaller size of the development team and the peculiar culture and channels of communication it entailed. During the start-up days, everybody knew each other and hung out with each other. Besides, dedication was not just an intrinsic thing that every developer was supposed to have. They worked with dedication because they were passionate about games and there was the precarity stemming from lack of financial security. Unless one worked hard for the project, there would be no more studio to be employed at. The success of the studio and its culmination in the buy-out process, for Robert, had to do with the chemistry of the people involved within the garage culture and the right decisions at the right time and place.

> The president got, not lucky but, they hired the right people, right. And we could have done the same exact, I think we've could have attempted the same exact games with different people and totally gone out of business. So it's like, the reason we're here now is because of the core of people who are at the beginning, were really, really dedicated.

While there was agreement about dedication, what it actually was tied to is a matter of contestation among these long-time employees. Some emphasize precarity related to the role of the lack of constant money flows, while others underline the culture that was almost endemic to the employees back when they were independent. The latter group of people is more concerned about the loss of that 'pure' dedication to work, as the following conversation reveals:

> Ronaldo: I mean, back then, everybody was dedicated to doing what we needed to do. Nowadays, because of the security, there's a lot less, there's a lot more shades.
> Otis: It is about the safety net. We don't, we didn't have one at that time, so it was depending on all us to do our best as well as possible to keep us alive.

> Matthew: Well, I mean I do think that it's a factor, but I mean, at least when I came on at that time, like I wasn't thinking, oh if I don't work my ass off, I'm going to be out of job.
>
> Robert: No, I was too stupid to think that.
>
> Otis: That's all I mean, what I mean is, the attitude came from the top down, right. Because the president and all those guys were like, shit if we don't do this and they've set an example, that made us want to do the same thing.
>
> Matthew: There definitely was a much stronger culture at that time of just like, everybody around you was working like crazy, right. And you've just, you fell in line. And it wasn't something you thought about. It was just like, this is what, this is what everybody is doing, right.

Then, the success of the studio depended on a strong work ethic not as an intrinsic force but the constellation of a number of factors such as elements of material culture and practices, the passion for the job, the rush to find financial resources due to precarity, and the existence of role-model creatives on the higher levels of the hierarchy. That the president used to be one of the "guys" that a developer was able to see and interact on a daily basis led to a stronger feeling of camaraderie. Additionally, in a smaller organization where face-to-face communication is more common and feasible, it is easier to establish channels to create a rigorous work ethic and accountability, as Karl emphasized:

> When you have a small team, it's easily, you're more easily held accountable to your other team because you're all there together, right. John is not in the seat next to you. You kind of know what. But he is gonna tell you when he's gone. I mean, with sort of the self-accountability thing.

As the teams got larger, project managers were introduced to ensure productivity in the studio. For Matthew, this was a significant moment because before the project managers, "it was a self-motivation to just. Nobody had to crack the whips." Otis agreed that they "were never told to" do something in their garage days. It was their new adventure with Digital Creatives that provided the studio with the resources to enter the market of blockbusters, and thus had to increase staffing to meet that challenge. That is why the studio needed "warm bodies," as Matthew put it. From that point on, a more bureaucratic structure was introduced. Below, I explore the dynamics

of frictions with the project managers, who were introduced to the studio as an institutional imposition from the parent company to make sure that the developers submitted the game on time and were accountable to Digital Creatives and their stockowners.

Signs of Friction: Larger Development Teams and Project Managers

During a focus group interview with the long-time developers, at some point Matthew referred to an almost elitist and artisan way of their hiring practices in the past. "If there was like, one person saying, I don't know about this guy, it was like, ok, we're not gonna hire him." Echoing Matthew, Karl also mentioned a "not invented in the studio" syndrome, which referred to the exclusive culture prevalent during the garage days of the studio. The syndrome, for Karl, was related to the ego I have described above in that the developers were not always receptive to the introduction of new things unless they were internally designed. Yet, a distinct change took place during the production of one of their games, which required larger teams comprised of "warm bodies." To fill the empty spots, the developers had to loosen their elitist hiring policy, which in turn had a "watering down effect." Robert and Karl agreed with Matthew and pointed to the impact of new consoles on studio culture. Indeed, creating big blockbusters for the console market was not entirely possible without large development teams and financial resources. In other words, the new generation of consoles would introduce games with larger scope and gameplay, and one of the first games to be produced on the new console required hiring large numbers of people.

Karl defined this shift as a "culture changing experience," as well as leading to a shift in work ethic:

> As the teams got larger, when we hired more people and I think our quality of, the quality of engineers and artists and designers. We had to hire because we ramped up so quick. That probably dropped and we were. So, you know. I think, just over the course of having

so many people work there, work ethic dropped. It didn't drop dramatically. But it became more varied. Let's put it that way, right.

When teams got larger and were dispersed across a larger spatial setting, a formal project management and producer system was put into place. While the developers did understand that a project management was necessary to manage a larger workforce, the need to quickly fill positions proved to be problematic in certain respects. Matthew says:

> Like half the people on Game X, had never worked on a game before. Right. And I think because of that, they had to hire on all these project managers and you know, to watch over everybody and crack the whip and say, this is what you're going to do now. Right. And, and there was no longer that kind of like, self-motivation to just really work hard. That whole culture of, of, we had a very elite culture, this, this feeling of we are the best.

While relations with the project managers gradually reached a smoother status, this setting caused considerable amount of uneasiness among the employees when it was still new. The project managers were hired to control the "weaker employees," according to Robert, who considered himself to be "lucky enough not to be on Game X during all that time." For Robert, the first stages of project management even "damaged" some of the employees among whom was this "really brilliant, smart programmer, you know, youthful guy." The game and the management structure it entailed, Robert stated, "turned him into the most bitter, cynical person ever."

As we can see, the attachment to work and its dynamics were shifting a great deal in response to the transitions in management. While the employees still loved the games they worked on, the fact that development teams got larger and project managers came into play in order to maintain an organic workflow initially created discomfort among the employees. This was especially true for the long-time employees for whom the new project management was just an alien system. Considering some of the policies "draconian," Robert stated that the new system "became almost adversarial, not like between people, but between the employees and the PMs."

84

As a result of the frictions, some people chose to leave the studio. On the other hand, Ronaldo's account of the transition to a larger development team revealed deeper issues in terms of corporatization.

For Ronaldo, corporatization actually meant more than just being bought out by the publisher. His remarks underline the communicative aspect of the labor process where experience and knowledge in the game industry emerge as crucial factors of production, constitutive of the immaterial labor. He points to the tensions and contradictions of having a management structure:

> My perception is that the big thing that happened was, Game X was when we became corporate … Like, we got that, we experience that disconnection between experience and what we had to do. And because we had so many people, we couldn't like, communicate that experience to all the new people we had. We ended up replacing that with a management structure.

Indeed, the project management initially proved to be disruptive especially for the veteran employees in the studio. During the garage days, "everybody just kind of knew what they needed to do and they just did it. They didn't have to be told to do it." However, immaterial game laborers did not particularly enjoy all the guidance because, while "it did provide the guidance that people needed to some extent," it also limited the kind of freedom "for the kind of creative work" that they did. As Matthew further mentioned, the immaterial laborers particularly enjoyed being "able to switch tasks quickly and without having to like constantly tell somebody else, this is what I'm doing, this is what I'm doing" and "establishing reports and blah, blah, blah." It is important, in this sense, to recognize the cultural aspects of the buyout and its impact on the labor processes.

This doesn't necessarily mean that the programmers see project management as all evil, though. For instance, while Ronaldo did agree with Matthew with respect to the constraining

nature of project management, his experience with another studio assured him of the importance

of such a structure, especially for his discipline, art. For Ronaldo, without a structure, the artists

were "just going to run forever." He underlined the role for somebody to "play the parents" and

urge the creatives to adhere to work schedules. Otis, too, agreed that the trouble they encountered

was due to the shift towards building a new game in a new console, rather than the imposition of

project managers per se. Robert was still more critical of the introduction of the project managers

because for him, they were "cracking the whip across the board." For him, not everybody needed

to be told what to do and how. At the heart of Robert's critique was the fact that project

management did not always understand organically how the creative class works. According to

Robert, project management acted in ways almost reminiscent of the labor process described by

Harry Braverman (1998) in which capital aims to regulate each and every move and moment of

labor and translate it into manageable and calculable steps:

> The project managers love the stamping widgets type people because it works directly with how their brains work. They can schedule and say, you've got 5 widgets done today, great. But it was a real challenge to get them to understand, especially when it comes to programmers, there's a lot of work that is completely undefinable. It's like, you can say, well how long is this going to take and you go, I don't know, 2 weeks. And you just don't know, because you're inventing something completely new or you just know in the back of your head this is complicated and you're not going to know how hard the problems are going to be until after its done, blah, blah, blah. So, yeah, part of the issue is like, making sure that the PM that, part of the switch over was getting the PMs not to just turn everything into a huge factory and understanding that a large percentage of people of the company work iteratively and incrementally and with heart.

As a tech-artist, Ronaldo has a similar critique in terms of how the new project management gets

to control the labor process and asks for a particular kind of measurable output:

> They're saying, alright, what can you get done in this three weeks, we want something rough. And what I've seen a lot of people struggle with is, they have this mindset of, I want this and it doesn't match up with the reality of being in the business. And so they're like, well, you want something rough, but it has to have like these five bells and these ten whistles, and I just can't get these five bells and ten whistles in the two weeks you want.

One could argue that the switch to a corporate structure and the introduction of a new console system constituted a clash between the minds of the project managers and the hearts of the creatives, whose imaginations were "enclosed" by one of the big players in the gaming industry. While the long-time employees had previously enjoyed open channels of communication enabled by the smaller size of the studio, they felt they were encroached upon by the advent of the project management, which was designed to control the labor process and tighten it temporally to fit the production schedule. As Karl mentioned, there was skepticism on the side of the developers because they asked questions such as "how are these non-technical people really gonna understand what we have to do?" According to Karl, the developers sometimes even questioned the value of project managers during the early phases since they thought "they're creating work to create work." Unlike the younger members of the studio who liked the fact that their work was "laid out," the more long-term employees had more resentment, and it took a couple of years for the project managers to reach balanced communication with these employees. In this respect, the restructuring of the labor process from a sort of free-form garage culture to a streamlined and managed structure caused friction with the immaterial laborers, who had enjoyed autonomy with minimum intervention by overseers. It was not, however, only the attempts of the project managers to "Taylorize" creativity that were disliked by the developers; financialization of production through the publicly-traded Digital Creatives further reduced channels of communication and created frustration.

No Longer Privately Owned: Stock Prices and the Frustration of Not Having a Say

The buyout process overall had come with financial security, and Digital Creatives left the relative autonomy of creative production largely intact. However, this did not immunize the studio from potential economic risks or uncertainty with respect to future. In other words,

precarity of the garage days had shifted gears towards a larger financial structure. While economic uncertainty is endemic to the capitalism anyway, uncertainty in the case of the studio has also to do with the nature of Digital Creatives in that it was a publicly traded company. Compared to private companies, public companies enjoy advantages such as external financing, leading to potential growth and investment opportunities. This is much harder to achieve for private companies. Publicly traded companies also have easier access to financial markets and capital for projects. On the flipside, publicly traded companies have to share information with respect to their financial standing, as well as meet certain standards and listing requirements if they want to remain feasible as a publicly traded company.[29]

While the gaming industry is very competitive in general, the very nature of being part of a publicly traded company created tensions and contradictions since Super Mario lost some of the managerial control, as well as got on a ship – later dubbed the "Titanic" by the developers when the parent company took the path of bankruptcy – with other studios that sometimes rocked the boat, despite the fact that the developers at Super Mario performed well. In terms of the necessity to brief the investors, a publicly traded company also needs to impose certain scheduling limits on the development team so as to keep the promises to the investors and sustain the healthy image of the company. In the case of the studio, the process of financialization as part of Digital Creatives entailed certain responsibilities and limitations. As the management at the studio once stated, belonging to a publicly traded company "means that the company is going to have financial requirements at certain times that we cannot hang on to a game for too long. Because we have to deal with that concept of publicly traded. We have stockholders to satisfy."

Super Mario lost its independence at the very starting point of an aggressive buyout process carried out by Digital Creatives. It was only one among many other studios that had been

---

[29] See, for example, http://pages.stern.nyu.edu/~adamodar/New_Home_Page/invfables/ipo.htm.

purchased by their parent company. At the time of the buyout, having stocks proved to be profitable for the developers, whereas over time the stock market watch on a developer's computer desktop ended up being a source of frustration. Stock prices, as Ronaldo put it, became "a water-cooler topic" over which, Matthew said, that the developers "don't really have much control." In general, developers mostly disagreed with the management and investment decisions of Digital Creatives (see Chapter 7), because they believed that these decisions put Studio Mario in a precarious position despite their record of success. What were the sources of the developers' frustration, then?

When corporations have disposable funds, it seems like a feasible idea to start investing for future profits. However, as some of the developers put it, this led to an almost reckless growth period where Digital Creatives bought out "sub-par studios" and did not make desirable investment decisions but rather rushed to enlarge their IP portfolio. "Why the hell are they doing this?" asked Matthew, in relation to some investment decisions at the corporate level. Similarly, Ronaldo thought that their parent company "didn't have a plan for identifying the quality of the studios that they were buying." He further stated that corporate actually "should have shut" some of the studios "years ago." Matthew echoed Ronaldo and points to the feeling that they "are supporting all these other studios that are dragging us down." Marshall's remarks about the status and actions of Digital Creatives almost defined the irrational rationality of capitalism in that, in his view, their policies were "growth for growth's sake." In this sense, being bought out by a larger corporate body meant that the studio would become part of a family where it did not always have a say in whether it wanted other siblings or not. In a similar vein, the decision-power of Super Mario in investment moves was absolutely zero. In that sense, Super Mario

would have to share – depending on the conjuncture – the burden and the joy of being a family, which increasingly became a less joyful relationship to sustain.

Secondly, financialization put an obstacle to the previous communicative aspects of the labor process that the immaterial laborers had very much enjoyed. While the developers did have a certain sense of the financial situation of Digital Creatives, they did not really have access to certain kinds of information about finances or future plans precisely due to the publicly-traded nature of the company. In other words, the initial financial security that rescued the developers from having to constantly chase external funding later on meant the obstruction of communication channels, which would also give clues about the problematic financial status of Digital Creatives. It was impossible for the parent company to give any specific information to the developers, which made them anxious regarding their own fate and changed how they related to their jobs. During a focus group conversation, Otis jokingly asked me if an hour would be enough to discuss their thoughts about their parent company. When I said "we can order whiskey," Ronaldo responded that "we might have to." In this sense, a cynical atmosphere had begun to permeate the studio, despite the fact that Super Mario's games did quite well on the market.

While frustrated and cynical, the developers were well aware that "there's very few things that they [Digital Creatives] can say at this point or do." Indeed, in terms of ownership, there was a striking disassociation between Digital Creatives and Super Mario in the sense that while the former had the utmost authority over intellectual property and future investments, the developers were quite aware that they "have no influence over what happens in corporate, whereas the decisions that happen at corporate affect us very much," as Matthew indicated. As the owners of means of production and imagination, the developers had absolutely lost the means

of making financial decisions, which at the end of the day meant nothing but control over the labor process. While the relative autonomy of creative production was not much violated, the larger framework of production was shifted. Marshall would point to the number-driven nature of the publicly-traded parent company in the sense that "it's very difficult for them to think any further out in three months, because it's about quarters, it's about the physical year. So it's you know, it's a very spreadsheet, financially driven."

As we will see in more detail in chapter 7, the lack of information that made the "end of the tunnel" invisible proved to be a burden for the developers. For Karl, lack of communication left the developers "in the dark" and made them "frustrated because they want to know more information." When the stock prices hit some dramatic points, Digital Creatives would further want to intervene in production schedules at times, "to make the investors happy and show growth" and that was not necessarily what the developers mostly wanted to do, as Alex emphasized.

What does being part of a publicly traded company mean, though? How does one understand the risk associated with the world of the stock market and finance in relation to immaterial labor and precarity?

Conclusion

Being associated with a company that was publicly traded temporarily relieved the anxieties and precarity of being an independent studio. However, over the years, the thrill of the financial security waned, if not totally evaporated. Feelings of anxiety and precarity had not totally disappeared but rather were articulated into a different scene. As Karl, who worked for the studio more than 17 years but reached a point where he decided to leave – in part because of the situation of the parent company – would tell, "being beholden onto the shareholders is a very

difficult and fine line" and caused a lack of control over the future. As Alex also stated, it felt like "we have limited amount of control. I mean, we, the average guy, I think this is probably pretty common feeling." In this sense, the advent of shareholder value into the studio can be understood along the lines of what I call "intensified commodification," following Randy Martin, Michael Rafferty, and Dick Bryan's (2008) work on finance, risk, and labor. Upon purchase, immaterial game labor has become subject to the rules of corporate governance and stock markets, and the stock market watch app on their computers becomes "an EKG to the global body" (Martin et.al., 2008, p. 124). The immaterial game developers increasingly became part of capital and were put in competitive relations with their own sibling studios and blamed them for their "failures." The urgency to satisfy the investors caused an intensification of the labor process in which the developers suffered from frustrations and anxieties for not being able to unleash their creativity as they wished. Moreover, feeling the pressure forced the immaterial game developers to act increasingly *as* capital to extract more value out of themselves since their success would impact the parent company's well-being, their own patterns of consumption, and their lifestyles as part of the creative class. The feeling of indebtedness to the parent company and to one's own consumption patterns such as home ownership intensifies the labor process, while rearticulating precarity into the new context of stock markets. This is why precarity needs to be thought beyond short-term job contracts. As an existential condition, we need to see precarity in relation to the ways in which immaterial labor increasingly begins to see itself *as* capital or indebted to capital.

At the beginning of this chapter I stated that my research participants who witnessed the shift towards a corporate structure regarded the process as a "trade-off." While they did have concerns and fears – such as being turned into a place where the publisher would just implant

their own staff and undermine creative autonomy – the employees also enjoyed the conditions of financial security. They no longer had to rush to find funding for their next project. Fortunately, concerns about the loss of autonomy did not prove to be real. The employees at Super Mario were pretty much left on their own because Digital Creatives needed original titles and, overall, they were happy with the studio's past performance and production of original IP. At the same time, the transition also embodied the rationalization of what formerly used to resemble some kind of craftwork, as well as creating a disjunction between the employees and the parent company, which was the very structure that provided financial security. Indeed, while the buyout process did partly eliminate the financial insecurity and precarity intrinsic to the garage culture, it essentially moved the competition to a higher level at which what mattered was not only the performance of the studio and the games it made, but also the performance of the publisher, its other studios, and its stock prices.

The ambivalent outcome and the perception of the buyout as a "trade-off" pushes one to rethink certain questions regarding precarity and the labor process, because the discourse of "trade-off" serves to conceal the loss of control over the means of production and the labor process in general. Although the studio became part of a more complex network of relations – fellow studios, marketing, and stockowners – at the same time, they lacked access to crucial information to make sense of their future, feeling that they were "left in the dark." While the "average guy," in Matthew's words, used to know everyone in the studio where the president was "just another guy," today's circumstances were radically different for the average guy who was now partially disassociated from other disciplines with which s/he had more contact. Moreover, the "average guy" became even more vulnerable to financial risks and found it harder to manage everyday life and project into the future. The language of "trade-off" once again

evokes one of the principles of libertarianism and free market upon which the developers heavily draw on. The perception that there can be a pure or equal trade-off partially erases the work of immaterial labor in producing knowledge, information, and experience, all of which ended up being appropriated by the parent company as intellectual property. In this sense, the discourse of trade-off presents nothing but the paradox of economic liberalism, which is "parasitic upon some preceding form of socialization" (Zizek, 2011). The same language implies a realm of exchange that seems to be devoid of power relations:

> in the market – and more generally in the social exchange based on the market – individuals encounter each other as free rational subjects, but subjects are the result of a complex previous process which concerns symbolic debt, authority and above all, trust. In other words, the domain of exchanges is never purely symmetrical: it is an *a priori* condition for each of the participants to give something without return so that he can participate in the game of give-and-take. (Zizek, 2011)

In this sense, a trade-off is never a trade-off. The garage studio's "debt" to the market was rearticulated into a more complex network of financial relations and ownership structures, which did bring initial financial security but did not eliminate precarity. The disassociation that came with being a part of a publicly traded company meant an absolute transfer of control over finances to the parent company, which ended up managing hiring practices, genres, and schedules of games to be produced. Ultimately, precarity was rearticulated into a bigger league of players, which need to find the right space to work and that is the subject of the next chapter.

CHAPTER 4

GAMING THE CITY: PRODUCTION AND REVITALIZATION OF DOWNTOWN SPACE

Unpacking the Creative City Script

The preceding chapter focused on the tensions between art, creativity, and commerce within the

context of the transition from an independent studio structure to a corporate one within which

precarity did not disappear but was articulated into a financialized and networked context. This

chapter follows a similar path but now recasts the concept of precarity on the relationship

between creativity and space by utilizing two concepts: the neoliberal/creative city and the

production of space. Studying space in the case of this dissertation is particularly important

because, as Vincent Mosco (2009) argues in his *The Political Economy of Communication*, there

are three processes that constitute his approach to the political economy: commodification,

spatialization, and structuration. While we witnessed the dynamics of a more rationalized and

intensified commodification of the labor process in the preceding chapter, spatialization in

relation to the studio also requires analysis. The process of spatialization is described as "the

process of overcoming the constraints of space and time in social life" (Mosco, 2009, p. 157)

and, in the case of Super Mario, this manifested itself in terms of having to move to a larger

corporate plaza which physically demonstrated the changing nature of social relations through

corporatization. As one of the developers said, the fact that they began wearing badges and

relocation meant "I no longer know you." In a way, the move to a new building signified the

broader monopolistic tendencies and concentration prevalent in the game industry.

At the same time, processes of spatialization cannot be understood outside the material

and discursive context of the push for a creative economy and creative city (Florida, 2005;

Landry, 2008). This is particularly relevant in the case of the gaming industry because, as has

been suggested in the case of the Canadian game industry following Henri Lefebvre (1991), the "production of space" occurs in an uneven fashion where "provincial government participation," "heating up of real-estate value and gentrification," and the "mobility of capital" (de Peuter, 2012, p. 92) emerge as major factors that render cities precarious in an age of talent nationalism where success is never guaranteed and has to be struggled for.

Under the conditions of increasingly mobile capital, cities are precarious centers of growth and capital accumulation. However, one might also ask the question whether there has been any time when cities have not been precarious. Indeed, what space can be more precarious than a city that has been subject to processes of brutal colonization, or a city like New York during 9/11, or Baghdad in March 2003? At the same time, I argue, following Jamie Peck (2005, p. 766) that "while the contemporary cult of urban creativity has a clear genealogical history, stretching back at least as far as the entrepreneurial efforts of deindustrialized cities … the flavor is a distinctive one." As other critical geographers have also pointed out, urban space globally has faced the neoliberal assault where fictitious land value, gentrification, emergent elite alliances have come to undermine the more public nature of how space came to be defined (see Harvey, 1990, 2010, 2012; Painter, 2002; Cho, 2002, Soja, 2002, Hannigan, 2002, Zukin 2002a; 2002b). The distinctiveness of the present "creativity flavor" is such that "cities and urban policies remain substantially constituted by an ideologically amplified deference to 'external' competitive forces and threats, though the struggle to replace working class jobs is partially superseded by a nouveau-bourgeois talent war" (Peck, 2005, p. 766). Finding themselves in a precarious situation with the flight of industrial jobs, cities are left "with few options except to compete with each other, mainly as financial, consumption, and entertainment centers" (Harvey, 1990, p. 92). Indeed, the neoliberal city is one where "the urban terrain is opened for display,

96

fashion, and the presentation of self in a surrounding of spectacle and play" (Harvey, 2002, p. 14).

Yet, the talent war in the context of the creative economy is as much cultural as it is economic; cities "are not seem simply as accumulations of buildings and spaces but as sites of occupation where processes of cultural formation occur" (Miles, Hall, & Borden, 2004, p. 3). As far as the push regarding creativity is concerned, it is evident that processes of urban redevelopment go hand in hand with the marketing of place, in which arts and culture become the main pillars for producing creative and appealing urban centers. As Martha Rosler (2010) notes, the attempts to produce a creative urban center requires the appropriation of values of people of color or the working classes, who ultimately are not desired in the new imagined spaces. Managers of urban centers deploy these values, in their appropriated and commodified form, in order to attract investment from creative industries.

In this chapter, I draw on this body of work on neoliberal globalization and the critique of the creative city, and use Henri Lefebvre's (1991) notion of the "production of space" to draw attention to the productivity of the local actors' material actions. The critical literature on the global/creative city has mostly marginalized the status of small and medium-sized cities. Scholars have mostly focused on major nodes in the network economy (Sassen, 2002a; 2002b) at the expense of smaller or medium-sized cities, which have only recently been addressed (Bell & Jayne, 2006; Schlichtman, 2006; Leibovitz, 2006; Bradley and Hall, 2006; Lees, 2006; Lloyd, McCarthy and Peel, 2006; Evans and Foord, 2006; Waitt, 2006; Markusen, Lee & DiGiovanna, 1999). This emergent literature on small- and medium-sized cities, and the critique regarding the sweeping tendencies within globalization narratives (especially see Pratt, Gill and Volker's 2007 attack on the ideas regarding the death of geography) makes looking at the particularities of

production of space an important task in understanding the consequences of the relocation of Super Mario.

If we are to understand the appeal and impact of the hegemonic discourse around creative cities (Florida, 2005) and micro-urbanism,[30] Lefebvre's notion of "production of space" is important for at least two reasons. First of all, it emphasizes the continuities within a capitalist mode of production and forces us to see the relationship between media, communication systems, and Modern reason (Hay, 2011). As James Hay (2011, p. 121) further argues, Lefebvre's framework is particularly useful as a sobering reminder that highlights some of the historical continuities with respect to capitalism and demonstrates how "a recent discourse and reasoning about the new media city develops out of and perpetuates a Modern reasoning about progress, renewal, and reinvention." Secondly, Lefebvre understands space as active and productive; it *acts* as the ground for the construction of social relations. In this sense, there is a double meaning to it: space, as Lefebvre notes, is both produced and productive. In *The Production of Space*, Lefebvre writes "there is nothing in history or in society, which does not have to be achieved and produced" (1991, p. 68). "Though a product to be used, to be consumed, it is also a means of production," Lefebvre suggests (1991, p. 85). Space is productive in that it "gathers crowds, products in the markets, acts, and symbols" (Lefebvre, 1991, p. 129).

In this sense, Lefebvre is useful to understand the transformation of the downtown area, to which Super Mario moved, as historical rather than natural. That is to say, downtown area where the studio is currently located needs to be understood as the theater of hegemonic

---

[30] "Micro-urban(ism)" refers to the concept used by local actors to brand and market Game City, the pseudonym of the city under consideration in this chapter. It is a concept that might be relevant for small or medium-sized cities, which do not necessarily constitute a major node in the global economy but do have a major impact, and are desired by some members of the creative class. Micro urban spaces are defined as urban centers with a population of up to 250.000 people. They possess what many internationally recognized cities have such as arts, culture, nightlife, strong technological infrastructure, and an awareness regarding environmental issues.

struggles over the iconography of the city (McCarthy, 2011). The notion of the production of space, in its double meaning, implies not only the structural forces that produce space but also how space, with its historical specificities and material practices, *produces*, and therefore is "a condition of future practices – a basis of making History" (Hay, 2011, p. 122). An active, productive, and social notion of space underlines the importance of culture, signs, representations, imaginaries and aesthetics in producing space, which in turn produces social relations, representations, and material practices. In this respect, Lefebvre's perspective is highly useful in rethinking the role of media and cultural industries in producing a particular kind of space and thus producing the birth of the creative city in the neoliberal moment. As James Hay has argued, "urban renewal is a Modern problem requiring solutions and modalities, but it is an unfinished project;" "media have mattered in different times in different ways in the (re)production of urban space – as instruments of urban renewal" (2011, pp. 124, 127).

Thus in this chapter I look at how the relocation of Super Mario proved to be quite influential in the revitalization of a medium-scale downtown, which does not typically come into the picture within literature on the creative economy or in theories of immaterial labor, which often focus on major nodes of global finance.[31] I argue that it is more useful to see the contemporary attempts of Game City to provide free wi-fi – with a private partner – for the downtown and market smart phone applications as a web of mediated relations, as well as viewing these efforts within the historical role of media and communications in the formation of urban space.

It is perhaps when we *first dissect and then assemble* the broader forces, processes, social relations, local particularities and local actors, and understand them in historical and dialectical

---

[31] In the case of theories of immaterial labor and video game studies, Nick Dyer-Witheford's (1999) *Cyber-Marx* and his co-authored *Games of Empire* (2009) do provide nuanced analysis and sound criticism regarding the geopolitical status of these theoretical frameworks with their focus on the advanced capitalist world.

terms that we can comprehend the revitalization of downtown after the relocation of Super

Mario. It is through such materialist analysis, I assert, that we can come to terms with the ways

in which Super Mario relocated to its current location, with what this relocation meant for

downtown revitalization, and with the broader processes through which public-private

partnerships foster the creation of a smart, innovative micro-urban space where the creative class

aspires to work. In Jamie Peck's words, such materialist analysis enables us to dissect the

"creative-cities script" which "constituted and enrolled a widened civic audience for projects of

new-age urban revitalization, anointing favored strategies and privileged actors, determining

what must be done, with whom, how, and where" (2005, p. 742; emphasis is mine). To explore

the construction of the space that houses the studio and understand the actors of this "creative-

cities script," then, we need to ask certain questions: What forces and actors come together at a

particular time through which Game City aspires to be a micro-urban space that houses arts and

culture? Following Doreen Massey (2008, p. 262), I want to assert that "what gives a place its

specificity is not some long internalized history but the fact that it is constructed out of a

particular constellation of social relations, meeting and weaving together at a particular locus."

In that sense, we need to narrow down the question and ask: What are the historical peculiarities

of the downtown where Super Mario is located? How have the conditions for revitalization

paved the way for the flourishing of a downtown that houses a major studio within the

framework of an arts and cultural district?

Revitalizing the Dead Downtown: Super Mario as the Phoenix

Prepared in 2000s, the downtown plan of Game City provides a brief historical context from

which the current discourse of the micro-urban city spring. The plan suggests that Game City

benefitted from being close to communication and transportation networks. Most of the

commercial operations did make downtown a vibrant location. However, the decision of the city

management to open a pedestrian mall proved lethal for businesses in downtown since they fled

to another location and rendered the vibrancy of downtown a thing of the past. It was only a few

institutions – albeit important – that remained in the city, including City government, a health

institution, a movie theater, and a newspaper. The city management responded to the

downtown's dysfunction after 5 p.m. by introducing a Tax Increment Finance (TIF) district.[32]

Through TIF, certain redevelopments such as bank and the expansion of a health institution were

made possible. However, the impact of TIFs became even more visible when the City

management recognized that the pedestrian mall was a huge mistake and that the future of

downtown would be tightly linked to the ways in which entrepreneurs would benefit from the

plummeting property values and re-evaluate them for their own purposes for a vibrant service

economy in downtown. In this sense, TIFs provided the institutional framework for the

revitalization of a dead town to become a vibrant arts and cultural district.

A major event in the history of downtown Game City and the relocation of Super Mario

took place when the space on which the studio is currently located was destroyed due to a fire.

This historical fire caused the total devastation of the occupant at the time, a department store.

Not being able to reconstruct the building, the developer of the store had to sell it to Game City,

which decided to demolish the remnants of the building and create a parking lot out of it. It was

through the TIF that the this parking lot was sold to a real estate developer, which in turn built

the plaza where Super Mario is currently located. The construction of a major plaza on this 'idle'

parking lot was historical for a number of reasons. First of all, TIFs were initially targeted to

---

[32] The first TIF district in Game City was adopted in 1981. While these TIFs were set to expire in 2005, they have been extended to 2021. As of 2006, $14 million in funds for redevelopment of downtown were collected. As a concept, TIF set the ground for the *Downtown Plan* and is important in terms of assessing its impact as a finance tool to enable redevelopments through increases in property taxes above the base year and initiate improvements in the downtown area.

renovate already existing buildings and in this sense, the construction of the plaza was not a common practice. Secondly, since nothing else had been built in downtown over 15 years, the plaza was the first sign in terms of future developments in downtown.

At the time of the construction, local press considered the plaza to have a phoenix effect in the downtown area since it was Super Mario's relocation that really drove the $ 14.5 million building. Indeed, the studio had a considerable impact because it ended up occupying more space than initially planned. As the game programmer Matthew mentioned in an interview:

> the president was thinking like, we should be able to stay within the confines of this floor for the next 5 years without expanding, right? And like after a month or two, we realized, that's not like, … in such a short time, right? This space, just this floor alone, was supposed to last us for five years, right. It's like, no.

Reactions to the partnership were diverse. A city planner I interviewed was fond of the private-public partnership because "not only were they coming with the building, but they were coming with the business, the game studio, to the table." Impressed by the "youthful employee of the game studio," he hinted at the bias towards creative jobs by saying that "those kinds of jobs are exactly the kind of jobs that we love to see here" since "they're the ones that will keep the engine going." Game City's deputy manager would regard this partnership as an opportunity that would transform the city into a truly urban center. However, some residents of the city feared losing their parking permits. Looking at the local press would reveal that a business owner accused the city in the local press of thinking that the game developers were more important than his/her business. While supportive, another business owner was critical of the city because s/he could have arranged her business plans accordingly, had she previously known about this development.

The notion of the production of space is useful to point to the consequences of developments mentioned in this section. While the plaza that houses Super Mario was produced as part of a political-economic negotiation, it in turn proved to be productive for generating other

developments and social relationships. The peculiarities of the needs of the immaterial labor led

to the initiation of this private-public partnership, in turn leading to the construction of the plaza.

The relocation of the studio and the construction of the plaza it entailed transformed downtown

into a lively place comprised of residential spaces, offices, restaurants, and ultimately an

institutionalized form of private-public partnership that is actively marketing the city now. It is

apparent that the game studio played a major role in turning the downtown area into a (new)

media city. It is within the context of private-public partnerships and the creation of arts and

cultural district that the transformation of the downtown area can be best understood.[33]

Ultimately, the 'dead' downtown space has been reinvigorated since the construction of

the plaza, of which the studio is a major part. Yet not only political and economic forces are at

play in the revitalization of Game City's downtown; rather cultural and discursive forces have

also shaped and continue to (re)imagine the downtown where the developers work and play.

Here, I will focus primarily on the discursive and material work of two actors – the real estate

developer and the city – who are actively imagining and producing a micro-urban space. It is

important to consider these discursive forces since, as Norman Fairclough argues in *Language*

and Globalization, discourses have impacts. Indeed, discourses "simplify economic and political

relations – the latter are so complex that any action oriented towards them requires discursive

simplification, a selectivity in terms of what is included and excluded, hence the constitution of

discourses as 'imaginaries'" (2006, p. 18). In this sense, the discourse of microurbanism and

creativity do have a performative role and constitute a material force in the social assemblage

within which Super Mario and its plaza emerge as two important actors. This next section thus

investigates how the real estate developer initiated the development of the plaza with the studio,

---

[33] One of the movie theaters in downtown Game City was renovated through a Redevelopment Investment Program.

what it means for the creative class to be at the center a vibrant downtown, and how the company

imagines and materially constructs a downtown space along the ludic lines of a creative city.

Creativity is *not* Just a Discourse: The Rise of a Former Hippie as a Real Estate Developer

During an interview with the human resources (HR) personnel at the studio, I happened to see

one of Richard Florida's books on a bookshelf. To my surprise, it was not only the HR that

happened to be interested in Florida's theory. The introduction of Florida's book to Game City

had been accomplished through the initiative of the same real estate company that built the plaza

where Super Mario is housed. Moreover, the website of the developer regards Florida as a

leading force behind the philosophy of his real estate company.

One of the members of the steering committee of *Downtown Plan*, the CEO of the real

estate company, was influential in resolving the recruitment and retention problem that Super

Mario faced earlier. The idea of building a plaza came up during a conversation between the

developer and the president of the studio. The president of the studio told the real estate

developer that he "had no problem with a steady flow engineers out of school, but after a six-

month to two years, they would tend to go somewhere else." This conversation convinced the

real estate developer to take action and talk to the City:

> So what the president [of the studio] said, "I'm leaving town, I'm gonna have to leave
> town and I don't want to, I want to live here." So I went to the city, and the city had
> financing programs in place, TIF programs in place, taxing increments, financing to
> allow, to subsidize the upside down nature of real estate downtown. And when I went in,
> I said, look I've got this done in three months, because a whole host of reasons related to
> publicly traded company and be competitive, but this guy is going to leave town or, I
> can't save 65 jobs. And they [the city] said we'll make it happen. And for them, this is
> *validation*.

Denying that they "got a deal" from the city, the CEO of the real estate company underlined his

"hippie" past, the cultural aspects that underlie the construction of the plaza, and the broader

philosophy of his real estate company. For him, the plaza mattered a great deal in terms of

representation and style because when he moved to the city, downtown was "dangerous" and deserted. That had to change and the relocation of the studio was a catalyst. "Maybe," he said, "it's part of the human condition, if you're cool, doing something cool, you'd like to be kind of around people saying that you're cool." As he further explained, the productive aspects of space becomes more clear when one thinks about the culturalization of the economy in general:

> So, bringing them downtown, let them walk around like lords of the universe down here, I never thought of this before, but you know, when during the hay days of Wall Street, they called those guys masters of the universe. They're sort of masters of a certain universe … You know, I can come in in shorts and work. And if I'm in the art department, I can wear leather and spike my hair, and I get paid 50 grand a year, you know.

Indeed, the cool aspect was crucial. The president of Super Mario also enjoyed the new location and what it provided in terms of commuting, working, and playing in downtown.

While Super Mario's downtown presence was the first product – a very successful one – of the real estate company, the coolness associated with the creative class became a pillar of how the real estate company came to brand itself. The company today regards sustainable urban development as a process closely related to "responsible corporate citizenry." Their clientele is decidedly the creative class, without whom, according to the company, communities "cannot survive." Their vision is to create a neighborhood in which the members of the creative class are willing to work, play, and live. It is this imagination within which they invite their clientele to buy or rent residences and workspaces located at the heart of a vibrant downtown. As part of its branding strategies, the real estate developer deploys the narratives of its residents, who unanimously emphasize the convenience of the luxurious residences and workspaces in a cozy downtown environment.

Due to the success of the plaza and other developments downtown, the CEO of the real estate developer has been heavily featured in local press with specific links to Richard Florida's

105

theory of the creative class. For instance, one of the local papers published a three-piece feature article on the revitalization of downtown. The paper interviewed an academic who underlined the importance of uniting art with economy and the need for supporting local artists to thrive and network. The real estate developer and its plaza are also foregrounded in the article as the driving force behind the declining crime rates and flourishing businesses in downtown and behind creating a big chunk of employment especially with the relocation of the studio.

It thus seems plausible that the relocation of the game studio not only revitalized the downtown but also *produced* imaginaries on the part of the real estate company, which now is a major actor in downtown with its luxurious developments, condos, and office spaces. Nevertheless, the real estate company is not the only actor to imagine and build this creative and smart downtown area. Game City, especially after the successful partnership with the real estate company, has embarked on a set of activities to consolidate the trend in revitalizing the downtown along the principles of public-private partnerships, a direction set out in its *Downtown Plan*.

The Work of Imagination in the Age of Microurbanism: *Downtown Plan*

Having made a first major step in revitalizing the downtown through the relocation of the studio, the city management engaged in another initiative, *Downtown Plan*, in order to further consolidate and institutionalize transforming Game City into a creative city. The plan crystallizes public-private partnerships in which members form a steering committee as an alliance of the local elites, including the CEO of the real estate development company that was the driving force in the construction of the plaza.

In preparation of the plan, the steering committee organized 14 meetings and conducted interviews with social actors ranging from social service organizations to realtors and property

owners. As part of their workshops, the committee designed five different scenarios to engage

participants about in envisioning the future of downtown. From these five scenarios emerged an

ideal blended scenario in which the emphasis is not just on physical buildings but people,

culture, diversity, and different sets of activities that turn downtown into a vibrant space,

mingling day and night. The plan further underlines the impact of creative energies and social

relations that truly make a successful downtown that takes the desires and interests of people into

consideration. The plan proposes "private public relationships" as a remedy to the lack of

gathering spaces for the creation of these desired relationships. At the heart of the plan is the

construction of spaces for a public plaza and open spaces oriented towards families and festivals,

and activities of different sorts such as ice-skating and concerts.

It is important to draw attention to the language of the plan where the productive nature

of space and culture is underlined. As we have seen, the production of a particular downtown

space is not just about economics but also culture, materialities, social relationships,

imaginations, and representations. Overall, the *Downtown Plan* actively imagines and works

towards a social space, constructed through public/private partnerships that have become one of

the cornerstones of the "creative cities script" (Peck, 2005). The plan continuously emphasizes

the significance of a blending of entertainment, local actors and flavors, and the centrality of arts

and culture. The promotion of art stands as a particular challenge, which the plan proposes to

resolve with the right partnerships by incentivizing a district to allocate to artists for working and

living and to create a district for arts and entertainment. It explicitly mentions the need for a

cohesive branding strategy and new funding opportunities by especially underlining the fact that

there is an end to TIFs as a precarious urban revitalization strategy. It is this framework prepared

by the city within which the work of the new city partnership can be situated.

Game City Center Partnership: Branding the City and Educating the Consumer-Citizen in the Micro-Urban Space

In an age of austerity measures, local and regional governments increasingly find themselves having to generate new resources to build urban infrastructures and attract investment. The recognition that TIFs will at some point expire, unless extended again, forced Game City to devise alternative funding patterns. Two main responses emerged for the purposes of constructing the city to support creative lifestyles. One has been "microurbanism," a term deployed by the local elites, whereas the other consists of a concerted and institutional effort to build and consolidate public-private partnerships to generate funds, market the city, and educate its citizens via media shows and smart phone applications towards practices of consumption and entertainment in downtown.

As defined earlier, micro-urbanism is a key term used by the local elites to situate Game City as a desirable to place to work and live. It refers to urban centers that have a population of 250.000 or less. While not a strictly major node in the global networks, they do carry some weight in terms of their technological infrastructures, diverse populations, and a lively arts and culture scene.

The discourse of microurbanism is a branding strategy to appeal to the creative and intellectual classes who may not necessarily prefer to live in the global urban centers but rather choose a more manageable lifestyle that comes with a commute time of 14 minutes, museums, blues venues, film festivals, an international guitar festival, an elite public high school, a major research university, and influential entrepreneurs. It is through such keywords as "smart, innovative, and micro-urban" that the local elites intervene to define and brand Game City.

While this discourse might give the impression that it may not go beyond a branding strategy, the interviews with the game developers confirmed the capability of a city of this scale

108

to sustain a particular section of the creative class, which does not necessarily prefer to live in large metropolitan regions. Rather, the developers enjoy the smallness but also the smartness of the city where it is possible to find things to do, museums to go to, and, more importantly, houses that they can afford to buy and a reasonable environment in which to raise families in comparison with the chaotic and expensive environment in the larger creative hubs.

The local elites are not the only actors to market the city. Game City concentrated its efforts by founding a public-private partnership, Game City Center Partnership. As of April 2011, the city council reached an agreement to boost connectivity across the three business centers. With the establishment of this partnership, the city aims to gather smaller organizations under one single umbrella so that they can operate more smoothly and evolve into a sustainable and strong identity. Furthermore, the objective is to market the city to the regional and national market. For its operations, the City supported Game City Center Partnership in its initial phases by offering an Executive Director position, whose duties include mapping business in the city, informing the residents, running a website, offering advertising opportunities for members, carrying out public relations, and ultimately branding the city as a venue for working, playing, and living. The executive director would be "loaned" to the Game City Partnership to work 20 hours/week for a year, the budget of which ($50,000) would be met through the Food and Beverage Fund. The interesting aspect of this "partnership" is that it does not seem to have sought community input except for an initial study session.

As a 501c6 not-for-profit organization founded through a merger of the Downtown Association and a business group in the city, the partnership is now up and running, right across the street from Super Mario. In an interview, the executive director stated that "we have money to put towards these promotions and branding our downtown and the micro urban community."

The partnership's executive director is a city planner, who on the City's website, states that he is happy to see that the town is going beyond the stereotypical silent, regional, and small town that is now kind of waking up.

Indeed, through a (new) media operation, the Executive Director and the partnership are doing their best to make wake up the micro-urban city, educate its citizens, and acculturate them to certain material practices. Game City Excitement, a program produced by Game City Center Partnership and dedicated to marketing downtown, is one of these media productions. In its first episode, the uniqueness of Downtown is underlined through its opportunities for leisure activities and having "over 1100 seats" for potential visitors. Underlining the efforts of the City to transform the downtown, the program also introduces its audience to retailers and restaurants in downtown, some of which position themselves as businesses that serve "local food." A restaurant chef, for instance, underlines the nice aspects of being in a small place and the opportunities it provides in terms of mingling with the local farmers, and compares it with her experience in San Francisco, a creative city par excellence according to Richard Florida's metrics. In its edutainment efforts, the program asks questions of its viewers about the city such as "How many outdoor seats are located downtown?" before taking breaks. The second episode of the program focuses on a local bookstore, and a historical movie theater as major nodes in the arts and culture network. Indeed, the second episode is particularly dedicated to educating its public, and creating a sense of history within which the micro-urban feel is cultivated. Within this marketing assemblage information regarding smart phone applications is also included, described as "The connection between you and the stores you love in Game City." In the third episode, the focus is again on restaurants and cafes, some of which are the favorite spots of the game developers. One of the restaurant co-owners specifically mentions the studio with which

they do business. What is specific about the third episode is its major emphasis on the "Guild of Public Artists" as an important actor within the network of the arts and cultural district. Formed in late 2000s, the "Guild of Public Artists" is engaged in certain transactions, some of which involve putting sculptures in the city. It is mentioned in the video that the support of the City is crucial for their endeavor because it is the City that pays for the installation. The Guild brought 29 pieces of sculptures in three years, 13 of which are situated downtown. Through national calls, national as well as regional artists are involved in this process. Public institutions or private businesses, among which both the studio and the real estate development company stand, sponsor these artists.

Aside from the Guild, we also need to mention "999 East" as another important actor, involved in producing the arts and cultural district. With its mission "to cultivate Creativity" in the area, the organization sees art both as a "vehicle for social change" and "a catalyst for economic development." It is really an umbrella organization to connect artists with each other, with community, and with businesses, and to advocate arts in the region. The City and Game City Partnership are among the major partners in this organization. It provides space for local artists to display their art on travelling billboards, in a sense, creating a mobile gallery experience.

It could be argued, then, that within this constellation of material practices and discursive forces, the emerging micro-urban scene is one that is very much inspired by the creative economy discourse where the aestheticization of urban experience and commodification of arts play a central role. Businesses, arts organizations, and the City collaborate to produce a micro-urban space, which in turn produces particular modes of urban experiences and consuming identities. It is a complex set of transformative relations within which the relocation of Super

111

Mario had a uniquely historical role. In this constellation of neoliberal forces and practices, the hegemonic existence of the private-public partnership also needs to be acknowledged. In order to promote and market the city, the City has undertaken the initiative to allocate staff and funding for the Game City Center Partnership to evolve into a sustainable and coherent organization, deploying media of both the old and the new kind.

Conclusion

This chapter has investigated the productive capacity of space in transforming social relations. When Digital Creatives bought out Super Mario, they had to expand and ultimately move to a larger space, the infrastructure of which was established through a private-public partnership as a major pillar of the "creative-cities script" (Peck, 2005). As the project became successful, the city began to further imagine and construct a playful downtown that they hoped would appeal to the taste of the creative class as the new engine of the informational economy. As the CEO of the real estate company put it, this success served as a "validation for the city" in that it enabled the maintenance of a creative workforce right at the heart of downtown. Out of these messy developments emerged a partnership that now invites its residents to come, shop, and dine downtown.

The relocation of the studio, then, emerged as a catalyst in the acceleration of material practices in the city in terms of moving towards public-private partnerships. In this sense, the spatial arrangement with respect to the game studio proved to be productive in the construction and imagination of a smart micro-urban downtown space. Over some ten years, downtown shifted towards being an arts and cultural district with a major focus on creativity, a transformation which was highlighted by the city as an example of its overall changing character.

In his analysis of Amsterdam and its desire to be a creative city, Merijn Oudenampsen uses the metaphors of hardware (the infrastructure) and software, the city's cultural "programming" (2007, p. 173). In this respect, it seems plausible to argue that the game developers, as the hardware, were influential in terms of constructing the infrastructure of the downtown (production of space, where production literally refers to the building of the plaza). They were at the same time actors within the broader constellation of the micro-urban experience (production of space, where the term now refers to how that plaza actively produces the space along with cultural meanings, social relations, and representations) and in this respect became the software: art festivals, arts organizations, and city center partnership. The relationship between the software and the hardware, by its very nature, needs to be productive and dialectical, as far as the creative class is concerned. As Oudenampsen aptly defines, the creative class is "at once Homo Ludens and Homo Economicus, it incorporates the drive to create, produce and socialize with the drive to appropriate those powers and passions" (2007, p. 173).

How is it, then, that the discourse of microurbanism and creativity appealed so quickly to policy makers? How do we understand the role of the local actors in the constellation of different material forces that converge to form this emergent micro-urban, smart, creative city? Why are city governments and states in the USA, as Andrew Ross (2007) argues in comparing it to China and the UK, more involved and willing to provide tax incentives for creative industries in general and game industry in particular (de Peuter, 2012; Kocieniewski, 2011)?

Critiques of the creative economy discourse agree that creativity initiatives by cities across the globe are low risk and relatively low cost endeavors (Peck, 2005; Ross, 2007). As Ross suggests, "the recipe on offer to city managers is more like a get-rich-quick-scheme: high rates of return from minimal investments with little risk involved" (2007, p. 30). David Harvey

113

makes a similar argument with respect to the increasing hegemony of public-private partnerships in which risk is absorbed by local governments as far as "struggle over the acquisition of key control and command functions in high finance, government, or information gathering and processing" is concerned (2002b, p. 459-461). However, the relative cost of the implementation of policies does not necessarily mean that cities in a highly volatile and flexible economy are no longer occupying a precarious position, because "nothing is forever" (de Peuter, 2012, p. 92). As Jamie Peck (2005, p. 767) sharply puts it, creativity strategies "empower, though only precariously, unstable networks of elite actors, whose strategies represent aspirant attempts to realize in concrete form the seductive 'traveling truths' of the creative script." Moreover, despite their emphasis on grass roots and local flavors, policies often seem to instrumentalize creativity, fetishize the artist as the entrepreneur, hierarchize particular valorizations of creativity, trivialize non-urban centers that support metropolitan areas, homogenize cultural forms, prioritize middle classes that are highly racialized and gendered, and end up being used as "a discursive weapon to further problematize non-middle class values and peoples" (Edensor, Leslie, Millington, and Rantisi, 2010, p. 7).

Thus, if we think of the street in a Lefebvrian (2003) sense, as "a form of spontaneous theater" with "the informative function, symbolic function, the ludic function," the creative-city discourse and practices seem to privilege the ludic function. Perhaps Vincent Mosco's analysis of Silicon Alley in New York best demonstrates the extent of spatialization and mediatization and the role of state and city government "in supporting the recycling (including rewiring) of vacant buildings, making it easier for multimedia startup firms to locate in sites that meet their technical requirements" (1999, p. 109). Apart from this intervention, the story of New York's transition into a city of new media spectacle is telling in terms of how Business Improvement

114

Districts intervene to produce "safe" publics spaces that cater mainly to the creative class, while curtailing basic freedoms for its people.

We cannot predict how Game City's downtown might turn out in ten years from today. Even within the 2.5 years of research, the status of both Game City's downtown and of Super Mario have changed. Nevertheless, while we cannot predict the future, we can conclude by making at least two arguments based on the material reality analyzed here. First of all, discourses do have material outcomes. The transformation of downtown has been the result of an amalgamation of various actors and processes that include Richard Florida's influence, the relocation of the game studio into the heart of the downtown, and the emergence of a decidedly entrepreneurial city that aims to revitalize its downtown and turn it into an arts and cultural district with a micro-urban feel. In this sense, it could be argued that "spatial convergence does not only bring about economic change, it also creates the conditions for a transformation in governance" (Mosco, 1999, p. 114). That is to say, the relocation of the studio not only created an economic transformation but also a cultural and governmental one in which the city repositioned itself as an entrepreneurial entity foregrounding private-public partnerships as the main pillars of the neoliberal city. Secondly, we can assert that the entrepreneurial city, with its claims to being smart, innovative, and micro-urban is precarious, because "the entrepreneur is precarious by definition" (Oudenampsen, 2007, p. 176). Finally, the public-private partnership as a form governance privileges consumption in the bar and restaurant economy, as the promotional posts from Game City Partnership's Facebook page confirm.

It seems that the transformation of downtown into its current phase represents a hegemonic moment of the "conceived space" of the urban planners and real estate developers. While the micro-urban discourse seems to favor the "perceived space" of the popular and leisure,

the "lived space" of art and imagination is minimized or commercialized. For the "right to city" to truly exist, it needs to emphasize "the rights of citizens and city dwellers, and of groups they (on the basis of social relations) constitute, to appear on all the networks and circuits of communication, information, and exchange" (Lefebvre, 1996, pp. 194-195). Unless the "right to city" is established along inclusive and egalitarian lines, the residents of the city remain shoppers and tourists in their own city, remembered during restaurant weeks and summer festivals.

CHAPTER 5

THE SELF-REGULATING GAME DEVELOPERS IN THE AFFECTIVE WORKPLACE

The question is how do you do it where they feel more driven to get their work done, and that is somewhat more about "Hey, take control of your life"… We're not getting anything out of this "40-hour-week-sit-your-butt-in-a-chair." It's not helping us.

Because I can manage everything but productivity
Management

In Chapter 3 ("From the Garage Days to the Flagship Studio"), I focused on the difficulties experienced by the developers after transitioning to a larger workforce upon being bought out by Digital Creatives. This process resulted in the introduction of project managers to manage the larger workforce. The game workers, who found themselves being "whipped" by the project managers, did not enjoy this particular condition. Building on Chapter 3's insights, here I shed further light on the peculiarities of managing immaterial labor and measuring its productivity in the fluidity of digital networks and playful workplaces. Indeed, how *does* one control this particular type of workforce within the celebrated workspaces, which are also rebellious playgrounds? How do we understand the dynamics of managing a seemingly unstructured labor time? How is a conditioned flexibility constructed at Super Mario?

It is clearly difficult to control and streamline the productivity of immaterial laborers such as game developers. On the one hand, video game developers as part of the creative class ask for unrestrained schedules and reject mandates on their creative processes. They do *not* want to be told what to do. Furthermore, they enjoy playful environments that have been strengthened by the advent of digital and even more immersive networks. On the other hand, companies that heavily rely on such a workforce play in a risky business field and assert that they need to abide by production schedules, which become even more important if they are part of a publicly traded company. In such an environment, new media companies, such as my own research site, are

increasingly resorting to governmental strategies that are dubbed as "workplace perks" in popular representation. They provide free food and drinks in meetings, or, the giant game publisher Electronic Arts (EA), construct campuses if they have the means. While not coming close to EA, Super Mario has followed a similar path. When I first started my fieldwork in 2010, they were switching to a flexible work environment (FWE) policy. By the time I was finishing my fieldwork, they were thinking of buying a margarita machine, new TVs, and arranging a new room for both work purposes and play. How does one understand these moves with respect to the autonomy that the game workers want to keep and that management aims to harness for purposes of more productivity (Banks, 2010)? Similarly, how does one understand that the management backed away from its decision of a "focus week" when the studio shut down the Internet because the developers "hated it"? What are the dynamics behind the "freedom" that is underlined in the studio?

Drawing on the work of Michel Foucault and Nicolas Rose (1990), and the insightful applications of their ideas to creative workplaces (Cohen, 2008; Ross, 2003, Dyer-Witheford & de Peuter, 2009), this chapter documents how creative game developers work and how their creative capacities are harnessed and regulated within Super Mario. There are different ways of managing this particular kind of workforce, ranging from designing the workplace as a playground to in-house training sessions that push the game developers to work on their communicative capacities within a flexible work environment. Tracing these dynamics in my next section ("Workspace as Rebellious Playground, Work as Play, and Hollywoodization of Labor"), I first attempt to understand the design of the workspace at Super Mario as a playground by deploying the concept of biopolitics, and further develop my analysis in the next section ("Mundane Objects in Affective Spaces: Materializing Immaterial Game Labor through

118

Photography") by drawing attention to the productive aspects of mundane objects and space. In this section, I particularly underline the uses of photography in revealing the importance of "dead objects" to animate "labor" and produce value. Then comes "Playboring on the Rollercoaster: Game Development as Labor of Love and Battles to Fight" in which I depict the passion of the developers who perform labor of love at the workplace. This section particularly highlights how the work ethic in the creative workplace puts significant emphasis on "commitment and subjective investment" (Weeks, 2011, p. 70). Such passion and dedication has a cost, however, and the spouses of the game developers pay for it; thus in the following section, ""Will Daddy Come to Our House?" The Cost of Passion at Work," I argue that there is a dialectical relationship between the processes of self-exploitation of developers at work and the construction of the identity of a passionate and supportive spouse at home.

These discussions are followed by two final sections, which come as a corrective to the hype about the free-floating nature of creative labor as if it were devoid of any frictions. Here, I mainly tell two stories: the cultivation of a particular kind of game developer who is required to work on his/her communicative and linguistic capacities to be a collaborative worker *and* a self-responsible game developer; one that is on top of everything, knows what to do, when, and with whom. More specifically, "Measuring the Productivity of the Immaterial Game Developer: Flexible Work Environment" is dedicated to the management's constant "rants about creativity," the "impossibilities" of a 40-hour workweek in the game industry, and the dynamics of a policy-shift towards a flexible work environment. The sixth section, "Cultivating the Communicative Self, Learning to Have Crucial Conversations," focuses on an in-house training that aims to improve the communicative capacities of the immaterial game workers or "virtuosities" as

119

theorized by Paolo Virno (2004). These capacities are particularly important in large development teams where communication has itself become labor (Brophy, 2008).

I conclude the chapter by pointing to the dynamics of biopolitical production where subjectivity is put to work (Read, 2003). In the moment of biopolitical production and in the space of the affective workplace, I argue, productivity is self-regulated. The barrier between work and life, a contingent characteristic of a specific kind of production in particular geographies – like traditional industrial labor – has been destabilized. The spatio-temporal divisions and discipline that pertain to strictly defined work schedules and workspaces are radically transformed in the conditions of game labor. Nevertheless, this radical transformation does not mean that the historical contradiction between labor and capital has disappeared. Rather, control now takes the shape of harnessing creativity in an "orchestrated chaos," which has become the archetypical feature of the post-Fordist creative work environments such as Super Mario, as we will see in the next section.

Workspace as Rebellious Playground, Work as Play, and Hollywoodization of Labor

In *The Communist Horizon,* Jodi Dean (2012) cites Doug Henwood's ironic indictment of the utopian discourse of digitalization:

> Find capitalism too controlling? No, it's spontaneous! Too inegalitarian and exploitative? No, it overturns hierarchies! Vulgar, brutal, de-skilling, and mercenary? *Au contraire*, it's creative and fun! Unstable? Nah, that's just its miraculous dynamism at work!"

It would be safe to argue that Super Mario too targets these contradictions in its attempt to control the hegemonic labor force of cognitive capitalism. Chaos and informality (spontaneity, anti- or un-hierarchical, miraculous dynamism) are celebrated with the assumption that they lead to creativity and thus to profit. In the context of the post-Fordist workspace, subjectivity is (at) work. While it is indisputable that the minds and hearts of workers have always been of interest

to capital, what is at stake as far as game development is concerned is the "prominence of a set of industries for whom the mobilization, extraction, and commodification of advanced forms of collective knowledge are foundational" (Dyer-Witheford & de Peuter, 2009, p. 37). The gaming industry is undoubtedly one of the pioneering forces within the aforementioned industries, for which "creativity, cooperation, and cool" (Dyer-Witheford & de Peuter, 2009, p. 55) are crucial to mobilize and valorize. In this respect, the ethos of work as play and the idea of the workplace as playground are important goals to achieve for the owners of cognitive capital so that they can peacefully regulate the workforce. As a game developer who left the studio told me, "Basically, it's a place to go and stay all day. And only leave to go home and sleep. They [video game workers] want more than the cubicle walls." Having such a workspace is especially important for harnessing the creative juices of immaterial labor because, within game development, "subjective cooperation becomes the primary productive force" (Virno, 2004, p. 60).

Throughout my fieldwork, it became obvious that Super Mario is invested in creating a playful work environment for the game developers. From their website to the physical space, they rightly boast about fostering an "open environment" promising open communication and no cubicles. Indeed, the desks and offices are fully customized, housing various items ranging from canned food to alcohol, family pictures, and game posters signed by the team. From the entrance to the farthest corners, the studio welcomes you as a fun workplace. The posters of games produced since the early days of the studio are on the walls. In a way, the studio displays its historical record of production to foster pride.

Rooms for the developers to hang out, chat, and share ideas are furnished with comfortable furniture. Some of the rooms are constructed in a flexible mode so that they can perform such different functions as mobile video conferencing or presentations. There are

showers in the studio for the use of the developers during crunch or after coming back to work from jogging outside, also possible thanks to the flexible work environment. Certain days of the week are designated for special kinds of breakfast; coffee and soda are available all the time for free. A kegerator with a joystick tap serves the developers when they crave beer. Drinking is indeed an important cultural aspect of the affective workplace; beer is served during team meetings on Fridays. If there is a new employee joining the team, s/he is welcomed with a big round of applause. Important milestones are celebrated with food and drinks. Food is particularly important during times of crunch, and holiday parties are organized, sometimes in the form of potlucks.

Developers are free to play games during their lunch breaks or simply when they feel like playing a game. They also play games during crunch so as to concentrate again and go back to production. The studio has a game library, which can be used for "research." Employees can check out films for inspiration, as well. There are many arcade machines in the studio, and a major passion of the developers is board games, which one can see developers playing in the studio. The studio also has a poker table for those who love card games. Nerf gun wars do take place in the corridors. In fact, one employee's spouse described Super Mario, with its fun-filled moments, jokes, and male-dominated environment, as a "fraternity house." While she was teasing her husband with respect to how much fun he had at work while she did not, it became obvious again that the studio aimed for the creation of a laid-back work space which crystallized the "new spirit of capitalism" (Boltanski & Chiapello, 2005), the critique of traditional habits of work, and the spectacularization of work.

For instance, my first meeting with the developers hinted at what we might call "the Hollywoodization of labor practices." The meeting took place in a movie theater, with "Super

Mario" written at the entrance of the theater. During the meeting, the president and the vice

president of the studio informed the employees about the company's performance from the

previous year. However, the employees had a surprise guest: me. My photograph was projected

on the wall of the theater as an introduction. I stood up and waved my hand to the crowd, which

in turn welcomed me with warm applause. This Oscar-like gathering would continue with

announcements of the year's awards. The awards for rookies of the year and design excellence

started the ceremony. As the winner of the award for artistic excellence was announced, the

emcee said that it was passion and fun that led to hard work and if they lost it, they would also

lose productivity. Awards for production excellence, quality assurance excellence, and service

excellence followed. The award for service excellence – or perhaps better termed affective labor

– was given to a female employee who was described as helping employees to overcome burdens

related to their families, implying the leaking of work beyond the workplace. The award for

technical excellence was for the programmers, whereas outstanding achievement was

transdisciplinary and awarded for ideas that are not crazy but rather for ideas that were

implemented. Another female employee, regarded as the person with the most impact in the

company, was given the President's award.

Viewed against this background, what do working and playing in the same place mean?

How can we interpret developers walking around without shoes or wearing T-shirts saying "I

work to support my videogame habit"?, Paolo Virno's *A Grammar of the Multitude* suggests

that:

> The informality of communicative behavior, the competitive interaction typical of a
> meeting, the abrupt diversion that can enliven a television program (in general,
> everything which it would have been dysfunctional to rigidify and regulate beyond a
> certain threshold), has become now, in the post-Ford era, a typical trait of the entire realm
> of social production. (2004, p. 59)

In addition, Nicole Cohen (2008)'s deployment of Michel Foucault's notion of biopolitics help

us understand the strategies for the constitution of the "Hollywoodization of labor practices."

Foucault describes biopolitics as a shift in the exercise of power where life is foregrounded over

death; life is harnessed for the purpose of regulating populations, with the intention to "invest life

through and through" (Foucault, 2008, p. 139). We can see this goal in Super Mario's celebration

of the creative workplace as the constitution of an affective workplace where freedom is

fostered. Foucault develops more fully his idea of the relationship between capitalism and

biopower:

> This bio-power was without question an indispensable element in the development of
> capitalism; the latter would not have been possible without the controlled insertion of
> bodies into the machinery of production and the adjustment of the phenomena of
> population to economic processes; … it had to have methods of power capable of
> optimizing forces, aptitudes, and life in general without at the same time making them
> more difficult to govern. (2008, pp. 140-141)

As Nikolas Rose (1990) rightly argues, the interest in the efficiency and subjectivity of the

worker is not a new phenomenon. However, it also needs to be acknowledged that, particularly

in the present moment of digital capitalism, there is a global effort to create open workspaces for

regulating immaterial labor.

If the push from upper levels of policy to develop a creative economy is one factor

driving this trend, the backstory of the development of video games from slacking at work into a

profitable and global industry is also to be noted (Dyer-Witheford & de Peuter, 2009). In this

sense, work in creative industries and specifically the game industry is no longer only restricted

to financial gains or workplace solidarity. As Rose (1990, p. 103) posits, "the worker is an

individual in search of meaning, responsibility, a sense of personal achievement, a maximized

'quality of life'." In the new context, what is at stake is the rise to "a new, international, and self-

consciously progressive politics of the workplace" In the present moment of biopolitical

production, as Rose writes:

> The management was to work on the ego of the worker itself… the task of the leader was thus not to force individuals to comply but to raise them to higher levels of motivation and morality, to be an expert in the promotion and protection of values, to give lots of space to employees. (1990, pp. 112-115)

It is ultimately in this sense, I argue, that biopolitics is a useful term to overcome the dichotomy

between *controlling* immaterial labor and *harnessing* its creative potentials. The term biopolitics

allows one to understand controlling and harnessing as an integrated strategy rather than being

mutually exclusive. This is important precisely because these two seemingly opposite actions

converge in order to produce subjects who are happy to work long hours and *not* say "God, I

have to go to work today," as a game developer once told me.

Thus the creation of the workplace-as-playground is more than a functional response of

management to immaterial labor. Rather, as Nikolas Rose (1990) argues, these workplace

strategies are tightly linked to political power exercised at a broader level and in this respect,

biopolitics allows us to understand the creative workplace as "home away from home" (Albom,

2013), in which perks are never merely perks but are strategies that put to work the playful

subjectivities of immaterial game labor. It is within this regime of biopolitical production that the

egos and productive capacities of the developers are harnessed by the creation of a spectacular

workplace within which they work and want to come back, or keep working even when laid off,

as a tester later told me.

Mundane Objects in Affective Spaces: Materializing Immaterial Game Labor through Photography

In the first chapter, we saw how the paradigmatic immaterial laborer performs on a computer

using his/her cognitive skills. Thus far in the present chapter, we have also seen that one of the

strategies to harness creativity in game development is the creation of affective and aesthetically designed workspaces in which work melds with play. One of the difficulties of my research was excavating game developers' emotional and affective relationships to their colleagues and to their work environment. More specifically, traditional interviewing methods and participant observation at times proved to be insufficient to understand the relationships between aesthetics, the ordinary aspects of objects, and performing work in high-tech environments.

To overcome this difficulty, I used photography to bypass the "limitations of language as a medium of articulating aesthetic experience" (Warren, 2002, p. 224). While creative workspaces are cultural economies within which the desire to be creative is encouraged, it is not always easy to address how the flow of this desire takes place among mundane objects. How does one understand desire and affect in highly aestheticized and individualized workspaces filled with objects? How can we better understand and situate ordinary objects vis-à-vis the formation of immaterial labor?

Making use of Samantha Warren's (2002) method of photo elicitation, I asked game developers to use their cameras and "Show me How It Feels to Work" in the game studio. The game developers' image based narratives I assemble below from photo elicitation materialize the mundane but equally affective processes within which they work and imagine their work. Discussions around immaterial labor (Hardt & Negri, 2000; Galloway & Thacker, 2007) have mostly remained at a theoretical level and have thus missed the role of ordinary objects in the constitution of work practices. In this respect, photographs visualize and stabilize – even if for only a second – the highly fluid experience of immaterial game labor. This is important because immaterial labor is not only performance *by* the self on the computer but is also performance *of* the self within highly aestheticized and individualized cultural economies that are. Immaterial

laborers, in this case game developers, perform among things that are more than dead objects.

Perhaps more than ever, in the contemporary moment of biopolitical production in which

"capitalist production has . . . directly appropriated the production of culture, beliefs, and

desires" (Read, 2003, p. 2), "economies must be engaging" (Thrift, 2010, p. 290). Thus these

image-texts are a highly useful tool to reveal the power of objects in the constitution of affect,

desire, and labor in the gaming industry.

These three (affect, desire, and labor) cannot be thought of independently from each other

precisely because of the dynamics of biopolitical production within which subjectivity becomes

one of the primary, if not *the* primary factor of production. As Gilles Deleuze and Felix Guattari

argue,

> there is no such thing as the social production of reality on the one hand,
> and a desiring-production that is mere fantasy . . . the truth of the matter
> is that social production is purely and simply desiring-production itself
> under determinate conditions. (1977, p. 29).

That is to say, it is through a dialectical understanding of the messy relationship between labor

power and desire that we can begin to reveal the power of mundane objects in the affective

workspace of the studio. These objects, as the following image-texts demonstrate, participate

within the relational space in which affective encounters take place with other human beings,

objects, images, and representations. While the term "affect" implies force, I deploy it to

underline the mundane. As Melissa Gregg and Gregory Siegworth argue in their introduction to

The Affect Theory Reader, "it is quite likely that affect more than transpires within and across the

subtlest of shuttling intensities: all the miniscule or molecular events of the unnoticed. The

ordinary and the extra" (2010, p. 2). Photographs thus underline the affective power of the

mundane in their capacity to enact us, stop us, direct us, and engage us in productive relations

because labor power – the unique commodity in capitalism – is relationally constituted and

energized by such encounters as part of everyday life. A materialist understanding of affect and desire, in this sense, takes everyday life seriously, as suggested by Henri Lefebvre, who has insisted that social theorists must "examine not just institutions but moments – moments of love, poetry, justice, resignation, hate, desire" (Seigworth & Gregg, 2010, p. 20; cited in Marcus, 1986, p. 79).
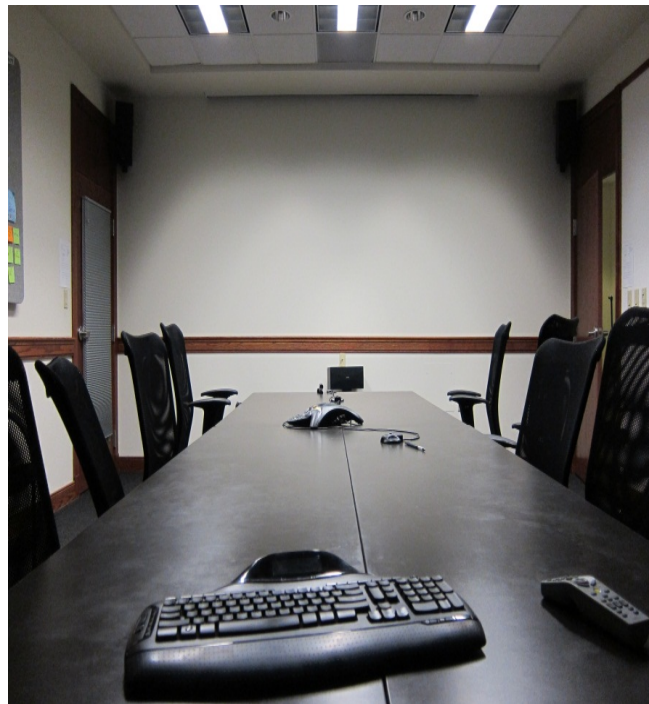
Figure 2: Spaces of Potentiality
Design Director: "To me, the most, the number one important feature of this shot, … is that blank white wall in the back because that is essentially the canvas that we use to project … that canvas can be, that space can be … with other images, with whatever else is happening in that room, whatever kind of discussion is going on in that room or whether it's a teleconference, whether it's more of a presentation or a meeting where, you know, work is being done. A lot of things just happen on that surface, on that blank wall. You know, that's, in a sense, it's kind of like a space of potentiality".

This photograph of a blank wall is from a room in which game developers met to discuss various issues. When the design director sent me this picture, I was surprised because the first quick look at the picture only shows an empty wall with a keyboard surrounded by empty chairs. Taken by the design director of the studio and from his gaze as a major actor in design decisions, the photograph illustrates the empty wall as a space of potentiality where the desire of the designers

128

and other developers materializes. It is this blank wall on which affective and competitive

encounters between developers take place in a contested way. It is on this wall that potentialities

of ideas, desire, and labor converge hopefully to make a successful game, which in turn will

relieve the developers' anxiety about their potentially precarious situation (see Chapter 7).

Photography also reanimates or reincarnates dead objects and, via their memorial effects,

enables stories that reveal major shifts over the history of the studio. Image-text two (below)

evokes the transition from a garage studio to a more corporate structure and evokes the

amateurish spirit behind game production. The image prompts reflection by the developer that

reveals video game production as a realm of passion, desire and dedication, which were key to

the initial success of the game studio.

Figure 3: Reincarnation of the Desks
Tech Artist: I think, actually it wasn't until we moved into this building that we actually have what most people
would associate with an office. Up until then, it was, your 30 dollar banquet table we had bought at Staples.
Ergin: Do you have any memories from that day? Like moving, things being dismantled?
Tech Artist: It was pivotal because up until that point, any time we moved, we moved ourselves. So, the president
would get a truck, we packed up all our stuff and then one of the guys would just drive the truck to the next office
and we'd unload it. But when we moved here, they had movers. It was kind of this big transition moment … We
didn't really do any of the moving ourselves. There was, that was like the big disassociation point because we're no
longer moving ourselves.

Nigel Thrift argues that in the contemporary moment of digital capitalism, "the boundaries

between alive and not alive and material and immaterial have become increasingly blurred, so

that what is considered as alive can become thing-like and what was considered as dead is able to show signs of life" (2010, p. 296). Indeed, the desks above were "buried" in the storage room and only came back to life through photography. Yet the developers still relate to these "dead" objects, which embody past social relations, and have the potential to fuel labor power by way of nostalgia.

Just like the photograph above, image-text 3 below, taken by an art director, gives life to "dead" objects. I juxtapose two images in order to reveal the extent of friction and quality of life with respect to immaterial labor enacted through dead objects and mundane spaces. Indeed, a chair is never just a chair, nor is a crack in the parking lot.

Figure 4 Chair and the Crack in the Parking Lot
Art director: I was joking with my wife because I was telling her about this project and I was like 'You know, I spend way more time in that chair than I have in furniture in our house' (left)
I wanted to get a picture of the parking lot at night. That's kind of what I wanted. You will see it at night. There are certainly people who have done crazy nights and certainly other game industry stories. Things like that. I've done, I feel like, my fair share of crazy late nights, as well (right).

While no different than any other office chair, this photograph narrates "the work as play" ethos, a foundational pillar of the gaming industry. No matter how aware we might be about this ethos, the photograph of the chair embedded within computers and post-it notes reveal the extent to which the developers work long hours and are involved in creative processes. This empty chair

makes even more sense with the juxtaposed photographs below, revealing the machinic

subjectivity of immaterial laborers in the studio and their desire to simultaneously enjoy while
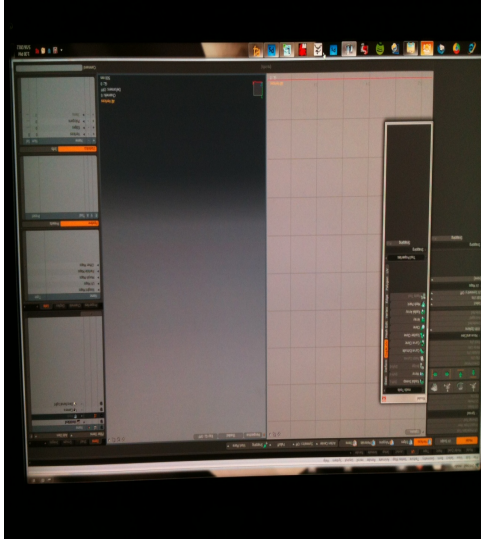
also detesting those machinic moments.

Figure 5: The Machinic Canvas and Moments of Escape
Artist: That's the world that we live in. It's my canvas … I don't really work on any other medium other than what's
on that computer, you know … This schedule thing is this overhanging, overseeing, omnipresent thing that's always
there, letting us know that okay, your time is creeping down, like, this is how much work you have, this is how
much work you don't have … Anything outside this little area, it just disappears. External studio relations are just
cut off … You don't really think of it as a machine. You take it for granted (left).
Art Director: I guess, being an art director in particular, being a lead on the project. It's just constant influx. People
coming to your desk, and email. Like email bucket load. When you look at Super Mario, it seems so laid back …
I've described it to other people like 'it's being a lead on a project is a little bit like being on a roller coaster (Right).

The computers and development kits – which are both magical commodities and ordinary objects

in the game studio – are *things* about which the developers are highly passionate. They are

mentally and emotionally invested in these machines that are most of the time "taken for

granted." They constitute spaces for work, potentialities, joys, and frustrations. However, it is

also through the same mundane computer screen that one can understand how other team

members are doing in terms of schedule and work dependencies. In this respect, the screen

means a list of pressing tasks in line and an implicit form of control for project managers. It is

these same machines that sometimes restrict their interaction with the outside world, for which

they also have a longing, as the art director mentions above, describing game development as "being on a rollercoaster."

Ultimately, this section has emphasized the importance of photography for excavating the mundane aspects of objects and spaces that constitute the business of gaming as a rollercoaster. If creative workplaces need to be engaging, they are constructed not only through "perks" but also through the productive capacities of ordinary objects and material culture that interviews cannot easily address. The ordinary goods and spaces in and outside the studio, through the photo elicitation, have proven to "not just provide evocations of times past or moral reckoning but affective senses of space, literally territories of feeling" (Thrift, 2010, p. 292). It is this affective economy through which extraction of surplus value is not only maximized but also rendered as fun and invisible among ordinary objects. In the next section, I further explore the dynamics of being on "the rollercoaster" on which labor of love, with its joys and frustrations, unfolds in the field of creative production.

Playboring on the Rollercoaster: Game Development as Labor of Love and Battles to Fight

The field of game development simultaneously involves the joys of riding a rollercoaster and its dizzying effects, which are further accompanied by battles to fight against other disciplines. In a general sense, it is "extremely hard and very collaborative" (Dyer-Witheford & de Peuter, 2009, p. 56). The collaborative aspect of game development is important to note in that the rewards the developers enjoy are not always monetary. As much as they enjoy bonuses or complain about the amount of the bonuses, there is an "emotional draw" (Dyer-Witheford & de Peuter, 2009, p. 56).

Both during the school visits that the developers organized with the surrounding educational institutions[34] and my interviews, it became clear that the developers love producing

---

[34] Passion at work does not stay in the studio and leaks into surrounding educational institutions. During the course of my study, I participated in two educational visits organized by the game developers. These visits represent a spill

video games. In the business of developing video games, passion is the Bible that everyone

should possess, pursue, and preach. In a survey conducted at the studio, 36 % of 109 participant

developers strongly agreed, and 28 % agreed to the statement "working in the video game

industry has always been my dream job." Despite the uncertainty and precarity the same survey

revealed, it also showed that developers had from an early age begun dreaming about working in

the industry, which gives them the opportunity to be self-expressive and creative. As emphasized

in studies by Adam Arvidsson (2010) and Gill & Pratt (2008), employees in the creative industry

feel very passionate about their jobs despite low levels of pay or high levels of precarity. This

"vocabulary of love" (Gill & Pratt, 2008, p. 15) can partly be explained by "the ideology of

creativity" (Arviddson, 2010, p. 297) as a "material and concrete" reality and practice. For

Arviddson, the ideology of creativity is vital for the construction of a creative self, which is

comprised of "motivations, self-image, notions of the value of his or her work, coolness" (2010,

p. 297). Along similar lines, cultural studies scholar Jim McGuigan (2012, p. 431) has underlined

the importance of "cultivating popular consent" in establishing hegemony for a capitalist system.

McGuigan's genealogical work on the word "cool" and exploration of the essential traits of the

cool persona reveals three major features: "narcissism, ironic detachment, and hedonism." These

traits are combined with a strong work ethic that is rendered ludic with other factors such as

---

of "affect" into the school setting where "production of glamour" or what Adam Arviddson (2010) calls "the ideology of creativity" can be sharply seen. The developers exchange their views on game development with young college students and boost their passion about games. These visits are particularly important to keep the production machine from stopping in that the desire and attention of potential developers need to be harnessed for the perpetuation of glamour with respect to game development. These visits reveal the dynamics of the creation of the ideal post-Fordist worker (Weeks, 2011). During the visits, the developers again and again underlined how cool their colleagues were. A recurring suggestion was that while education mattered, what really mattered was "teamwork" and "managing other people." Being willing to keep improving one's portfolio, cultivating good relationships with other developers, and not being a jerk since industry is small were some of the affective skills emphasized as necessary for prospective developers. Indeed, passion is key to employment. As a developer told the students, if there are people with equal amount of skills, the person who is hungry and ambitious will be hired. Ultimately, the implication of these visits is closely related to the construction and experience of game development as a cool job since it is through these visits that the virtues of performativity, networking, and self-branding are communicated to younger generations, whose exploitation is only possible through the perpetuation of glamour.

"creative lifestyle, a common world, intense socialization among colleagues, the occasional celebrity moment" (Arviddson, 2010, p. 305). These are the discursive features of the game development community, communicated across generations, that are important to underscore because the developers enjoy building community and working with other "nerds."

To what extent, though, do these narratives represent a historical departure from any traditional white-collar profession or from the stereotypical romantic artist who is attached to her work? In *Work's Intimacy*, Melissa Gregg traces the literature from C. Wright Mills's (1951) *White Collar* and William Whyte's (1956) *The Organization Man* to Alan Liu's (2004) *The Laws of Cool: Knowledge Work and the Culture of Information*, showing the almost obsessive nature of white-collar professionals in relation to their jobs. In this sense, one could argue that there is nothing particularly special about the gaming industry. However, what is important to note in the gaming industry is the emotional and affective aspects of labor as historically underlined by feminist scholarship (Hochschild, 1983). As we have seen, video game workers require peers to love the job and to feel passionate about it; feelings need to be regulated, directed towards outside, and shared with fellow developers. For instance, sometimes one needs to act like a "clown," as a developer once told me, and cheer up the others during crunch time and tell them how awesome their work is. Kathi Weeks points out at length the affective nature of immaterial labor by linking post-Fordism to contemporary practices of creative labor:

> If originally the work ethic was the means by which already disciplined workers were delivered to their exploitation, it serves a more direct function today: where attitudes themselves are productive, a strong work ethic guarantees the necessary level of willing commitment and subjective investment. Especially in the context of service work and work with an affective and communications component, the individual's attitude and emotional state are considered crucial skills, along with empathy and sociability. (2011, p. 69-70)

It is through the experience and mutual construction of such feelings as coolness, passion, and commitment that the game developers feel partly compensated, as well as end up "being the architects of their own better exploitation" (Henwood, 1997, p. 22; cited in Weeks, p.70). It is precisely because game development is about love and not drudgery that the art director, in my first interview, told me that I should ask other developers whether they love what they are doing, because if they do, then that means "that they can ride the rollercoaster, because game development is a rollercoaster." Indeed, while game development is constructed as a ludic and profitable business, Matthew thinks that the reason for entering the industry is beyond money:

> A lot of that is internal. It's just passion for games. We love games. …
> That passion, it has to come internally. And I think that's what drives us
> to put these insane hours.

The rollercoaster is full of both uncertainties and joys in creating something that millions of people pre-order. The joy of Siva – a lead designer – reveals how emotional the field of game production can be just like parenting:

> I've got two kids, okay? It's almost like having a baby. You watch it
> grow, you watch it start off incapable of doing anything. And then it
> learns more and it learns more and you try to guide it and so on and so
> forth and finally end up doing you're proud of.

The "child" analogy is quite powerful. Who would ever want his/her kid to fail even if s/he is frustrating like Mission 4 that Siva had designed? Moreover, parenting is not the only analogy; "Fighting battles" is another. Despite being part of the same "army," each discipline fights battles against each other in addition to the war against the competitors. Silvio, a designer who went to a design school at a later stage of his life because he loved video games, describe some of those battles with an artist in relation to a feature in the game:

> He said, "No, no, no, no, that's been signed off. You can't change it, it's
> gotta be this way." I want it, he doesn't. He's overloaded... The boss in
> question at the time was on his side because he's gotta worry about

deadline pressures. He doesn't want to add work to anyone. I don't want
to add work to anyone either but the game play just sucked . . . It's good
to win because you want, as a designer, you want the game to be fun.

For the designers, what matters is whether the game is fun. The artists, on the other hand, are

passionate about aesthetics to the extent that they would tell me that they couldn't leave behind

some of the assets they worked on precisely because they got so attached to them. Apart from

fighting against other disciplines, artists also had concerns about the contradictory nature of

commercialized art production. While it is hard to say that the artists had an anti-capitalist

attitude, some of them were more explicitly critical of the processes through which they lost

control over the labor process especially because of outsourcing where they ended up managing

their fellow artists in China, or due to the fundamental logic of production under temporal

disciplinary logics.[35] Chris, a senior artist said:

Art becomes less art. Art becomes an asset. It becomes an asset that's
scheduled, that's expected to hit a mark at a certain time. And, there is a
dollar amount on that. It's like, next, next, next . . . It's not the death of
the artist but it kind of is. We're asset managers. We make stuff, and
move on. It's an assembly line. It's produce, produce, produce.

Does this logic of assembly line apply to programmers who "have to translate art and design's

ideas into an implementation of some sort"? Not really, since coding for game development is

generally a very open-ended process of problem solving. It is not quite easy to break down and

standardize tasks for coding in game development, as Matthew states:

---

[35] Art is the primary discipline that is most involved in outsourcing. According to the associate producer responsible
for managing outsourcing – among other things – 9.73 % of total development budget is spent on outsourcing and
the items are as follows: 2D Art Concept Outsourcing (0.60 %), 3D Art Asset Outsourcing (2.85 %), Cinematic
Outsourcing (5.81 %), In-Game Motion Capture (0. 57 %). The studio is primarily involved in art outsourcing not
only because of financial reasons but also the nature of the art work that is outsourced and the scope of the games.
As the associate producer put it: because these games are pretty enormous and especially and the games we make, . .
. all the crap we have to build to get it done, there is a lot of it . . .The alternative to turn into outsourcers, to build all
these assets would be hiring or bringing on a lot of temporary staff, or full time staff that ultimately we wouldn't be
able to support, and we have to lay them off. And that's not a situation. That's not something this studio has
traditionally done." Outsourcing, I was told, not only initially caused anxiety around employment but also later on
led to a situation where the artists thought that it actually diminished their space for creating art and turned them into
managers. They had concerns about getting lost in spreadsheets.

> There is a tendency for non-programmers to view programming as
> assembly-line work. Really, this can only be done for the simplest of
> tasks. For projects of the size we work on here, it's simply impossible to
> plan out work with that degree of certainty beforehand.

In this sense, programming the games of the scope produced at the studio is a job that involves

what the sociologist Aneesh Aneesh (2001) calls "unsaturated skills." In "Skill Saturation:

Rationalization and post-industrial work," Aneesh rethinks Harry Braverman's thesis of

deskilling in the context of programming. For Aneesh, in an environment in which tasks have

been converted into electronic symbols, there are two skillsets: saturated and unsaturated. While

saturated skills are about pre-determined outcomes, unsaturated skills leave more space for play

and ambiguity. Jobs that require unsaturated skill sets "resist complete explication, or

codification" and they imply "an implicit understanding of the problem and many possible ways

of its solution, even if within the framework of logical rules" (Aneesh, 2001, pp. 374-375). As

Ian – artificial intelligence programmer – said:

> When working on enemy behavior for example, it takes a lot of changes
> to get something that feels intelligent and threatening. It's not a simple
> process that can just be translated; it is an idea and making an imagined
> outcome.

It is not to suggest that the universal logic of capitalist production in terms of calculation has

been superseded. Rather, as Aneesh argues,

> the rationalization of skills, in the context of information technologies,
> appears both a continuation as well as radical shift from the earlier
> period. While it continues the tendency toward the efficient calculation
> and analysis – to the last detail – of each element of work, it also
> introduces a new element; that is, the conversion of tasks into electronic
> symbols. (Aneesh, 2001, pp. 369)

This level of unsaturation and ambiguity can lead to both creativity and frustration for

programmers. They do enjoy open-ended processes of coding but such flexibility might lead to

battles with art and design because when coding in game development is more about unsaturated

skills and more flexible labor processes, it becomes easier for designers to switch back and forth between decisions. Constantly shifting design decisions without adequate communication to the programmers becomes frustrating. This, according to programmers who would warn the designers that their demands are not implementable, would lead to "waste of work," as the programmer Pipa once described with respect to prototyping he did based on the shifting demands of the designers.

The rollercoaster on which the developers passionately embark is an experience that means more than financial rewards. While there are strong signs of the persistence of the strong work ethic and "calling" described by Max Weber, game development is also a field of cultural production that requires putting one's whole subjectivity, passion, love, affect, and desire into surplus value extraction. While there is little doubt that the "ideology of creativity" is at work, what needs to be underlined is the kind of affective labor that is operationalized in the industry. As Melissa Gregg (2009, p. 209) defines it, such affective labor refers to "meaningful and productive human activity that does not result in a direct financial profit or exchange value, but rather produces a sense of community, esteem, and/or belonging for those who share a common interest." In this respect, the labor of love performed by game developers constitutes a contentious field of production in which work at the simplest level is emotional (Hochschild, 1983; Mills, 1951; Weeks, 2011) in the sense that the personality and affective capacities of the immaterial labor are put to work. Battles are fought with creative egos; winning the battles further feeds the ego, which in turn fuels labor power. However, immaterial labor within game development still has its alienating moments where the most intimate and joyful creative capacities become subject to temporal discipline. Battles that are a sure win can be lost due to the instrumental logics of profit maximization, which quite often leaks into the domestic sphere, and

as we are about to see.

"Will Daddy Come to Our House?" The Cost of Passion at Work

Scholars studying political economy and labor within the gaming industry have addressed the

domestic sphere with reference to the infamous conflict of the EA Spouse (Dyer Witheford & de

Peuter, 2009). While the outcry of a woman whose husband worked for EA did lead the

International Game Developers Association to address the crisis with its reports on quality of

life, such cases have not disappeared from the scene of the industry. When 38 Studios in Rhode

Island went bankrupt in May 2012, a developer's wife wrote a letter to *Gamasutra*:

> Am I angry? You bet! I have been taken for a ride and am having to take
> a handout from the government for the first time in my life.

After this moment of anger, she then stated that her "husband is interviewing daily thanks to an

amazing industry trying to make up for what has happened." The letter by this disgruntled

woman articulates the affect, love, anger, exploitation, and also hope, within which the domestic

sphere operates. There is a dialectical relationship between the processes of self-exploitation of

developers at work and the construction of the identity of a passionate and supportive spouse at

home, which can be observed not only during times of crunch but also through the very

construction of video game development as a cool job that is respected in the broader society.

When it comes to crunch, it is the dialectical construction and institutionalization of certain

gender roles within the domestic sphere that legitimize labor relations at work. In this sense, it is

important to go beyond the workplace since the family is as important as the workplace for

producing and reproducing certain work subjectivities and performances.

The women I have talked to often spoke proudly of their husbands or boyfriends.[36] When

I asked them how they in a broad sense perceive their husbands' jobs, they would directly talk

---

[36] The interviewees under discussion are all involved in heterosexual relationships.

139

about how their husbands derive a lot of joy from what they do. Aisha (former teacher, stay-at-home mom), for instance, stated that "when he got to hired at Super Mario, it was a very positive thing because he always loved video games … it was so cool he got to work with video games because he loved video games." Mary, as well, mentioned that she was "very proud that he's found a specific niche within the game industry. He's on the GDC board of directors." Echoing both Aisha and Mary, Rose expressed how this was something that her husband "has always wanted to do."

Here, it might be useful to think in relational terms to see how the role of the proud and supportive wife materializes in relation to the creative work ethic of the game developers. They support and feed back into each other. While it upsets the spouses and makes it harder to regulate the domestic sphere when daddy is at work, it is the same discourse of a smart, hard-working, responsible, and creative husband that feeds back into the material construction of the supportive spouse. Indeed, when I asked another spouse – Sabrina – how she considers the positive and negative sides of the industry, she noted that one of the positives is the great skills that he can pass to their kids. In this sense, it is perhaps not a coincidence that Sabrina – who supported her husband's career aspirations and relocated to where he ended up finding a job – would cry when she told me that her husband's success during college was very meaningful for her. She narrated the story of seeing the poster of her husband's game in a store. When her husband got an offer from the current studio, Sabrina was not only willing to relocate with him but also cook for her husband's friends during the early days of the studio when they were constantly working hard to find a publisher. She would cook for them since "it was super important to him."

The fact that game developers' spouses are proud and supportive of their husbands does not necessarily mean that their lives are all rosy or they do not actually have a critique of the clearly gendered labor practices. Mary regards the game studio as a fraternity house:

> Every place he's been a little bit more different and a little bit more different culture, but the core frat house mentality carries through from my own perspective. Literally, he spent 10 dollars on batteries yesterday because his nerf gun was not shooting the targets, to the person he wanted to.

Sabrina agrees with Mary, who also adds that they are now "maturing." She ties the fraternity house features of the studio to the fact that this job is "like a little boy's dream."

There is, however, also an undesirable side to the fraternity house and that is crunch. In other words, the developers' wish to produce the most competitive and cool game on the shelves has a price. Aisha's husband's first crunch was really hard. He was not able to come for lunch or dinner and because Aisha was a teacher, she used to go to bed early, which would mean that she had "a month or two of really not seeing very much of him." In order to overcome this difficulty, Aisha would drive to her then boyfriend's office to have lunch with him. Now married with kids, no longer working, and relocated to their current location, Aisha's life is relatively easier because geography is now more helpful in the current setting.

Apart from these sacrifices, there are ways in which partners negotiate or develop strategies to alleviate conditions of hard work. It is a rule for the daddy to come home for dinner. An additional strategy during crunch is to take the kids to daddy to have lunch at a park. This is something that they did "almost every day during crunch time." Crunch sometimes becomes so intense that another spouse once told Aisha that her kid asked Aisha's friend: "Is daddy gonna come to our house tonight?" Indeed, when daddy is gone, it is up to the spouse to undertake more responsibilities and stay sane. Rose, who works as a principal in a school, describes crunch as the

141

time which is "like being a single mom and working full time." She does acknowledge that her husband helps whenever he can but crunch still "makes it hard on everybody when he's so busy."

One last dynamic through which women are overtaxed is the new media technologies, which accelerate or even formalize processes of homeworking. In *Work's Intimacy*, Melissa Gregg (2011) incisively demonstrates how contemporary forms of labor have come to leak beyond the workspace into the domestic sphere. Increasingly, capital is trying to extend the spaces of value production through online technologies. The lives of the game developers reveal the contradictory dimensions of the constitution of immaterial labor in the contemporary moment. Ellen's husband works from home and while at times it works great for the family, she has concerns as well:

> Being able to work at home has allowed him flexibility in his schedule, but it has also allowed him to work much more than if he worked in an office. I do not really like that he works so much. I have often tried to discuss with him that he does have a life/responsibilities outside of work. I have the biggest issue with him having 24/7 access to his job on the weekends, holidays or vacations. There has not been a day that I can remember that he has not done some type of work. It can be rather aggravating. I try to explain to him that holidays and vacation time are supposed to be spent relaxing and not working. He just does not get this.

Checking emails as a vital element of game development is indeed an issue. Aisha's husband, a producer, does check his emails regularly and that bothers her. Wendy, who has worked in IT for a while is not quite happy with the smartness of new technologies:

> It's annoying especially on weekends. We had to make a deal that if the kids are awake, the computer is off. I can't stop him from checking email or doing things on his phone, he might as well have the goddamn thing grafted to his hand ... Still, better at home than at the office because then I'll occasionally be able to see his face/spend time with him.

Then, homework can be regarded as the temporal and spatial extension of immaterial at work and during crunch. In other words, work and crunch are extended spatio-temporally through the new ICTs and ultimately invade nights and leisure time of the video game developers. What is even more specific to the business of game development is the blurring of work and play, in that the developers need to do "research," playing games at home. This does require spouses to enter into negotiation of leisure time and space, where the husband is mostly relegated to the basement as the office for "research." In this sense, women feel the necessity to regulate their husbands' passion and are critical of it. Viviana, who is married to a programmer and does not work, thinks that he blurring of work and play and the passion for work in general is troubling.

> The love of it [game development] is a problem. Actually, I think you can almost like your job too much. Because he's here all the time. And that's expected. It's extremely expected. You're expected to come in early, stay late, come in on Saturday, come in on Sunday, work from home.

No matter how much the developers work, their spouses are proud to be supportive wives and supportive moms in the domestic sphere. Nevertheless, it is important to understand their roles *not* within a framework of false consciousness. Rather, the gender role of being a supportive spouse is constructed in dialectical relation to the creative and cool game developer, whose job is envied and valued both materially and ideologically more than other jobs in the American society. It is this broader set of social relations within which a particular gender role should be understood. It might be misleading to understand hard work ethic as some kind of an internal drive. It is constructed through a masculine language and practices, which involves phrases like "the dream job" for which the game worker needs to be willing to sacrifice leisure time and family.

The hard work ethic is only possible due to the unpaid labor of women who take the time to meet their husbands at work when they are crunching. During crunch, women also ask help from parents or in-laws to sustain family cohesiveness. Finally, women are aware and critical of the way in which work leaks into the domestic sphere. They work together so as to limit leaking of work into leisure, or what Melissa Gregg (2011) calls "presence bleed." While women's unpaid labor is one aspect that sustains the hard-work ethos in the studio, the studio itself is developing new strategies not only to sustain this ethos but also respond to difficulties of measuring the productivity of immaterial labor and avoid potential domestic conflicts such as the EA spouse. The studio calls this new strategy the "flexible work environment policy," the implications of which I investigate in the next section from the perspective of governmentality.

Measuring the Productivity of the Immaterial Game Developer: Flexible Work Environment

After being bought out by Digital Creatives, Super Mario grew exponentially to reach as many as 230 employees. When a workforce of that scope is at stake, management becomes a problem, which was addressed by the studio at the first meeting (April 2010) I attended with the developers. During the meeting, management complained about "overcommunication," which could partly be overcome through the flexible work environment (FWE) policy. As a consequence, the studio decided to switch to a FWE policy, which required the game developers to be present only for 2 hours at the studio. As long as the tasks were completed within the schedule, the creatives were set free. While the developers needed for practical reasons to be more than two hours at the studio and worked their regular hours anyway, the new policy gave them the freedom to go jogging during the day, take their kids to school or hospital, or just not work if they were not feeling creative.

Another motivation behind the new policy was related precisely to the peculiar difficulties of measuring, capturing, and standardizing the productivity of immaterial labor within digital networks. Almost all of my interviews with the General Manager ended up with a his "rants about creativity":

> How do you stick that [creativity] into a 9-5 job, 40-hour week job? It doesn't work in my mind … People have creative moments. They might have them home, they might have them anywhere. Well, we want to keep that. We want to enjoy that. At the same time, we have to also make sure that dependencies and communication happen.

While this might sound like a mythical construction of creativity, there is also the material reality that developers work long hours and find themselves coding as they take a shower, as Pipa once told me. In this sense, the policy shift is not an ideological construct but a material response on the part of management to harness creative production in the game studio.

In addition to overcommunication and the problems with respect to capturing the productivity of immaterial labor, crunch was the other factor behind the studio's switch to a flexible work environment policy. As a lead designer also confirmed, the policy was devised "as a response to the company's first attempt at large scale game production, double the size of their previous games." When such expansion of the scope of production, labor power, as the unique commodity under capitalism, needs to take a break every once in a while. When it is not possible to halt production, then a FWE policy can be helpful:

> In the old days, it was always managed by hours. Are you in chair for 50 or 60 or 80 hours? 80 hours was always the worst. It's like you can't do more than 80 hours and it's counterproductive. Over time, it's just not healthy. What we want to do is we are not gonna be able to get away from that. We are gonna have to ask for more work in a short period of time. That's just life. That's what our business is about.

Game developers at the studio welcomed the FWE policy. The senior developers in particular, who have been embedded within production networks to embody important institutional and

professional knowledge for a long time, enjoy the spaces of freedom. Matthew is happy about

the policy that gets "team members personally interested and invested in the welfare of the

project." For him, such a work environment "supports and nurtures developers' natural desire to

produce good work," and identifying few "underperforming individuals" who "wither" and "fail

without constant oversight":

> Getting rid of people who cannot self-manage is actually a twofold win:
> not only are you eliminating a sub-par performer, but you are also
> eliminating the cost of managers having to constantly watch over that
> person's shoulder (Matthew, programmer).

> If they do fail their goals, then they're directed on how to change their
> behaviours or the appropriate repercussions occur to make sure the issue
> isn't repeated. (Vincent, lead designer)

Freedom does not always work in the intended ways, though. As one programmer who was laid

off once told me, "the flexible work environment is that it required me to exercise more self-

control because I technically didn't have to get into work until 3 pm."

Ultimately, the shift towards the FWE derives mainly from the complaint of the General

Manager who said "I can manage everything but productivity" and in turn wanted to create a

work atmosphere so that the developers "feel more driven to get their work done." The policy

can be thought of as a strategy of capital to capture surplus value by granting the autonomy and

freedom that immaterial labor very much enjoys. It indeed is a pedagogical exercise through

which developers *learn* to act as responsible employees who are on top of their tasks and

schedules. It is a "stronger cultural change," where, as Matthew quoted Spiderman, "with great

power comes great responsibility." Following Nikolas Rose, it could be argued that game

developers can be seen "no longer as subjects with duties and obligations, but as individuals,

with rights and freedom" (1996, p. 151). The fluid and playful subjectivity of immaterial labor –

to be found in the very genesis of the first video games (Dyer-Witheford & de Peuter, 2009) – is given the freedom to slack and be productive at the same time.

The ethical dimension of the FWE is notable, since being productive within the FWE becomes a matter of moral and individual responsibility. Seemingly "undermining" the expertise of the project managers and empowering the developers, the policy relieves the management of the responsibility to "babysit" the developers and invite developers "take control of [their] lives." The strategy of the FWE is, however, accompanied by one more strategy to boost the communicative capacities of the game developers: an in-house training through which the developers are taught to work on their communication, which in the industry, becomes labor, the dynamics and implications of which we will now explore.

Cultivating the Communicative Self, Learning to Have Crucial Conversations

This final section investigates the implications of an in-house training in which game developers participated to become better communicators in a complex organization with intense work rhythms. With its large workforce and flexible schedule, the studio at times acts very much like an MP3 player as described by Richard Sennett (2006, p. 48): it can "select and perform only a few of its many possible functions"; or, "the sequence of production can be varied at will." Especially during production of demos (for the media, the parent company, and E3), the developers will form a smaller team to produce what the studio calls "proof of concept" (POC). POC at a basic level refers to a vertical slice through which the developers prepare a demo of the totality of the game and ask for green light from the parent company. The particular POC I examine below was scheduled for a visit from the parent company and required particular sections of the workforce to be re-aligned with new and different tasks. The routine process was disrupted to prepare an outstanding demo for the visitors. The developers were constantly

147

reminded that the studio wanted the visitors from the parent company "to walk away … feeling impressed," as the producer put it.

To achieve this goal, a smaller team that would work closely within an intense schedule was formed. While the initial team consisted of about 40 people, the studio could "add/remove people as needed." In a way, POC represented a kind of state of emergency, because, "for team members working on POC 2.0, POC 2.0 work takes priority."

Despite starting with icebreakers and jokes, POC soon proved to be a complex and stressful process. From discussing whether to use the regular software or a spreadsheet for keeping track of tasks to the completion of actual tasks, the developers' attitudes made it clear that this would be a rough period of work. As a developer made it clear in the meeting, "all I wanna know is how much stuff there is left for me to do." One of the POC meetings was particularly important in terms of revealing the extent to which communication is very important to game development. When two artists raised their objections about the scope of the new POC milestone, the producer responded by saying that they were focusing on details. Then, the following conversation took place:

> Artist: No, these are not details but rather have to do with both the
> interior and the exterior.
> Producer (a bit frustrated): Plans change Dominic, things change.
> Artist: Okay, you drive it. Let's talk about it offline.

As Pipa later confirmed, "this was not the best meeting" and "sometimes meetings do get tense like that."

It is this intense and rapidly changing work environment to which communication is crucial. In a studio with this scope, employees might lose sight of the broader project unless efficient communication takes place. Similarly, communication is important during times of conflict. Game development, as an assistant producer put it, is "more of an orchestrated chaos;

people working simultaneously on different missions and activities." In the middle of this chaos, the developers can get "overfocused on what they're doing" and not tell their colleagues what their needs are. This is why the General Manager wants "people to *care* about the people around them."

It is against this background of stressful work and the peculiarity of laboring within communicative networks that the developers are encouraged to go through an in-house training called *Crucial Conversations*. Beyond being an ideological construct, this training reveals the importance for the studio of improving the linguistic and communicative capacities of immaterial labor so that it can function smoothly. As the analysis that follows will demonstrate, communication is inseparable from the laboring capacity of game developers, who are required to work in networks with their maximum affective and linguistic capabilities. It is vital for the studio to harness the communicative labor that the developers need to perform because it is through such pedagogical activities that the creative class can productively "know how to labor communicating" (Marazzi, 2008, p. 17) since in the informational workplace, communication, and labor have become one and the same (Brophy, 2008).

Crucial Conversations is designed to train the developers to handle intense and necessary conversations and "clearly communicate" what they want. The training addresses those "crucial conversations" that the developers have with "opposing opinions, strong emotions and high stakes." By assigning a book, implementing individual and group exercises, and showing videos, *Crucial Conversations* (Patterson et.al., 2012) teaches the developers to discover their natural tendencies: do you get angry or shut yourself off during crucial conversations? As part of the first step, the developers learn to get unstuck. The scale within which human beings operate, the training suggests, is silence and violence. It is up to the developer now to figure out where s/he

149

stands and work on his/her communicative laboring capacities. Apart from working on the self, the developers are also invited to focus on "pool of shared meaning," which is about "trying to get information from yourself and others." It doesn't necessarily mean reaching mutual agreements all the time. Rather, it is meant to ensure that everyone "contributes his or her two cents." "Anything less than total candor shrinks the shared pool, saps motivation, and dumbs down decisions," the tutorial says.

During the training, the concept of a shared pool of meaning was illustrated with a video where the boss was asking his employee to fulfill a task within an unreasonably limited amount of time, when he had already made commitments to his own bosses. This example sparked a great deal of conversation because as the human resources staff also mentioned, "it is the industry." No matter how unreasonable the demands might be, the developers were advised not to leave the conversations since it is harmful to the health of the company and relationships within the team. The harm is both affective and financial: having those crucial conversations saves "over $ 1,500 and an eight-hour workday for every crucial conversation employees hold rather than avoid" (Patterson et.al., 2012, p. 13). It is, then, a major component of their work for the game developers not only to be good at what they do but also regulate their emotions because emotions, as the training underlined, burst out for reasons of survival rather than contributing to the shared pool of meaning or improving one's communicative labor power.

Developers also learned to overcome their fears of being shut down. On the contrary, in a creative environment, a fluent team needs to be willing to challenge each other and not take criticism personally. In addition, the skills learned in this training were "starting with heart, learning to look, make it safe, master my stories, state my path, explore others' paths and move to action" (Patterson, et.al., 2012). Mastering these skills, the developers were told, would help

them fix problems on the spot and enhance communication as labor and communication with others. The training was strictly intended to teach the developers to be able to regulate their emotions and ask them to actively work on their own behaviors. As part of a team, they need to learn not to blame others since it is "toxic" and "creates cliques." We are the best person for us to work on since "we know us, we have access to us and we can change us."

The developers I talked to found the training useful. Otis – the studio design manager – told me that it was a good learning experience since he works with a lot of people in design and it was important for him not to fall into the "sucker's choice." He did implement some of the skills he learned when he had a conflicting situation with another designer. For him, the training was also useful since people in the studio really need to learn to "be vocal with the right people" and give constant feedback to each other. For him, the training underlined the importance of constant questioning, critiquing, and being proactive when it comes to tasks and work processes; there might always be alternative ways of doing things and therefore, constant critiquing is crucial. As he asked: "Is it the best way to accomplish the high level goal we're all trying to achieve?" Warren, a self-taught artist, drew attention to how the training was influential for teaching the skills to be a good team-member since "no one here works in a bubble." "Being plugged in" is important and the training taught him "where to look." After taking the training, he was able to effectively communicate with a fellow artist who was furious after thinking that he was being overtasked.

Thus, this training seems to achieve a couple of goals. First of all, it is part of constantly investing in and improving the communicative capacities of immaterial labor. For a large team to be cohesive, communicational labor is vital. The emphasis on the concept of a shared pool of meaning and teamwork also need to be interlinked in the sense that immaterial labor, with its

desire to have fun and be productive, becomes almost inseparable from capital. To put it another way, in the contemporary moment of biopolitical production, immaterial labor is asked to consider its communicative capacities as capital, which can be improved.

Thinking about how labor is constructed in this training goes beyond a calculation of the price of labor. Rather, as Michel Foucault notes in *The Birth of Biopolitics*, it means studying "work as economic conduct practiced, implemented, rationalized, and calculated by the person who works" (2008, p. 223). The worker is no longer "the object of supply and demand in the form of labor power" but "an active economic subject," who is now invited to harness his emotions, as well as manage other team members. Proposing that laborers turn into enterprises and their "wage is the income of a capital" (Foucault, 2008, p. 224), Foucault poses and answers an important question: "Now, what is the capital of which the wage is the income": it is "the set of all those physical and psychological factors" of the "active economic subject" (2008, p. 224). In this sense, a game developer is no longer a partner in a monetary exchange but rather "an entrepreneur of himself" (Foucault, 2008, p. 226). Emotions within the team, dispositions, and affective relationships all become skills to work through and invest in.

As Paolo Virno (2004, p. 12) argues, "in the post-Ford era, human communication has become the basis of cooperation in general," which is what *Crucial Conversations* broadly targets; namely, the productive capacities of language and communication. This is important for the game studio because language and the body have become inseparable in the creative workplace (Marazzi, 2008). Here, I understand communication not merely as the transmission of information or ritual (Carey, 1992); rather, in the gaming industry, communication is a laboring process requiring employees to be active subjects and to work on their affective work capacities. While transmission of information itself is indeed important, communication here is more related

152

to practices of governmentality. As we have seen, Studio Mario video game developers have a "high degree of adaptability to the changes of rhythm or tasks, a poly-operative kind of labor power that knows how to read the flux of information, that knows how to labour communicating" (Marazzi, 2008, p. 17). It is in this spirit that communication goes beyond the simple transfer of information and becomes labor.

Conclusion

This chapter documented various ways in which immaterial game labor's productivity is targeted by management at the studio. In order to harness the productivity of immaterial labor, management constructs a flexible and an affective workspace. It organizes in-house training sessions that invite the developers to work on ("invest in") their communicative capacities. These strategies demonstrate that engagement with immaterial game developers implies a transformation with respect to how one thinks about labor in the informational economy. Game developers are beyond workers that count only as one factor within production. Rather, they constitute passionate and communicative bits of capital, which are encouraged not only to display emotions and to communicate, but to also integrate them into production. In a way, immaterial game labor is now beyond how we perform our skills in the workplace. It has morphed into how well the developers communicate and how productively they are willing to communicate. The creative game developers, to draw on Foucault's analysis, can be regarded as *homo communicator* in that they are now enterprises which need to invest in their own communicative potentials to improve the labor process in the studio. As this chapter has shown, immaterial game labor operates within a networked and communicative totality to which real subsumption is central. Subjectivity of the immaterial laborer becomes productive. As Jason Read (2009, p. 33) aptly puts it:

> This subsumption involves not only the formation of what Marx referred to as a specifically capitalist mode of production, but also the incorporation of all subjective potential, the capacity to communicate, to feel, to create, to think, into productive powers for capital. Capital no longer simply exploits labor, understood as the physical capacity to transform objects, but puts to work the capacities to create and communicate that traverse social relations.

While their communicative subjectivities are put to work, the developers are also invited to become subjects who are proactive, self-responsible, passionate, flexible, and good team members who hold themselves and their team members accountable when necessary. Nevertheless, this self-regulation is not imposed from above but rather activated through the discourses, spaces, and practices of freedom. As Foucault puts it "the new governmental reason needs freedom; therefore, the new art of government consumes freedom. It must produce it, it must organize it." (2008, p. 63). In this sense, it is not that the immaterial laborers are buying into a governmental ideology. Rather, they are becoming active subjects through affective relations, spaces, FWE policies, and digital machines. As Alison Hearn (2010, p. 73) puts it "professional or creative workers identify so much with the aims and interests of their business that they […] become managers of it themselves." It is through the powerful constellations of these material forces that language, communication and subjectivity all converge into labor, from which the extraction of surplus value is maximized and rendered fun. Indeed, as Michael Hardt and Antonio Negri write in *Empire*, "today productivity, wealth, and the creation of social surpluses take the form of cooperative interactivity through linguistic, communicational, and affective networks" (Hardt & Negri, 2000, p. 294). Ultimately, what we are witnessing is an intensification of generalized and socialized creative labor, the discontents of which I will explore in Chapter 7. The next chapter, however, sheds light on the most vulnerable section of

the studio and explores the marginalized experience of precarious playborers *par excellence*:

video game testers.

CHAPTER 6

PLAYBORING IN THE TESTER PIT: VIDEO GAME TESTING ALONGSIDE THE
PENDULUM OF DREAM JOB AND DEAD-END JOB

Introduction

In the previous chapter, I documented the work experience of video game developers as the

exemplars of communicative laborers for whom there exist particular difficulties in terms of the

control, management, and measurement of productivity. These immaterial laborers, I have

argued, constitute a particular type of workforce for whom affective workspaces need to be

constructed in order to harness their creative potential and to capture value. As opposed to the

more privileged and skilled developers at the studio, video game testers (quality assurance or

QA) are decidedly younger than the developers and work under highly joyful but even more

precarious conditions, and they are the focus of this chapter. Testers are indeed part of the

workforce that has not been studied in detail in the field of video game studies. In one sense, in

the study of the political economy of communication, the field itself has mostly focused its

attention on media moguls like Rupert Murdoch and has marginalized the experience of low-

level workers such as video game testers.

The narratives from interviews support the argument that video game testing is a

decidedly temporary position appealing mostly to young people, who are passionate about video

games, have fewer occupational skills than the game developers (a.k.a the creatives) but enjoy

being compensated in terms of the symbolic capital of having a cool job and access to the

communicative networks of play. The testers hope that their temporary position will serve as a

stepping stone into the industry, provide upward mobility, and lead them to better careers such as

full-time testing, or programming and design. They operate along the lines of what Angela

McRobbie (2003) calls "the pleasure-pain axis" or what I will call "the pendulum between dream

job and dead-end job." When the youthful nature of the job is combined with the fact that performing this job requires relatively fewer occupational skills and can even be learned on the job, the outcome is labor precarity and the preservation of a large reserve army of labor. This depresses wages, disciplines the workforce, and limits the potential for organizing, precisely because testers feel "fortunate to have a job" in a highly unstable economic environment or even prefer this temporary job to jobs that come with higher wages and benefits.

Understanding the precarious experience of the testers is particularly important because what's missing from the more theoretical accounts of immaterial labor (Hardt & Negri, 2000; Lazzarato, 1996) is precisely the testers' very own account of this particular form of labor, which has multiple implications for analysis. In the first place, as Rosalind Gill asks with respect to new media work in Amsterdam, "what are we to make of someone who says they love their work and cannot imagine doing anything they enjoy more, yet earns so little that they can never take a holiday, let alone afford insurance or a pension" (2007, p. 9)? Secondly, video game studies have mostly focused on the work experience of game developers rather than this more vulnerable workforce in the industry. Thirdly, discussions of precarity in media industries have neglected the multiform nature of precarity (de Peuter, 2010) or created a very dualistic picture where one ends up with either "technobohemians or net slaves" (Gill, 2007). I thus foreground the experience of video game testers not only because they deserve it simply as a significant element within immaterial labor – which they do – but also because precarity in the creative industries is more complicated than the dichotomies that are only recently overcome within scholarship. Finally, in documenting the "playboring" (Kucklich, 2009) experience of video game testers, this chapter contributes to media and communication studies the concept of "degradation of fun." Following Harry Braverman's (1998) discussion of the separation of design from execution in

industrial production and his concept of the "degradation of labor," I introduce the concept of "degradation of fun" to address the ways in which passionate gamers are alienated from play and develop a more selective or instrumental way of engaging with video games.

The rest of the chapter is structured as follows. First, I define and describe what video game testing, as a hybrid form of work and play, entails and what the labor process looks like. This section is followed by a theoretical discussion of the concept of the "precog" as an exemplary personality of precarity in the creative industries and the value of this concept for understanding video game testing across "the dream job vs. dead-end pendulum." Drawing on Zygmunt Bauman's (2012) work on education in liquid times, I situate a majority of the precogs as part of the "ni-ni generation" (neither in employment nor at school) and discuss the overlapping of the youthful nature of the testers in its intricate relation to the construction of testing as a cool job – unlike industrial jobs – and the preservation of a reserve army of labor that depresses wages and disciplines the labor force. After documenting what it means to playbor along the pleasure-pain axis, I conclude with a theoretical discussion rethinking precarity for video game testers.

Culture and Playbor Process in The Tester Pit: Laid Back and Structured, Quantifiable and Surveilled

I began my fieldwork at the tester pit; where quality assurance (QA) employees work in a dim and densely seated room in order to use their development kits to test video games. While dim lighting in the room is the norm in the tester pit, the dense seating has to do with structuration at the studio. Testers are more expendable and are seated in a crowded workspace that is less spacious than that of the core creatives. All testers have at least two computer screens in front of them. Just like the popular movie *Grandma's Boy*, the tester pit is a laid-back, informal environment that blends work and play, and involves a lot of joking and laughter. This work

environment undoubtedly produces a certain amount of freedom from the formalities, hierarchies, and demands of a more "grown-up" space. Posters of games are hung on the walls. There is a hoop for the testers to organize free throw competitions. When I was in the pit one day, I saw a nerf gun and asked the QA manager what that was about. He said that it belonged to a former employee and began shooting other testers in the room.

As the place where professional work values meet laughter, the tester pit is also the location where people are called by either nicknames or last names. It is not uncommon to see testers walking without shoes and, in that sense, the tester pit does represent a kind of extension of the dorm room. As Cirose, a temporary tester, put it:

> This place becomes *a second home* at times and people have felt comfortable, or tired enough, to sleep over night in the studio … There are bathrooms equipped with showers that many employees frequently use before work and after, and often during lunch. Many play sports or go to the gym during lunch.

It does not take long for one to find canned food, beer, snacks, or soda next to development kits. Just like the dorm room, it is a setting where people work, play, and live. For instance, when *Call of Duty: Black Ops 2* was out, I was invited to a party in the tester pit where some of the testers played their favorite game in the multiplayer mode, commented on the new aspects of the game's giant franchise and enjoyed snacks and beer left over from an earlier party held during the day. As some testers were playing, others were working on their project.

The informal culture and laid-back environment is a significant factor that determines how the labor process is structured in the tester pit. Unlike the developers, QA is regarded as a "support group" within the broader labor process. For game testers, full-time positions are 11 people. Temporary workers constitute the rest of the testing department and their number fluctuates depending on the status of the current project. While they are a "key resource" valued

by the developers, they are also invisible and sometimes feel that they are treated like "second-class citizens" in terms of employment conditions.

While artists, programmers, and designers are the "core" creative class, the objective of testers is to help release a relatively bug-free game, or at least as bug-free as possible. The analogy that Eric, a permanent tester, made between video games and websites is useful in terms of defining what testing a game for consoles entails. Games of earlier eras would be a website of ten pages, whereas contemporary games produced by Studio Super Mario are a "million page [website], even though, it may not be extreme." There are many permutations in terms of how artificial intelligence interacts in an open-world game and that is where game testing is like "coming in and figuring out many different puzzles," said Eric.

Yet, as the training session I participated emphasized over and over again, testing "can be a fun job, but it's still a job," structured along the lines of the capitalist labor process. As opposed to the open and frictionless workplace mythologized in accounts of the creative economy and in popular representations, the field of testing is not a free-floating playground. On the contrary, there is a manager, below whom is a supervisor. These two employees are seated so that they can see the whole tester pit. Below the manager and supervisor are strike leads, who are more directly in charge of testers, relegated to different tasks testing such aspects of the game as the art, how it functions in multiplayer mode, and evaluation of standards and compliance. Apart from the workplace hierarchy, there are guidelines, workplace codes and attitudes that structure how testers should work. After the testers are given the tasks with respect to what they should be testing, they need to be able to "put what [they're] doing in words" or else they are "just playing." In this sense, the blurring of work and play make it necessary for testing to be defined in some specific ways so as to make this particular form of labor quantifiable and accountable

160

towards the completion of particular goals in a limited amount of time. However, temporary

testers like Ricky who always "tries to find an aspect of playing in it" since it just keeps him

"fresh and interested." This is especially a coping strategy when performing tedious tasks.

As we saw in the previous chapter, measuring the productivity of immaterial labor within

the communicative networks of a highly informal workplace can be a problem and there are

different ways of achieving this. First of all, a software program is used to streamline bug

reporting and make the labor process quantifiable. In this software, all the information about bug

reporting, bug severity, action taken, and bug status can be found. With the help of this software,

all employees in the studio can see the status of bugs, as well as the priorities and status in terms

of fixing them. In this sense, the software acts like a panopticon in which everyone's work

rhythm and productivity can be monitored. Similarly, testers report what missions they go

through and when on excel sheets. While upper management at QA is not directly involved

working with the testers, intermediary managers such as the strike leads can also simply wander

in the tester pit to see who is really working or "dicking around." Testers also sometimes

compete against each other, which ensures productivity through peer pressure and play. Melissa,

a temporary tester said:

> It's light hearted, it's not serious at all, but there is this sense of, you know other people
> are keeping a track, keeping track of other people at the same time. And usually at the
> end of the day, we joke around about who won for the day.

Additionally, there are ways in which peers can report each other to their managers via their in-

house chat system. Physical proximity also matters, as Cirose mentioned:

> It's kind of almost your neighborhood watch, kind of thing. The person sitting next to
> you, if they see you doing nothing all day, they'll probably get on their nerves. Like
> every now and then if you see someone just sitting on Facebook all day, which some
> people do, usually, I am pretty sure people will tell the strike leads.

Measurement of productivity also depends on what kind of testing is being done. As far as art testing is concerned, for instance, it is the bug numbers that reveal how productive a tester has been. Sometimes, testers will compete and "brag about" their bug numbers. For an employee involved in multiplayer testing, gameplay testing, or rendering, it is the quality of the bugs rather than the quantity. In the latter case, the process is more complex than just a screenshot; it requires the tester to break the game to understand "what's causing this, how often it happens" or whether it happens both in Xbox and PlayStation. With these bugs, testers will be bragging more about game crashes and complexity.

Attitude is an important factor in organizing the labor process in a laidback environment. While it is a fun place to be, having the right attitude while communicating with the developers is crucial. The testers have to construct themselves as "constructively destructive." What is crucial to being a desirable tester is to learn to break the game in creative ways, communicate them to the developers, and inform the developers about what impedes play in the game. Language is very important in terms of ensuring smooth communication of bugs and problems across the developers. Using the correct tense, giving accurate information regarding problems, actions, and locations, as well as making complete sentences, and avoiding "I" (because it sounds accusatory) are all important, as Eric would tell me.

In terms of structuration in the labor process and participation in creative decisions, QA's ideas are valued but do not always have the utmost impact. While they do verify the state of the game and communicate this to the producers, it is up to the producers to decide on the direction of the game or which bugs to prioritize in terms of fixing. At later stages of the game development, gameplay, standards, and compliance are prioritized over art bugs since, for the game to be shipped, it needs to be playable and not crash. My conversations with QA at times

162

revealed how their "support group" status upset them not only in terms of monetary benefits but also because of not being able to participate in creative processes as much as they would like.

To give an example, being a support group becomes an obstacle for them to fully benefit from flexible work environment (FWE) policy because their status and location within the broader labor process requires them to be "available to be there for people." This is not to say that the testers are not allowed to enjoy the FWE policy. Rather, their flexibility is limited, first by their position in the labor process and, secondly, by how their presence in the studio is controlled. As hourly & non-exempt employees, in the past, the testers had to use physical punch cards "that you slid into a printer and it would stamp the current time." Currently, they do this electronically but still cannot work from home like the developers can. Both of these features — the requirement that they record their hours, even if electronically, and that they work at the studio — subject them to a more regimented labor process. In that sense, the immateriality of creative labor and its fluidity does not apply to the testers.

Ultimately, as the extension of the dorm room, the tester pit and the labor process within it are regulated through a hybrid combination of formal procedures and cultural aspects that pertain to a playful workplace. Quantification through a software system and excel sheets, the gaze of and competition with peers enable the constitution of a disciplined and productive workforce. The labor force is also spatially and temporally controlled through the software system that has replaced the punch card system. Selected from a large reserve army of labor, the testers find themselves in a competitive environment where they check themselves in terms of bug numbers and bug quality. The labor process is further intensified during times of crunch. In this respect, while the labor process entails moments of creativity and fun, it also includes repetitive and mind-numbing tasks. The playful environment alleviates the feeling of a

163

regimented and strictly managed labor process, which, in this case is regulated through play and the material constraints of precarious employment to which I now turn.

Theorizing Precarity at the Studio: Game Testers as Precogs

As I have made it clear in chapter 1, precarity is not necessarily a new feature within digital capitalism. Rather, it is a hegemonic form deployed by owners of capital whenever it is necessary. It is a mode of being and needs to be seen beyond the short-term job contract. As far as how it is experienced at Super Mario, one could argue that it is relationally constituted through such processes as ownership of different levels of cultural capital and occupational skills, blurring of work and play, swinging between pleasure and pain (McRobbie, 2003), and the degradation of fun. How, then, can we classify precarity in the gaming industry?

Greig de Peuter suggests three personas within which precarity is materialized: the cybertariat (Huws, 2003), the autonomous worker, and the precog. Within this trio, precog, a term derived from the struggle of an Italian activist who attempted to unite precarious service workers and cognitive labor in the media and education, is useful for illuminating the experience of temporary testers. As de Peuter (2011, p. 5) vividly describes, "the precog, in its bid to cope, can adopt dispositions that make it not only a victim of post-Fordist capital but also a model subject of it." Precogs are characterized by the following traits:

> . . . self-driven, passionate, commitment to work; willingness to work for nothing; perpetual and personally financed reskilling; habituation to material insecurity; obsessive networking, bold enterprising behavior . . . the precog is a pragmatic adjustment to flexploitation. (de Peuter, 2011, p. 6)

"Precog" is conceptually powerful in the case of testers precisely because the latter operate along the lines of hard work and play, and epitomize the individual who aspires to get a permanent job in the industry. Testers are self-driven and serve as witnesses to the demystification of play. They suffer from uncertain futures but also enjoy the laid-back work environment and greater

164

financial compensation when they work overtime. They swing between zones of video game testing as a dream job and video game testing as a dead-end job, embodying both pride in the profession and a simultaneous awareness of the structurated nature of their labor. Enjoying their compensation in terms of symbolic capital, testers see themselves as decidedly different than blue collar or low-paid service job employees. Yet, although they aspire to become members of the core creative team one day, they do not belong to the middle class or upper-middle class club of the designers, programmers, or producers.

With their inconsistent and intermittent work histories, testers epitomize the most vulnerable workforce in the game studio. However, they remain completely committed to their work. Even when targeted as part of a massive layoff in 2009 (86 out of 102 were made redundant), they kept working until the end of the lay-off day because there was a lot to do. This was especially depressing, as a tester named Melissa noted, because just before the layoffs, the studio was aiming to expand the number of permanent QA positions, a dream devastated by the layoffs, and full time temporary employment was taken off the table. What is even more striking is that the testers' condition of precarity is now so entrenched among them that when the parent company filed for bankruptcy, they simply "shrugged it off," as Andy said, because they were already used to layoffs.

A major factor in testers' enduring precarity is their relatively young age. The testers I talked to have irregular work histories; they have worked in quite different types of jobs, sometimes doing "anything to get by," like George, a temp tester. Similarly, they had attended various educational institutions to increase their skills and sometimes had to drop out of school. Some temporary testers sustain their lives by being roommates with their colleagues. The testers can also choose to relocate and move back and live with their families when laid off, or reward

themselves "with a break and play[ing] a lot of World of Warcraft and enjoy[ing] the amazingness called unemployment [termed, 'Funemployment' by QA]," as Cirose once said. Not having families reduces the burden of temporary employment. Further, the youthful camaraderie enables the testers to get through crunch, during which they have an ethos of almost being in the trenches. With the material culture and experience of youthfulness, the testers both maintain their pride in their work and endure the hardships of job insecurity. While these insecurities are increasingly becoming part of work lives across the professions, degradation of fun is specific to the testers as part of the pain that demoralizes these particular workers and undermines their passion for their job.

Pain in the Pit: Degradation of Fun and the Contestation of Play

What happens when the dream takes a long time to come to an end? How is leisure transformed when "play" becomes work? What does the instrumentalization of play mean? Testers, as immaterial laborers, suffer from physical pain during crunch, where they work long hours for months. While compensated well financially thanks to overtime, they may not always have a social life to enjoy their financial returns. Secondly, and more importantly, as the line between work and play is blurred, symptoms of what I call "degradation of fun" occur because play in testing is instrumental, subjected to time discipline, and regulated by tasks laid out by managers. As the training sessions I attended revealed, in order to count as effective testing, "play" must be translated into tasks and become quantifiable. The logic of capital and its way of deploying technology to streamline labor and ensure surplus value extraction is at play. Additionally, testers' playing habits outside of work become more selective or instrumental since play becomes a tool for keeping up with the industry. While testers are still passionate about games, they go home, play games for an hour and then, like Ricky, are "ready to do something else."

Degradation of fun also occurs in convergence with precarity in that temporary employment undermines the joy of both play and work.

There are two primary ways in which degradation of fun occurs: instrumental logic of play and crunch. While there are strategies and practices that reduce the pain of crunch, the meaning of leisure is radically transformed when play becomes work. Over the years, the joy of playing games at home is diminished, as seen in the case of George:

> I have absolutely no doubt that the amount of hours you put into one game will diminish your desire to play others. 40 hours in a week, you might be able to get away with it. But the 70 hours a week, you just go home; like, I don't even wanna look at a computer screen. Just stare at the front door, just because it's not a computer screen.

Another tester, Ricky, says:

> You play the games differently, you're no longer just having fun, you found yourself to a degree testing, in terms of, you always trying to find, oh, what would this do? How can I break this? … It just kind of changes the way you play video games. That's the biggest downside.

There are instances where play becomes purely instrumental to keep up with industry trends, as QA Manager once told:

> I used to be that person who used to play games a lot at home. I still play games at home, but I go home now and I play games to keep myself up in the industry.

In this respect, degradation of fun refers to the processes, which reduce one's passion for games. Employees other than QA also experience degradation of fun. For example, artists and programmers told me that they do not even want to look at a game that they worked on for so long. However, in QA, there is too much exposure to the game itself, where work is structured to break the game in every possible way to ensure it does not crash after being shipped.

This has repercussions on how testers' leisure is structured. That is to say, playing games for fun is no longer the same experience: testers find themselves criticizing art, gameplay, and design decisions. Degradation of fun is at its extreme when testers need to work on sequel games

167

or games that one does not necessarily enjoy playing. The production of sequels is not uncommon in an industry in which production of new and original IPs means risky investments, and studios want to create reliable established titles. A number of employees have told me that, no matter how much the stories within the games change, they would prefer working with different titles rather than repeated iterations of the same titles.

Finally, degradation of fun is also clear in the tension between IP ownership, creative decisions, and QA's inability to have much impact on the labor process. David says:

> Whenever the corporate does something, it's probably gonna piss me off [laughing] because they always seem to do it outside of a passionate perspective.

"The distinction between passion and wanting something out the door to make money," in David's words, diminishes the fun at work because clearly, the corporate decisions are more tied to scheduling and finances. Whereas the parent company or even developers have more impact on the broader production process, testers are the archetypes of passion and desire in the production of games. When corporate decisions override the testers' aesthetic judgments and priorities, then, the pleasure they derive from development is diminished, and leads to major frustrations and a feeling of lack of control over the playbor process.

In addition to the more broadly changing meaning of play, degradation of fun particularly manifests itself during crunch. While testers "look forward to" coming to work at other times, crunch is an exception. It is the crystallization of pain in the tester pit. While there is the pleasure of being in the trenches, pain, bodily and mental, outweighs pleasure. Crunch comes with both nice paychecks and mandatory, long hours. As much as the mental and physical toll of crunch is alleviated in the playful culture of camaraderie, social life simply does not exist. Cirose and Ricky agree on this:

> Well, gosh. Crunch is really mind-numbing … We had no social lives, absolutely none … We're getting better paychecks but it didn't seem to compensate for the lack of a life you have.

> It really affects your life outside of work. You kind of don't have one.

Responding to my question "How was life during crunch?" George echoed Cirose and Ricky:

> You don't have one, you don't get one. I had huge paychecks and by the time I got laid off, I had all this money because I would go home, go to bed, wake up, shower, go to work, go home, go to bed. And that was my life for like 7 months and just don't have time to spend any money.

For Andy, crunch is "a necessary evil," but it won't be easily fixed. Crunch is the time during which the immateriality of labor just does not hold. Employees feel like doing more physical activities such as "playing Smash Brothers, air hockey, going downstairs, walking around the block" in order to alleviate the physical and mental pain:

> I'm so passionate about it but at the same time, like, just like 10 minutes. I wonder if I'd get fired for 10 minutes. I'll just tell them I'm taking an extra break and I'm going to lie down on the carpet. I mean really, mentally, you start to consider, what would I give just to take a quick nap? I remember people talking about going into the bathroom and like locking the door and like falling asleep just like sitting down on the toilet (Andy).

> While working here, I have developed a respect for working outside. Because I don't get to see nature that much anymore (Eric).

As we can see, the meaning of play is radically transformed as far as video game testing is concerned; contrary to the "ideology of creativity" (Arviddson et.al, 2010) that is materially at play through popular representations or government subsidies (Kocieniewski, 2011).

While testers come up with creative ways to alleviate boredom at work, play becomes work and the instrumental approach reduces play into quantifiable tasks. This in turn impacts the ways in which testers play games outside work. They either become more selective about what they play in their free time or they play games so as to keep up with the industry rather than purely for fun. These dynamics are even further exacerbated during crunch, which comes with

169

meaningful financial returns but may not mean much because of the lack of a social life. The degradation of fun along the lines of the structuration within labor process, then ultimately emerges as a major way in which precogs feel the pain of their labor. However, it is not the only form of pain. This pain of labor is partly caused by the existence of a reserve army of labor as a disciplinary force regarding wages and work hours, all consolidating precarity.

The Reserve Army of Labor of the Hopeful Testers

When I was discussing the reality of layoffs in the lives of the testers, management stated that they are not actually layoffs since the testers know from the beginning that this will happen; that is, they will be "let go." How does one actually understand this interpretation that a layoff actually is not a layoff? What conceptual tools do we have to deconstruct this language?

In discussing the "universal laws of accumulation," Marx talks about how the organic composition of capital will change where variable capital (labor power) will be at a disadvantageous position due to mechanization and technology. He argues that at some point, every mode of production will have a corresponding law of population and engages in a debate with Malthus and his theory of population surplus. At the heart of Marx's critique is that poverty within a capitalist society will exist no matter how many children working classes have. In opposition to Malthus, Marx argues, capitalist accumulation depends on the existence of a reserve army of labor, and states that "modern industry's whole form of motion therefore depends on the constant transformation of the working population into unemployed or semi-employed hands" (1876/1990, p. 785).

To understand the material conditions necessary for precarity among the testers, the concept of reserve army of labor is useful, since, when labor is increasingly deskilled or when there is a surplus population that can easily replace the employed population, layoffs can be used

as a threat, leading to overwork and super-exploitation.[37] As David Harvey argues, and as we can

apply to the case of the testers, "agreeing to work overtime sometimes becomes a condition of

employment" (2010, p. 275). Indeed, when taking a job, the testers are alerted to the fact that

they will be crunching, and are asked whether they are fine with that. Again, subjectivity is at

work, and passion becomes part of the labor power.

The construction and material experience of game testing as a cool job is an important

contributing factor to the preservation of a large reserve army of labor. It is the nerd culture in

the tester pit that appeals to the precogs; it is a "light-hearted" environment that people look

forward to coming back to after they have been laid off. It is a "once in a life time opportunity"

where "you're not doing retail, no customers to deal with" as Cirose mentioned. Indeed, when

asked to elaborate on their work experience in the studio, precogs would constantly compare

testing to other jobs that they previously worked at such as factories or restaurants. In

comparison to these former work experiences, testing involves a lot of ways of communication

as Steven, who defined himself as Grandma's Boy, put it:

> Like, especially, like in auto plants and stuff, where everything is so, the division of labor
> is so, very specific that, I mean, the only time I would ever talk to the other guys that
> were further up the line who are making parts … I had almost no contact with anybody.

The communicative capabilities within testing and the symbolic capital it brings, in this sense,

are important for the surplus population of testers, who prefer a temporary job without benefits to

a full time job with benefits. Andy (formerly full-time now temp tester) says:

> I would take a worse paying and awful job in game development industry over a job
> having nothing to do with game development.

---

[37] Marx states it succinctly: "The over-work of the employed part of the working class swells the ranks of its reserve, while conversely the greater pressure that the reserve by its competition exerts on the employed workers forces them to submit to over-work and subjects them to the dictates of capital" (1876/1990, p. 798).

The existence of major educational institutions nearby is another vector for spreading the news

of the game studio and production of glamour across younger generations through school visits.

However, perhaps the most significant constitutive factor of the reserve army of labor, is the

relative lack of skills needed to be a tester. This is precisely why one of the paths precogs can

take is to finish their degrees, or get more relevant ones in the field of game production while

laid off. As the QA manager once said:

> I mean you have to be very highly skilled to be a programmer. You have to have a lot of
> education. You have to know what you're doing, the experience. Again, you need the
> experience in QA and you need to, but it isn't something that, but so many of the people
> can learn and pick up … You have to have a mindset for it … but it's something that we
> can teach people, we can really kind of, we can hire someone and then teach them to be a
> good tester.

David points to a similar point with respect to skills:

> So like when it comes to QA, they aren't very selective, to begin with. Just because you
> know, like you said it was temp position and because there was a huge pool in that, most,
> most quality assurance testing that they want, doesn't require a lot, doesn't require like a
> high quality of work here.

George confirms David in terms of the relationship between the reserve army of labor and

depression of wages:

> If you have larger pool of people to draw from, you can lower the wage because
> eventually someone is going to be desperate enough to take the job.

Thus, when coupled with the construction of testing as a cool job, the symbolic capital it brings,

the relative lack of skills required to perform the job, family and personal connections to get a

"cool job" testing, and the existence of educational institutions nearby with ongoing cohorts of

potential recruits, testing's reserve army of labor becomes a useful analytical tool to understand

precarity. In a highly competitive environment where many young people want to get a job in the

industry, having a job makes one feel "fortunate" because as Cirose sharply put it, the industry

changes very fast and there are budget cuts and "if there is no work, then essentially there is no

172

job position for me." This in turn weakens the bargaining power of the worker and disciplines

him/her as well as habituating testers to overwork. Ricky's remarks are telling:

> One is that there's lots of people who want to do what we do. And two is, there isn't really a required skill set to get into the job. So it's anyone who has any desire to do the job, has a chance, at least can, can compete for it. So it, with those two factors, I think combined, to keeping the wages low, and the, kind of our, the attitude that we're replaceable or you know, a little bit not as important, I think.

It is thus not a coincidence that the studio keeps the record of previous employees and rehires

productive testers when they are needed again. In this sense, while testers are expendable,

preserving one's future value depends on how passionate and productive one is during temporary

employment. Additionally, the testers make sure not to burn bridges and are active on social

networking sites such as Facebook in order to try to come back to their beloved studio.

Despite the fact that moving outside QA or becoming full time is a quite limited

possibility and wages are depressed, hope of doing so keeps the testers' aspirations alive. When I

asked George, a temp tester, how it is that they do not look for alternative and more stable

careers, he said that it was "the hope that there's an end to being a temp." As hopeful as they are,

there exist feelings of expendability and this is what the next section explores as an inevitable

effect of reserve army of labor.

Expendability and the Sentiments of Second-Class Citizenship

When I started my field work in the tester pit, I got an email from the QA manager, who wrote "I

know we are awesome but are you sure that you want to spend that much time with QA? The

other disciplines might have more impact." This statement clearly reflects the under-appreciation

felt within QA particularly in terms of expendability and deprivation of the benefits granted to

full-time employees. Being hired when needed, then laid off, to be temporarily re-hired when

projects ramp up is of great concern to temporary testers. While they accept the fact that there are not enough full-time positions in QA, they do not refrain from expressing their disenchantment.

Moving out of QA into writing, Tim compared his new position to QA, where he said he felt "like a grunt worker, just another worker." Ricky and Cirose share Tim's sentiments:

> The fact that they brought me back says that they recognized that I brought something to the table. So in that, coming back was a little harder to come as a temp. And you definitely feel a little bit under appreciated when people are doing the same thing as you and they have obvious benefits. And then you feel a little bit, like those moments you feel a little bit like a second-class type of person.

> I was informed in August that I would be among the group to be let go in December, so I can answer your question very genuinely. It was shock. My morale has dropped since August. I feel unappreciated, expendable.

Cirose's situation was even aggravated by the fact that her layoff deadline was extended, which she considered to be "a cruel joke" especially because she thought she was doing well in terms of her bug counts. While the accounts of discontent are mostly about feelings, disenchantment is not restricted to emotions. It is intricately related to material in/security. When I interviewed Andy and asked him what it meant to be a temp employee, he straight out said "It's awful." He now has to pay for "health insurance out of pocket," whereas this was not the case when he was full time prior to being laid off in 2009. Apart from insurance, temporary testers are deprived of some other benefits (e.g. buying games cheaper) that only come with full-time employment. This undoubtedly paves the way for sentiments of second-class citizenship. Andy says:

> Here, the phrase second-class citizen is used a lot. I definitely agree with the sentiment. Regardless of their ability or their efforts to try and make it very fair and very like level, you can't help but feel like you are less valuable.

The feeling of expendability is further aggravated because of the skill gap that the testers have in contrast with other contract workers (such as artists) at the studio, who are also hired on a project basis but with different terms and conditions. Andy has more on this:

174

> Contract workers in other departments feel like mercenaries. They're elite and they're hired on to this one task. Whereas contract QA feel a little bit more like serfs. Like they're just sort of, you know, pushed into the position. I guess there is a lot of demand for their job. QA is looked upon as a very untrained field as opposed to any other disciplines.

When full-time was still a possibility prior to the layoff in 2009, feelings of expendability were entrenched through the reviews that came every 6 months. If a tester were regarded as desirable, then s/he would become full time. If the powers that be said no, it would take another 6 months to go through another review. For Andy, who was full-time before he was laid off, these reviews "felt really terrible" and "felt like they were kind of holding a carrot in front of you, and leading you on."

As the financial situation of Digital Creatives (see the next chapter) deteriorated, I met with testers again to understand what this meant for them. The financial downturn of the parent company accentuated the expendability of the testers.

> David: If the corporate was to sell off the studio to somebody else, who knows if that other, you know, publisher or whatever would keep the QA group with the studio.
> Ergin: Right. So the fact that things are rough for the corporate, means that this core group may not be here forever?
> Cirose: We would probably be one of the first to go … Cause we're expendable than the developers, I mean … We've been laid off before … There really is no job security in QA.

Job insecurity and the feeling of expendability is so strong among the testers that when Digital Creatives filed for bankruptcy, the testers only "shrugged this off," because as Andy said, "Worst case scenario, I'm fired again. So what damage can they do?" The auction week, for Andy, was not "an atypical week" because "that's always something that's on the table." In that sense, having been laid off before had immunized Andy towards potential layoffs. This is not to say that they didn't care about the outcome of the auction. On the contrary, the temporary testers

wanted a small publisher without its internal QA to buy their studio so that they could keep their jobs.

Being expendable, then, seems to combine with the carrot-stick reality, and is effective because of the desires of the employees who are so passionate about their jobs that they are willing to relocate or are happy to be re-hired after a layoff, especially at a time of economic recession. They are aware of the large – *and younger* – reserve army of labor, which is always a threat to their position in the studio. When aspirations to belong to the full-time club are not realized, disenchantment prevails. While sentiments of second-class citizenship are sometimes communicated to the management, the project-basis nature of game development hinders the employment of more full-time testers, along with the reality of a large reserve army of labor explored in the previous section. While being proud of their employment in the creative industries, the material reality of temporary employment in a way hinders the realization of creative dreams that the precogs have learnt to have within the affective networks of digital play since they were kids.

Conclusion: Rethinking the Precarity of the Testers

As Enda Brophy and Greig de Peuter write, "the employment stability associated with Fordism cannot be treated as a norm. Fordism was, on the contrary, an exceptional moment in the history of capitalism" (2007, p. 187). What seems to be new, though, is not its existence, "but rather the degree to which it has been generalized: post-Fordism democratizes exploitation" (Brophy & de Peuter, 2007, p. 187).

If we take this position as our departing point, how can we rethink the precarious labor of the testers? First of all, precarity is articulated with the material experience of fun and the informal culture that perpetuates temporary employment. Testers are aware of the fact that their

176

employment is primarily temporary. However, the informal culture at the tester pit enables them to have a good time until that cruel moment of unemployment arrives. Secondly, it is important to acknowledge testers' role as cognitive laborers within the gaming industry. Both in popular media representation and in the school visits that the developers organize, passion, perseverance, and dedication are constantly underlined to young people as the prerequisites for getting a foot in the industry. Despite their importance in the production cycle, as model subjects and as victim of port-Fordism, the testers symbolize an important and equally neglected workforce both in the gaming industry (Ramsay, 2012) and game studies. No matter how less "skilled" the testers might be, they are "central in terms of the financial and web of the creative value produced" (Foti, 2004). They are the workers that ensure that the game does not suck or crash, and thus their work gives the studio a good reputation.

In the case of the testers, it is also important to deploy the concept of precarity since it comes as a corrective to overly utopic notions of immaterial labor, and reinscribes friction, exploitation, degradation of fun, material pain, and pleasure into the labor process. While feelings of expendability abound among testers, they do not desire alternative modes of production or play; those feelings rather solidify the reserve army of labor. Testers prefer to entertain the prospect of temporary employment rather than search for full-time alternatives.

Additionally, precarity is not only dictated from above (Brophy & de Peuter, 2007) but also entrenched through the productive processes of play, acquisition of symbolic capital, and remnants of hope to attain a more secure position or a new temporary position in the future. The notion of hope is important for theorization of precarity since it is strictly tied to processes of voluntary production, excessive networking, and self-exploitation, undertaken with the idea that these will bring conditions of full-time employment, as demonstrated Kathleen Kuehn and

177

Timothy Corrigan's (2013) work on bloggers. However, it is precisely where these hopes produce what Lauren Berlant (2011, p. 1) calls "cruel optimism" in that "the object that draws your attachment actively impedes the aim that brought you to it initially." In other words, even though the optimistic attitude towards their job might end up being a "cruel joke" and hurt the testers in the long run, it does sustain them even for a brief period of time.

Thus, in a way, precarity itself is productive. It produces subjects who are keen on the hard work ethos, competitive play, and self-surveillance in order to secure their temporary position both at present and in the future. When I asked George what he would recommend to people who'd like to get a job in the industry, he said "be proactive, be early, be prepared to hate the game." Pleasure, pain, and care of the self are all in action and embodied in the model subject of the post-Fordism and creative economy. Perhaps it is right at this point to rethink the precarity of the tester which undoubtedly differs greatly from an illegal immigrant's precarity and involves more "choice." That is to say, some precarities, though no less precarious, are more enjoyable and privileged than others.

The tester's aim is to gain full-time status or end up as a programmer or designer, while an illegal immigrant has to resolve issues that are embodied in the state form. In this sense, it has been argued, there are "ethical and organizational questions" (Brophy & de Peuter, 2007) with respect to the precarity of the precogs. Finally, just like the developers, the idea of unionization has never had any appeal for the most vulnerable workforce at the studio. Knowing that they're coming in as temporary workers, they do not believe in the need for winning the right to have particular days off, because, they "learned a long time ago" that they need to "do what makes [them, i.e. the testers themselves] happy." At times, they do speak the language of capital and tell

178

me that their temporary employment "makes sense." Moreover, they do not see themselves as workers but rather creative employees for whom the society has higher respect and envy.

To conclude, along with desire and affect, precarity also has the propensity for not only transgression but also its opposite; subjection to uneven power relations, as Rosalind Gill and Andy Pratt (2008, p. 21) argue. While precarity may at time enable processes of "resisting to capital," it may also pave the way for "binding us to it." When I started my fieldwork, Cirose considered her job a "dream job." Towards the end of her employment, she was "cynically" aware that she and the other testers were "expendable": "though we know our work matters, we as individuals don't," she said. In this context, Ricky would recommend this job "to anyone who doesn't have a career path in mind, but enjoys video games. Cause it's a lot of fun, but I don't know that it necessarily leads anywhere specifically." While one can get lucky and move up, there is also the reality of tough competition and the large reserve army of labor. It is the mixed feelings of Cirose with which I conclude, by way of arguing that as the ni-ni generation without the necessary skills but with utmost passion, the testers swing between the pain and pleasure axis where immaterial labor has its rewards and frictions, negotiated through the discursive construction and material experience of game testing as a cool job. Organizing game tester labor does not seem to stand out as a possibility right now, but this does not mean that it will never take place. On the contrary, the testers do strongly feel pride in contributing to the game development and critically communicate discontent regarding their outsider status across the studio, and the dead-end nature of their positions, which they gradually and unwillingly come to realize:

> I guess the gradual realization this is a dead end job basically. The things I want to pursue, don't necessarily involve the video game industry. And especially seeing so many people, talented, really talented people get laid off, it's really discouraging. The longer I have this job, the more time I am wasting on a job with no future … I want to focus on

school. Unemployment will be pursued very contently. The reason I was upset and angry wasn't about losing my job, but it was about losing my job to others who I feel I have more experience on. Competition of sorts. As one of the more experienced testers, I feel like all the work I've put into this department was for nothing, if they hire a new temp in my place or train someone else to my level.

CHAPTER 7

"BEING IN THE DELUXE SUIT ON TITANIC" OR THE DISCONTENTS OF CREATIVITY

"When we produce a game, we produce the life of the studio"
Renata, project manager

"Our future is the future of our parent company. We don't really have any control over it … If you think of the parent company as a body, you've got one good arm but you've already amputated a leg and you've got another arm that needs to be amputated"
Ronaldo, tech artist

"You can worry about the security of the situation you're in or you can step back and look at it and realize that there isn't a company out there that it hasn't shut down a studio"
Management

Introduction

My first chapter on the concept of immaterial labor articulated the difficulties of grasping the totality within which immaterial laborers in the gaming industry operate. When we think about the well-being of an immaterial laborer, it is clear that this depends on a few immediate factors and some external ones, which the remaining chapters have discussed: the game developer's affective work relationships in the studio; the status of a potential domestic relationship; the stock prices of the parent company that owns the studio; the scheduling and marketing demands dictated by the parent company; the operations of rival companies in the market, and the potential birth of a new console. These are only some of factors that impact a developer's work and how s/he feels about it. If one of these factors fails to meet the expectations, the game developer immediately feels the impact. As Matthew, a veteran developer told me with respect to the events unfolding at Digital Creatives and its potential impact on the studio, "shit rolls down the hill." One might actually be tempted to think that game producers' well-being depends on immediate factors related to their jobs and studios. However, there are external factors, as well. For instance, as Mike Rose (2013) in his article on *Gamasutra* notes, the delay of a game like

GTA V not only impacts its publisher's stock prices but also emerges as a potential threat to other actors such as Activision and its next iteration of *Call of Duty*, EA's next iteration of *Battlefield*, or even giant console manufacturers such as Sony and Microsoft.

This chapter demonstrates that despite the glamorous press coverage game developers receive, lives are precarious even in the flagship studio of a major publisher. While precarity is most acutely felt among video game testers as we have seen, senior developers also express similar sentiments. When I asked Thomas – an art director at the time – if he ever worried about the stability of the studio, he responded by saying that "Oh, absolutely, every day." Thomas added that it is not necessarily their studio and situated the problem within the broader industry, which is "so much more hit driven, either you're a hit or you're not." A lead designer (Robert), who was pretty confident – and rightly so because of the success of the game he was in charge of – of his position at the studio when I began my research, stated how economics in general has radically changed since the financial crisis in 2008 crisis:

> With this hits driven mentality we are always worried about the next step
> and we need to make as sure as possible that we always make the right
> step in order to not stumble, as stumbling means potential to fall which
> would mean the potential end of the company.

It is thus within these dynamics that this chapter shows how "shit rolled down the hill" and reached Super Mario, which suffered from casualties but fortunately survived what the management at the studio called "the perfect storm." I open the chapter with a brief historical sketch of the deteriorating financial condition of Digital Creatives. I am able to write about the broader outcomes of the financial downturn by relying on industry publications, which I cannot cite but can only paraphrase to protect the anonymity of Super Mario.

Throughout the chapter, I provide narratives from the game studio that reveal the ways in which the creative class experience the less enjoyable but sometimes inevitable aspects of game

development: layoffs, financial insecurity, and the anxiety of working in a hit-driven industry. I document how lack of communication and rushing not-quite-finished games is due to being part of a publicly-traded publisher, and increases anxiety and discontent among game developers and their spouses. I conclude the chapter with a discussion of how game developers do not consider unions even at times of highly unstable employment conditions and bankruptcy, and what that means as far as theorization of immaterial labor is concerned. As will be clear through the chapter, these narratives reveal what sociologist Ulrich Beck (1992) calls "the individualization of risk" in modern life. While the game developers do not blame themselves as did the entrepreneurs of dot-com crash described in Gina Neff's (2012) *Venture Labor*, the level of indifference against unions explains how each developer goes through the risk of the volatilities within game production individually. Indeed as we might suspect, the attitude of game developers towards the intricacies of creative work – that one needs to think outside the box and that creative work is decidedly different from blue-collar work, and that therefore unions would not be helpful – is socially structured. However, "these risks that people face at work are privately handled and managed" (Neff, 2012, p. 7). It is to the broader conditions – financial troubles at Digital Creatives – that prepared individualized risk negotiation that I now turn.

How Shit Rolled Down the Hill

In order to contextualize the bankruptcy of Digital Creatives, we need to rewind the story and situate it within a set of historical factors. Industry publications that range from *Kotaku* to *Gamasutra* list plummeting stock prices among the major indicators of the financial downturn of the company. Stock prices have to do with how products perform in the market and how the public perceives the operations of that particular company. In that sense, there has been a dramatic loss of Digital Creatives' stock value of which dropped from $ 30 a share to almost

nothing. The primary factor that led to this situation is the very logic of how capitalism works: ceaseless growth and accumulation. With promising stock prices and cash in hand, Digital Creatives desired further growth, pursued studio acquisitions, and initiated new product developments. Developers across the studio told me that the fact that their parent company wanted to grow for growth's sake was not a healthy path to take, as Vincent noted:

> Once they started making money, they started going out and purchasing all these different studios. And, you know, they're just like, well the more games we have out there, the more money we can make, which wasn't true, because people, you know, the economy being down, didn't help that.

Industry analysts would agree with Vincent's thoughts and criticized Digital Creatives for not having a sustainable and carefully devised growth policy, ultimately leading them to recklessly grow in areas in which they were not particularly competitive.

When the reckless growth policy didn't pay off as well as Digital Creatives wished, a "perfect storm," in the words of management, emerged. This perfect storm was an uncanny combination of various factors: having to compete with other giant publishers; falling stock prices; and the failure of a major product, which, according to the gaming press, proved to be a major revenue loss. As the assistant producer Vincent said, it was "the big nail on the coffin" precisely because this product was not even able to interest the developers at the studio, despite the fact that they "got them cheap if we [they] wanted." He continued by saying that "If you can't even interest your own people who are gamers. . . there is something wrong." Indeed there was something wrong; earnings in the mid-2000s did not carry into the late 2000s and the early 2010s. Their parent company, according to Vincent, due to the reckless growth policy of acquiring studios recklessly, had lost "sight of a couple of them [the studios]." Having more studios required careful supervision in order to create high-quality products. Yet, this dream

184

partly failed. That is to say, studio acquisition policy did not evolve in a healthy manner and as a result, Digital Creatives had to close studios across the globe, as well as killing a franchise, cancelling projects, and restructuring business in general.

The upper management at the parent company took responsibility for the direction of the enterprise and acted in several ways to slow down or even stop the financial downturn. Along with these internal decisions, as a public traded company, they were forced to inform the investors of their financial standing, which began to give quite alarming signals in 2012. More than ever, the parent company was relying on potential revenues from promising games, which had to succeed in a highly competitive and hit driven market. Nobody wanted to think of any other scenario than reversing the storm and getting back on growth path.

While the fact that upper management at Digital Creatives took responsibility for the direction of the company is important, it is also vital to remember the broader dynamics of the industry which make layoffs an existential part of working in the creative industries. That is to say, it was not only Digital Creatives that went through unstable times. Industry giants such as Blizzard, the owner of *World of Warcraft*, would announce a layoff of around 600 employees around the same time (Caolili, 2012). Similarly, EA laid off what it called a "small number" of employees at its Vancouver branch as part of a restructuring effort to focus more on its digital content" (Curtis, 2012). As Luke Plunkett's (2012) analysis of *Kotaku* incisively demonstrates, the industry has suffered from major instabilities since 2006, and has witnessed the closure of 99 studios in that time. Plunkett's analysis relies on the report of a user (Kifimbo) on neogaf where he says: "One last point: yes, this list is depressing, but I'm pretty sure the list of studios created from 2006-2012 is much longer than the one below."[38]

---

[38] See http://www.neogaf.com/forum/showthread.php?t=459131

Indeed, the game industry is very prone to ups and downs and is thus used to them, even without of the impact of the 2008 financial crisis. For the game developers, there is always hope. New studios will pop up after the workforce is dissolved since entrepreneurialism, libertarianism, as well as the "individualization of risk" are constitutive aspects of the workforce in the game industry. If this studio doesn't work out for a developer, s/he can either join another one or found his/her own. However, hope doesn't do away with the fact that gaming industry is a business model of "sink or swim," in the terms of a user (rukusprovider) on neogaf.com. While swimming along with the major battleships of a large company might materially be more secure than working for an independent studio, game developers still feel insecure, since that battleship could turn into the Titanic, leaving them "the deluxe suite on Titanic," as a developer wittily articulated. Indeed, despite reassurances from their parent company, developers at Super Mario would say that they "would rather be on a ship that's not going to sink." While the studio itself did not sink in the end, there were casualties along the path of restructuring Digital Creatives, as we are about to see in the "first" layoff in the studio among the developers.

Rearranging Deck Chairs on Titanic: Layoffs Hit the Studio

At Super Mario, layoffs were regarded as more "a QA thing." Apart from personnel issues, no layoff took place until 2011 and this was a matter of pride in management and among the developers at the studio. Moreover, the studio was the most profitable franchise of Digital Creatives. In that sense, nobody had ever thought about layoffs. However, the impact of the iceberg – the financial downturn at Digital Creatives – in 2011 began to be felt even at the "deluxe suit" on Titanic.

The layoffs came at a time of excitement prior to submitting a game to Digital Creatives and I was invited to a studio meeting. I was expecting to attend a meeting that would feature

awards to be given to talented and successful developers. What else could that meeting have

been about given that the game shipment party would take place only a couple of days later?

My expectations proved wrong. I went to the meeting to hear the president of the studio

talk about layoffs. At first, this didn't much surprise me because in these studio-wide meetings,

developers are given the opportunity to ask their questions to management and among the

meetings I attended, crunch and potential layoffs constitute a considerable portion of the

questions. However, the discussion I found myself was not a "generic" layoff discussion. In

other words, layoffs were no longer questions about rumors at the studio or in the social media:

they had become real. The unfavorable condition of Digital Creatives was now materially

impacting developers at the studio: 16 people had lost their jobs, while those remaining were

concerned about their own futures, asking whether there would be more layoffs. The

management was doing its best to reassure the employees, but was never able to completely

guarantee that there would be no more layoffs. What they were able to say was that there

probably would not be more layoffs but at the same time, who could know the future? The

employees were advised not to believe in who claimed to predict the future. This was a

particularly rough process for the president who had seen the studio through the transition from a

small independent one to its current stage, where he was now involved in making tough calls. He

constantly made sure that layoffs were not presented as performance-related but more about how

future projects were going to be designed and how much labor-power was needed for them. The

management firmly underlined that the laid-off developers were encouraged to re-apply if there

was a new opening.

The anxiety of the developers could be read from the questions they raised: What can we

do to lessen the chance of being laid off? The management's answer was clear in that, while

losing their jobs was not the fault of the developers' performance, keeping the skills up-to-date and *just being successful* was important. The president also underlined a stark reality when he responded to their question by opening the floor to the developers themselves: Anyone has a good answer?

The unexpected and troubling nature of the layoffs was felt both in the meeting room and in the individual conversations I had with some of the developers. Associate producer Margaret articulated the significance of the first lay-off quite clearly:

> It took a while I think for the team to get back into the swing of things
> because that was the first time we had layoffs.

To lose talent and then "re-adjust everything was also hard from work standpoint," as Margaret also said. However, the laid-off personnel would obviously be the hardest hit by the process. Vincent was one of them. Despite acknowledging that he was not planning to stay at the studio forever, he underlined the unexpected arrival and bitter feeling of the layoff:

> Just kind of like the mama bird kicking you out of the nest a little bit
> sooner than you had expected it. We haven't really had that warning this
> time. With the coming round the financial year and there's always a little
> bit of nervousness there, I guess. I didn't think about it cause I'm like,
> you know, I'm working on QA, and the biggest product of the parent
> company, there's no way, like my job is secure.

Unfortunately, Vincent was wrong. Not even working on the most profitable franchise makes a developer's job safe. As one might guess, the moment of being informed about the layoff was an emotional one. A project manager cried. In the middle of this turmoil, Vincent was concerned about his cultural capital and work experience in terms of future employment:

> My immediate reaction was, well, what the fuck am I going to do. I, I
> don't have a degree, I didn't finish school … I want to go like cry, shout,
> punch something, but, you know, cooler heads prevailed.

188

While educational degrees do matter in the gaming industry, having shipped a game and relevant work experience is indispensible for finding a job. Vincent, at the time, was just about to ship a project but got laid off, without getting "a project under [his] belt," which troubled him in terms of finding a new job. Jose, on the other hand, was not able to survive the layoff despite having an M.S. in computer science. Thinking that he was invited to a pre-scheduled meeting about work, he found himself in a meeting with staff from upper management who explained him the rationale for the layoff in budgetary terms. Layoff was about finance and the need to restructure labor power for future projects; it was not related to anyone's performance. Among the three laid off employees I interviewed, Barry was the most vocal about the layoff – not the studio – and the broader dynamics of working in the gaming industry. It was clear that Barry desired a healthier relationship between work and life:

> I really don't understand that. I mean, people are so terrified of losing their job, it's unhealthy, to be that terrified. You should not be afraid of that guy. Cause it makes you a slave, a slave.

Keen on producing his own IP, Barry further critiqued the regimented IP regime in the digital age quite harshly:

> Any creativity, any creative thing is built on sharing, really, honestly … We use all these draconian measures to prevent sharing when it's, when it's natural and normal … If you tell contractors to build a house, it's your house. But I, I don't that metaphor really should apply to creativity.

No matter how critical Barry was of the labor of love that the game developers put into production, the pride and thrill – of not having layoffs – had gone, and the morale of the team had dropped. As if this was not enough, the most profitable game project was close to completion, which now needed to be completed with less labor power. Not to mention that the machine of perpetual innovation and the push for new products were on.

The Studio as Machine: Perform Better, Produce Forever

As management underlined throughout the layoffs, the doors of the studio were still open to the laid-off developers. Two of the sixteen laid-off developers – one of whom was Vincent – were rehired. This was all taking place in the middle of a hectic schedule for the release of their game in late 2011. When I was talking to developers and management, I clearly got the feeling that this game was clearly going to perform outstandingly in the market. In a way, the studio was at a position to exercise heart massage to the parent company through its sales of the game. The pressure on Digital Creatives was such that they were at times intervening in gameplay, which would create a feeling in the studio that the parent company was "acting like QA." The developers were becoming more vocal about the broader studio acquisition policy of the parent company, which had now also changed its bonus plan. The developers did not welcome the change since bonuses now became more tied to the performance of the parent company rather than the reception of the particular game produced by the studio and completion of the project. That is to say, the developers were not happy about the fact that while their game did particularly well, they felt like they were only supporting their parent company in terms of cash flows rather than enjoying the fruits of their own performance. They were not happy because they felt they were being punished because of the poor performance of the sibling studios, despite the fact that the golden child – Super Mario – was increasing its sales.

Indeed, their latest game has been the biggest success of the studio, with excellent sales numbers. Yet, not even a month after the game was out, I was at the studio and casually chatting with two developers about how they were doing. Yet, although they were undoubtedly thrilled about the performance of their games, they were concerned about stock prices. When I asked them what they thought about the stocks, one of them wittily said that he tried not to think about

them. On the other hand, Digital Creatives was constantly thinking about ways in which they could improve stock prices and provide more cash flow. Part of the master plan relied on Super Mario to produce an expansion game as part of the bigger franchise, sell it at a cheaper price, keep the attention flowing, and hopefully provide cash for Digital Creatives.

Dictated by Digital Creatives, the idea of an expansion game was unexpected for Super Mario. For instance, while he was looking for a break from the franchise, the lead designer Robert found himself having to expand that very franchise and comply with this demand of the parent company. Similarly, Ricardo, an artist, would tell how they were not even able to enjoy the moments of joy and find themselves not only under the "black cloud" of the stocks but also captured by the perpetual production machine:

> Okay, awesome. We got this huge hit. But now, we need to, holy crap, get over-dumb downloadable content out right away because if we don't, the parent company might not make it another month … There was a birthday party one of our guys had for his daughter. We're all hanging out and talking. And of course, work comes up because we all work there. We're just talking about it, like, we should all be so happy and so proud right now but everybody is just sad because the studio is just falling apart.

It was clear that this expansion was intended to provide cash for Digital Creatives. Yet it was also troubling for the smaller team in charge of the expansion game, who initially thought that "shit, nobody is gonna buy this." The developers felt like the project was forced upon them to which they "kinda grudgingly said, ok, we'll do this." Time went by, concepts got into shape and the team regained confidence in the game and their initial reluctance faded away. Yet, as the project began to find its voice and build faith within the team, the new management at Digital Creatives decided to cancel the expansion and make it a full sequel as part of the profitable franchise. That decision, "definitely messed up team chemistry," said Robert, adding that they "definitely lost a lot of momentum." These would signal the honest but final efforts of the parent

company, which as a publicly-traded company created further anxiety, uncertainties, and frustrations among the developers. As the next section demonstrates, being subject to the rules and dynamics of being publicly traded created problems for communication about the future, which would convince some of the very talented developers to leave their beloved Super Mario and explore employment opportunities elsewhere.

Discontents of Being Part of a Publicly Traded Company: Lack of Communication, Plummeting Stocks, and Departure of Talent

As I have made clear both in this chapter and earlier (specifically chapter 3), being part of a publicly traded publisher initially brought financial security but that security is never guaranteed. Being a publicly traded company also means being directly subject to the instability of financial markets, as well as the performance and the perception of stock prices, which in turn constitutes an existential concern for the game developers. What further complicates matters for the developers is that Digital Creatives has to be careful about the amount of information that they provide to their employees. Given that game developers are laborers of passion and work long hours to realize that passion, they are equally invested in having accurate information regarding the status of their parent company. Moreover, when publicly-traded companies want to meet specific deadlines to prove growth for the investors and the public, they might force their studios to release their games at an earlier time when the developers are not really ready or comfortable to do so. In this sense, the requirements dictated by the parent company can be a major source of frustration and lead to periods of crunch for developers.

Among the peculiarities of being a game studio owned by a publicly traded company, here I will specifically focus on the importance of communication and the impact of falling stocks on employee subjectivity. There are basically two reasons to do so. First of all, while communication is a major component of the formation of immaterial labor and its governance

(chapter 5), its lack can and does create dissonance across teams. Secondly, stocks present an existential source of anxiety because the very interface – used for internal communication in the studio – on the developers' computers displays the stock ticker of the parent company and other major publishers in the game market. In this sense, stocks are like the Sword of Damocles, with the ticker showing the fate of the parent company hanging over every developer's head, that every game developer is aware of but wants to forget since thinking about it simply does not help.

As they became concerned about the health of Digital Creatives, game developers held meetings with the management from the parent company. These meetings were intended to address questions of the developers, who wanted to get *any* piece of information that would potentially relieve their anxieties. When I asked the developers how they felt about these explanations from their parent company, some of them would tell me that they did understand the peculiarity of being a publicly-traded company but then stated that the parent company was a bit late in informing them about their plans to fix the finances of the enterprise by restructuring. As studio management would also sharply underline, lack of communication and learning the state of affairs from the media – which did not always provide accurate information – put the developers "in limbo, waiting to see what's gonna happen." In this respect, the management at Super Mario tried to do its best – and this leadership was acknowledged by most of the developers – "to be as communicative as possible without being falsely optimistic." However, anxiety did not disappear. Even developers of higher ranks would say that "last year felt like, day to day, came in and not even sure, okay, are we gonna have a job tomorrow?" Similarly, one of the associate producers said that "there was just a gap of time where there was so much uncertainty because, we were not, you know, people were betting." Ronaldo, a veteran

developer, was particularly concerned and demoralized, saying "my mood hasn't really changed at all. It already bottomed out."

The diminishing of morale also had to do with the public perception of the company with respect to stock prices, which would show up on developers' computers on a daily basis to remind them that they are "just not gonna make any of the money back that [they] put in." While the developers were asked to focus on making quality games and remember that stocks are about perception, it was precisely that perception – among other things – that the parent company rigorously wanted to fix by trying to show growth, releasing games before developers were comfortable with them, or simply asking the developers to make new expansion games and downloadable content even before the developers were completely done celebrating the success of the previous game.

Within this atmosphere, some developers went beyond raising questions and embarked on different strategies to deal with the uncertainties in their professional lives, proactively attempting to subvert their own dismissal from the company. However, none of the developers or testers ever mentioned the possibility of forming a union or even questioned the viability of a discourse of a more collective form of action within the studio or industry. During my initial interviews, well before the bankruptcy of Digital Creatives, I was asking the developers what their thoughts on unions were. They either had not thought about it, simply responding, "I don't know," or they would state that unions belonged to the world of industrial jobs. In contrast to industrial jobs, their jobs were creative. In this respect, unions and the potential value of unionization seemed far removed from their imaginations.

When unions are not an option, what is left: trying to find alternative employment options. The disgruntled developers could be divided into two groups in terms of how they

searched for alternatives: those that sent out CVs elsewhere and those who simply resigned themselves to embark on other adventures. Robert, the lead designer, didn't want to leave the area but also told me that he was mentally trying to be prepared. Ronaldo, a long-time employee, would for the first time in years update his CV:

> The funny thing is, my office mate goes, "Crap, I gotta start looking for a new job, now." And I had already started looking. So, maybe that's part of it. In May, I had already gotten my resume together. I was already looking. I was already prepared to leave. I guess I really am. Literally I am.

Others took a step further and went to other studios.

Stuart told me that he had been "asking a path of growth" but never got "a solid answer" and decided to leave. While he thought that the studio was relatively safe, he also underlined that "the problem is, most of the people who are leaving are the really talented people. And they are not going to small studios." That is to say, it was senior talent that was leaving, and replacing senior talent was a major problem as far as geography was concerned. The stories about the departures were quite emotional ones, which mostly did not target the studio. In other words, the break up was not about Super Mario, but about Digital Creatives. For instance, one developer left despite a big bonus he could have gotten if he had stayed. Another developer, management told me, "couldn't even speak" and "was tearful" as he submitted his resignation letter. While Ricardo's reasons for leaving were mostly about his wife needing a change, he did acknowledge the gloomy atmosphere with respect to the situation at the studio:

> There is certainly like a funk in the studio, you know, because your parent company is falling apart. People kind of deal with it, you know, just making little jokes, inside comments about or stock situation and what-not. I mean, really when our game came out, it was doing fantastic right out of the gate. Like, everybody should have been on cloud nine.

While Ricardo constantly emphasized how he dearly loved the studio, he was also concerned

about it being understaffed in terms of artists. He especially underlined the shrinking numbers of

artists and the inaction or lack of resources to recruit environment artists, who are crucial to the

game genre that the studio produced.

It was not only Ricardo who was concerned about recruitment. Anxiety prevailed

throughout the studio. Among 109 employees that participated in a survey, 37.6 % agreed and

58.7% strongly agreed with the statement "I am concerned that we are losing senior talent and

might not be able to easily replace them." Nevertheless, there was an emotional side to the story,

as well. Remaining colleagues were emotionally struck due to the departures. Margaret, an

associate producer would vividly describe the situation:

> I think the biggest impact would be morale wise, seeing friends go,
> seeing mentors go. You're at a point where you just build a relationship
> with someone you look forward to working with them again because you
> have this good rapport, knowing that they're going to be gone, that can
> be hard.

While the management did acknowledge that developers were not happy about people leaving

and that recruitment posed a problem (due to geography and lack of finances), their comments

particularly revealed the extent to which work and lives were precarious in the gaming industry:

> In fact 100 studios have been shut down in the last 5 years and
> everybody's name is on it. EA, Activision. All these people that you
> know, people leaving here to go there. Guess what? That doesn't make
> you safe. What makes you safe is success. Success in a studio is what
> makes you safe.

It may sound like a cliché to state that success is important but it is true in that it contributes to

sales and improves team morale. Yet, does success really make one safe? In the case of Super

Mario, success actually meant more disciplined and regulated work in terms of helping the

Digital Creatives to survive. The developers found themselves in the machine of a perpetual

production cycle within which they had to constantly work to increase sales and respond to the

demands of their parent company. As Robert described this contradictory situation:

> They [the parent company] made a lot of dumb decisions. And they got
> punished for it. The problem was we got punished with them. Like our
> success was paying for their failures.

Then, while it is undeniable that success does increase the relative stability of a studio, it

unfortunately may not prevent undesirable processes such as departures of senior talent or

bankruptcy, to which I now turn.

Bankruptcy and Auction: The Bazaar for Intellectual Property or "Who's Gonna Buy Us?"

As I was contemplating doing my exit interviews, I was shocked by the news that Digital

Creatives had filed for bankruptcy. I immediately e-mailed some of the developers to get their

first reactions to the process. The initial reactions were mixed. On the one hand, there was a

feeling of relaxation now that the developers at least had some information about their possible

future. On the other hand, there was the inevitable uncertainty of what the new chapter in the

history of the studio would be. The design director, for instance, was feeling "pretty optimistic."

In contrast to a year ago, he said there was now "a clear path," which was "well explained." "It

feels a lot less uncertain now," he told me. The news of the bankruptcy would confirm once

again structuration not only along the lines of labor power but also levels of anxiety and

optimism. While the design director would be closer to the management in terms of his rank,

even the long-time, self-confident and assertive programmer Matthew, would say that "I was, I

will admit, I was a little bit nervous" to describe his first reaction to the news of bankruptcy.

Robert, a lead designer, learnt about the news and got "pretty nervous," while the

existence of a potential buyer made him more confident. But then again, the emergence of other

potential buyers and their visits to the studio threw him "for a loop," as a result of which he

began to "feel a sense of uncertainty again."

> It threw so many ripples on the pond that we can't tell where things are
> going. I don't know. I prefer stability. Like personally, I'm not a big . . .
> I don't take a lot of risks.

Robert's anxiety regarding more than one bid at the auction was quite justified and can be better

understood in two ways. Given the geography, it is more difficult for a designer to find

immediate employment vis-à-vis the programmers for whom labor market is more favorable.

Secondly, the increasing number of potential buyers could have brought immediate layoffs for

anyone but especially the testers, the most vulnerable section of the workforce, who were very

much interested in knowing the ultimate owner of the studio. At the time of bankruptcy, video

game testers' perception about potential buyers was strictly tied to whether the new owner would

need the QA personnel or simply lay them off. It is with these anxieties in a relatively stable

studio that the developers went into the auction.

When Digital Creatives was up for sale, there was initially one interested investor. Yet a

court then ruled that there should be enough time for more potential buyers to participate in the

auction and give due diligence for Digital Creatives. As the auction took place, there was no way

for the developers at the studio to have any information about the auction. The waiting process

for the new buyer was so unnerving that there was a kind of moratorium on work. As Vincent

told me, "I think at that point most people were just sort of going through the motions pretending

to work, as awful as that sounds." Matthew confirmed Vincent's assessment:

> I don't think people really got a lot of wok done that week. Morale was
> fine. But I find it really interesting that the day of the auction, there was
> an officially sanctioned party of sort. We had food, we had drinks and
> people just blew off work that afternoon, because it was officially
> sanctioned.

The auction day passed with speculations, reading rumors online, and making guesses about who was going to buy the studio. "Who's gonna buy us, who's gonna buy us, who's gonna buy us?" was the sentiment. While the developers felt relatively confident in terms of the value of their IP, their concerns and anxieties were more about who the new buyer would be, since certain publishers were not considered desirable to work for. That is to say, the sentiment was "I may have a job but I don't know that I want to work for those guys." This was particularly a vital issue for the testers because while they are used to layoffs and "shrugged it off" since, as the temp tester Andy stated, their "jobs have not gotten more volatile than they are on a day to day basis." What concerned the testers was that the new owner could potentially have their own QA personnel and not need new ones. It is this condition of existential precarity that takes us back to the question of unions again, but now, at the time of bankruptcy.

Re-union

Long before the bankruptcy and the auction, as Titanic was financially troubled; unions were not within the imaginaries of the developers. In order to understand whether there was any change in their attitude, I asked the same question again when Digital Creatives went bankrupt. What does a union mean to a developer when s/he is in a limbo, does not know who the new owner is going to be, and has no control over their means of immaterial production? What were developers, as members of the flagship studio, thinking about unions, when their future and well-being were threatened despite their performance?

The developers' perception of unions had not changed even days before the auction. An important distinction the game developers made was with respect to the "nature" of creative labor vis-à-vis industrial labor. For Robert, "creative industries seem like they're driven more driven by individuals, individual effort, creativity and sort of things that can't be, not cannot be

199

defined but, they're not concrete." For the developers I interviewed, Unions signified

standardized production, laziness, and lack of creativity. They were a thing of the past and

related to older forms of labor; they were a "loaded topic," and "a little too adversarial."

Especially in their own case, developers did not think that unions made sense because of the lack

of other studios in the area. Moreover, developers related the existence of unions in industrial

production to issues of mistreatment and exploitation, and they kept coming back to the idea that

they are not being taken advantage of, are treated fairly well, and love what they do. As an

associate producer articulated, "you're not in this industry if you're not a workaholic to some

extent."

     A specific conversation I had with George was particularly revealing in terms of evoking

the "nomadic nature" of game developers' lives and the generational transition that Richard

Sennett (1999) describes in *The Corrosion of Character*. Relating to his family who were part of

unions in the tobacco industry, George said that "it's not like you work 20 years in one spot or on

a pension and you're done. I'm working in an industry where it's entirely possible that I'll be

working in 5 different places in 10 years." He further defined the stereotypical creative worker in

the gaming industry as "an individualistic creature" who "continues to evolve," "learns best

practices" and refuses to be stagnant. For Vincent, unionization is not viable "because of the

nomadic nature of game developers" in that "they move from place to place."

     The combination of youthful workforce with doses of libertarian spirit is also a factor,

Ronaldo would say:

> It's a combination of youth and libertarianism because there is a
> disproportionate number of libertarians involved in any kind of
> electronic technology. It's easy to find those people in a game setting
> because it's this controlled environment where you can kind of point at
> things and say this isn't gonna work. And the industry is full of young
> people.

In the words of the management:

> People that come into these types of professions aren't the ones with that
> kind of mentality of "I need somebody to represent me as an employee."

For the testers, the conditions of temporary employment are already too pressing for them to

consider unionization. Temporary tester George notes:

> We know that we're coming in as temporary workers. We don't have to
> sit there and believe we really need to fight for this, this right to have
> particular days off.

As another temporary tester Andy states, the coolness of being in the gaming industry also

factors in:

> Especially because it's game development and it almost feels like a
> privilege just to be involved in the industry.

Ultimately, throughout my interviews, developers went through unstable times, layoffs, and

bankruptcy but unionization never emerged as a natural topic or option to consider. The game

developers saw their labor as completely distinct from industrial labor, which, unlike creative

labor, is more prone to deskilling. Many of them also converged on the idea that the libertarian

and youthful nature of the workforce also constituted a factor for them not to consider alternative

ways of addressing their problems at work.

Conclusion

What do we make of the anxieties felt by the game developers during bankruptcy? How is it that

unionizing does not occupy space even as a slight possibility within the imaginaries of game

producers at Super Mario? I want to conclude by way of arguing that this particular libertarian

frame of mind – having a cool, creative job and individualistic spirit – symbolizes the ultimate

point of dissociation of the developers from their means of production, from intellectual

property, and from control over their future. The more immaterial labor becomes integrated into

the circuits of capital, the less control s/he commands over the labor process precisely because s/he is chained to the perpetual growth machine that is highly financialized, where risks are individualized.

In this respect, it is clear how the structural pressures of capital turn ostensibly secure employees of the studio into precarious workers. Clearly, ownership of and control over one's labor is only articulated in terms of affective teamwork or coolness. Feelings or material practices of collectivity do not pertain to alternative modes of laboring or being. While there is relative autonomy over the labor process, this autonomy is strictly regulated and dictated by the publicly-traded parent company, whose major concern is to prove growth and satisfy the investors. As shown earlier, the investors' impatience for signs of growth does not always work for the common good in the game studio. On the contrary, precarity and mechanisms for coping with risk are highly privatized.

The developers do see and enjoy game development as teamwork but at the same time valued the ways in which their profession supports individual development where employees refuse to stay where they are. Solutions to problems at work are found collectively only when the problem is about work in its literal meaning. Developers discuss problems, complain about them, and share their concerns with the management, but at the end of the day, every developer faces the crisis on his/her own terms. In addition to emphasizing the developers' perceptions about how creative work should be, what also needs to be underlined is the ways in which risk is stratified. Certain sections of the workforce, such as testers, were more concerned than the developers by the bankruptcy of Digital Creatives.

While this chapter has mainly focused on the discontent of the developers, it was not only the developers who were discontent about the condition of Digital Creatives. Their spouses,

whose invisible labor sustains the industry (chapter 5), were equally upset. Aisha, for instance, found the situation "definitely unsettling." While she did trust in the well-being of the studio, she was critical of Digital Creatives:

> I will say it is frustrating hearing about bad decisions the corporate has made. Because it sounds like, 'Gosh, they need to get their act together.' The studio has their act together. Why can't the corporate get their act together?

Sabrina went further than Aisha, stating that "none of this is stable" and the game industry worked like a "meat grinder." For Rose, there is not that much new about the downturn. "I feel like we've been on this roller coaster before" she said, adding "it's just kind of doing the best we can every day and just not worrying too much." As an IT worker herself, Wendy was the most vocal about the industry practices and its impact on the studio and her familial life. "It sucks. We have stock options that are so far under water," she said. Quite unhappy about the fact that the success of the studio did not do away with any of the uncertainties, Wendy had concerns that the corporate structure might actually lead to adversarial conditions for the studio.

> A lot of, you know, we bust our asses, we delivered you to, we've held up our end of the bargain, we did our job, you got your bestselling game, where's our money? You know.

Then, in the same way that work leaked beyond the studio, so did discontent. No matter how much they loved their jobs, developers experienced unsettling times of transition that ended up being bought out by another company.

In his global mapping and sobering critique of the creative economy, Andrew Ross (2007, p. 39) writes:

> Wherever work has become more feel good and free, it has also become less just … Job gratification, for creatives, has always come at a sacrificial cost – longer hours in pursuit of the satisfying finish, price discounts in return for prestige, and disposability in exchange for mobility and autonomy.

Indeed, game developers love their jobs and are passionate about it; they are happy to work long

hours, are willing to sacrifice family time during crunch and are ready to take risks.

Nevertheless, as Barry underlined in our interview after being laid off, there are disadvantages to

this:

> Some people, maybe many people, in the game industry, live in order to
> work. You should work in order to live. And that's, that's just a priority
> you should have.

Barry's call needs to be taken seriously for a sustainable gaming industry and fair labor practices,

because even the prioritization of work over life did not completely make the lives of game

developers at Super Mario more stable.

While game developers may enjoy relative autonomy in the workplace, this chapter

makes it clear that they lack control over intellectual property or information about finance. They

are strictly subject to the decisions of the management with which they have neither an organic

relationship nor smooth processes of communication. Moreover, from time to time, they have to

comply with the demands of the management with respect to not only schedule but also

gameplay and content. No matter how talented or passionate they might be, game developers rely

heavily on big financial resources in order to compete in the cycles of perpetual console

innovation and emerging game markets. This is why, as I argued in chapter 1, alienation and

exploitation are two important concepts for understanding how immaterial labor works and

furthermore faces risk in highly individualized ways.

Finally, theorists of immaterial labor (Hardt & Negri, 2000) have productively articulated

the convergence between desire, subjectivity, and work. They have also insisted on the

revolutionary and disruptive potential of immaterial laborers who are further connected to each

other through digital networks. Such disruptive actions could involve unionizing or refusal of

work. In contrast, this chapter demonstrates that game developers as a group are not ready to conceptualize collective activity as an alternative to the present conditions of immaterial labor and are unwilling to engage in political organizing. Even more interestingly, some of the spouses were critical of their husbands with respect to how they were not receptive to the idea of unions.

In his work on Michael Denning's role in the political organization of the entertainment industry in the 1930s, Andrew Ross suggests that those industries were an "indispensable component of the Popular Front" (2007, p. 39). However, with the exception of games of multitude and tactical resistance (Dyer-Witheford & de Peuter, 2009; Raley, 2009), it seems that the gaming industry is actually a crucial part of the Empire rather than the counter-forces that resist the Empire. Even more important is the fact that labor practices, features of a desirable employee, and workplace culture in the creative industries – perks, flexibility, passion for work – are actually actively shaping how work is socially organized in other industries. Moreover, creative industries are "actively disorganized" (Ross, 2007, p. 39) and while some Autonomist thinkers regard disorganization of fluid networks as a positive aspect of resistance, the materiality of numbers, the hard and material work of political engagement, personal histories, and geography crucially matter in terms of negotiating precarity and the discontents of creativity. In this sense, it is not quite clear whether the passion for work and a labor of love can automatically turn into what Melissa Gregg (2011, p. 172) calls a "labor politics of love." As Jodi Dean (2009) effectively argues, the networks of communicative capitalism are influential in not only absorbing resistance but also in reproducing the playful and libertarian spirits of the game developers, who have played the games of empire and now are joyfully – albeit precariously – producing them. If it is subjectivity that is at work as far as the constitution of immaterial labor is concerned, then it will again be subjectivities and the material practices of

organizing, not just the fluid networks, that might reduce the individualization of risk and enable

the formation of fair and affective practices of labor in the game industry.

CONCLUSION: WORK WITHOUT WORK, PLAY WITHOUT PLAY?

Throughout the pages of this dissertation, I have analyzed what it means to work in the flagship studio of a major video game publisher. Contrary to popular representations of video game labor as fun and egalitarian, my research, by delving into the contested and contradictory texture of the everyday lives of game developers, reveals a nuanced picture where the creative class is embedded within precarious lives. This research took the reader from the independent days of Super Mario into turbulent times, through which the studio fortunately survived without closure but with some major casualties. As we saw in the third chapter, there were tensions with respect to ownership of craft, as well as frictions brought out by a more structured labor process controlled by project managers and driven by demands imposed by Digital Creatives. In other words, the straightforward precarity of the garage days were gone, but not completely. The dynamics of being owned by a publicly traded company, the failure of some of its investments and its plummeting stock prices, the increasing scope of the games to be produced, and the intrinsically competitive nature of the industry had transformed the conditions of precarity. On the one hand, Super Mario was able to secure funding for salaries, move into a larger corporate workspace with more perks, and throw larger parties for its employees. Yet, at the same time, the studio's successful record in and of itself was not enough to eliminate precarity forever.

While their sales record did secure a buyer at the auction, this new chapter in the history of the studio also revealed certain questions. First, the auction during which Super Mario was sold provides the space for thinking about the conditions of labor in the game industry. Second, the fact that the studio was sold is not an isolated event but represents the broader vulnerabilities within the gaming industry as part of the broader creative industries. In this respect, a contextualization of the auction is necessary to understand bankruptcy in a relational manner.

Addressing these questions, I will conclude by discussing the implications of the dissertation as far as the field of political economy of media industries and media/communication studies are concerned.

What to Make of Immaterial Labor? Rethinking Alienation and Creativity

As the assets of Digital Creatives were put on the auction block, one expectation of the game developers was confirmed: Studio Mario was a valuable asset to acquire and they had no difficulty in finding a buyer. Following this happy ending to the unnerving auction, the new owners came to meet the game developers. I was invited to this meeting, which constituted a peculiar encounter for a couple of reasons.

First of all, it was clear that Super Mario, as the company where I started my research, no longer existed, at least in legal terms. Only slightly before the meeting, the money to acquire the studio was transferred to the bank account of Digital Creatives, as the new owners of studio stated at the meeting. However, the significance of this meeting goes beyond legalities. It demonstrated the peculiarity of immaterial labor power and its relationship to capital. The owners of capital specifically felt the need to visit Super Mario, which would be the ultimate producer of value. In that sense, the executives from the new parent company again and again expressed their respect for the work and record of Super Mario. They underlined that they would not intervene with the creative processes of the developers. Again, this attitude demonstrated the extent to which Super Mario was a desirable studio, the productivity of which could only be ensured through maintaining and harnessing the existing work environment and culture.

At the same time, if they hadn't decided to buy the studio, everyone in the studio would have been potentially unemployed. In this sense, that moment of being up for sale raises questions regarding the precarious status of immaterial game labor in the industry. In one sense,

the auction was a trade-off, as Matthew over and over told me during our conversations. A number of parties are involved in a transaction and there are gains and losses emerging as the outcome of rational deliberation. Yet, the auction ultimately involves power relations that are disguised under the seemingly neutral language of the market. Indeed, the auction crystallized the competition for the desirable commodities owned by Digital Creatives. In this sense, one needs to question the ways in which the representation of the auction as a level playing ground or a simple and rational trade-off serve to reify social relations at work. The extent of the freedom of the actors involved in this trade-off is open to question.

Marx succinctly explains this encounter between the capitalist and the worker in:

> For the conversion of his money into capital, therefore, the owner of money must meet in the market with the free labourer, free in the double sense, that as a free man he can dispose of his labour-power as his own commodity, and that on the other hand he has no other commodity for sale, is short of everything necessary for the realization of his labour-power.

Based on this description of the market place, it is hard to suppose that the game developers were free to act as they wished. On the one hand, their power did come from their own labor and production record. How else can we possibly understand the fact that the new owners took the time to visit the studio and guarantee creative freedom? Nevertheless, there is also the fact that the auction took place between game publishers, which held the financial power and the networks to distribute and market games. Nobody asked what the developers desired in the aftermath of the bankruptcy and during the auction. In that sense, the first post-auction meeting between the new owners and the game developers symbolized a moment where capital comes to produce labor and to be produced by labor. The exchange between Digital Creatives and the new owners was accomplished and it was now time to go back to production. Yet the parties participating in this meeting were not equal. As Jason Read (2001, p. 25) puts it, "between equal

rights, force decides" and the more powerful force in the case of the game industry is the highly

regimented IP regime and ownership of networks of production, manufacturing, and marketing.

When we attribute force a decisive power as far as market relations are concerned, we need to

remember that "central to such an account is the notion that coercion is embedded in the relations

that structure so-called free choices. That is to say, coercion does not require someone standing

over the worker with a gun or some other threat of force" (Andrejevic, 2012, p. 154).

Then, what are the implications of this post-auction meeting as far as immaterial labor

and precarity is concerned? Michael Hardt and Antonio Negri, in their most recent work *The*

Declaration, argue that in contemporary networked capitalism, owners of capital are detached

from the place of production and that workers work on their own without much reliance on the

owners of capital. As opposed to the necessity of a physical proximity, they argue, "productivity

is ever more hidden as the divisions between work time and the time of life become increasingly

blurred. In order to survive, the indebted must sell his or her entire time of life" (Hardt & Negri,

2012, p. 12).

To translate this into the context of Super Mario, it could be argued that the creative

class, by agreeing to sign an NDA when they accept a job offer, guarantee financial return but

also put themselves under a bondage where failure to bring profits means unemployment or

existential precarity. They become indebted to the publishers. They have to produce, produce,

and produce, and still remain profitable. They produce games that they accept to disown a priori.

The new owners of the studio, on the other hand, acknowledge the peculiarities of immaterial

labor by visiting them and communicating with them and responding to their questions. In a way,

they recognize the fact that their investments need to pay off and that strictly depends on the well

being of the communicative capacities of the game developers. In this respect, it could be argued

"any effort to discipline or repress the curiosity, vitality, or desire for knowledge of cognitive workers reduces their productivity" (Hardt & Negri, 2012, p. 61). It is through these kinds of socialities that the productivity of immaterial labor is improved. Immaterial labor is curious and information is important for their vitality. The question is: does this desire for freedom make it intrinsically revolutionary?

As far as autonomy from capital, this research has demonstrated that theories of immaterial labor need to take into account potential or existing conservative cultural characteristics within this particular workforce. Developers are very passionate about their jobs and are willing to put in even more hours, rather than refuse to work. They may be open to experimenting with creative ideas but not necessarily open to new political potentialities. They may be in the midst of market fluctuations, but they desire a sense of place-bounded identity amidst conditions of precarity. Enjoying the unpredictable outcomes of creativity, the game developers expressed powerful longings of predictable futures and stable careers, while acknowledging that this may be far from reality.

At the same time, processes and feelings of alienation and exploitation are articulated into the new terrain of immaterial game labor. Alienation still prevails precisely because the game developers are cut off from their products. This disconnect was especially revealed during the auction. On the other hand, exploitation is integrated into the circuits of financial markets in the sense that production schedules are changed for the sake of showing growth and making the investors happy. Here, we need to note that "exploitation is not simply about a loss of monetary value, but also a loss of control over one's productive and creative activity" (Andrejevic, 2012, p. 154). Exploitation is also diffused across time and space since developers "enjoy" flexibility both temporally and spatially such that there is almost no "non-work" time.

The auction, in this sense, reveals a multi-faceted picture of immaterial labor, which is denied legal ownership of its product but still strongly feels itself the sole creator of the game. On the one hand, they feel empowered as part of the transactions following the auction. They are free. On the other hand, force is embedded within the processes of weaving control over one's creative labor power. Force, in this process, "is built into asymmetrical social relations and manifests itself overtly when these are challenged" (Andrejevic, 2012, p. 157). In the case of the gaming industry, these unequal social relations are materialized within intellectual property regimes that "do not take place by force, but merely reproduces existing property relations by extending them into the digital realm" (Andrejevic, 2012, p. 157).

Is the Gaming Industry a Fleet of Titanics? Rethinking Precarity and Ways to Resist It

As I was writing the conclusion to this dissertation, the news made clear that it was not only Super Mario that was having rough times. Even the strongest publishers such as Electronic Arts experienced major layoffs (Ligman, 2013). Activision's High Moon studio laid off around 40 employees after completing their *Deadpool* game (Rose, 2013). Fortunately, Super Mario seemed to have survived the storm without major casualties. The transition to the partnership with the new owner was relatively smooth because the new owners had not intervened in the daily operations of the studio. Yet, a stable future in a perpetual innovation machine is never guaranteed. This puts Super Mario in even a more vulnerable market position. As an experienced designer realistically put it, "We're below those triple A titles that sell 15-20-25 million units. And those are the ones that are, like, bankable, those are always gonna be successful, whereas us, we have a couple of failures, we're dead." This designer has a few successful titles under his belt, and clearly understands the conditions for precarity in the gaming industry even for designers of his value.

His remarks point us toward interrogating the stability and surviving capacities of game studios across the board. The stability of creative industries in general and the game industry in particular has been of scholarly concern recently, especially after the financial crash of 2008. For instance, the *Cambridge Journal of Regions, Economy and Society* (2013) has just published a special issue (Volume 6:1) on the repercussions of the financial crisis on creative workers, revealing various kinds of outcomes for creative employees. Based on a quantitative analysis, Todd Gabe, Richard Florida and Charlotta Mellander suggest that creative class occupations had "relatively low unemployment rates compared to the overall US economy prior to the official start of the recession, during the economic slowdown and in the years immediately following the recession" (2012, p. 50).

In a way, this is not a major surprise in that the members of the creative class mostly have college degrees. Yet, the Gabe et al. study does not demonstrate what kind of challenges these employees encounter while looking for a job, or how they experience precarity and uncertain futures especially when they were on contract work. As various articles in the special issue of the *Cambridge Journal of Regions, Economy and Society* demonstrate, the extent to which the creative class has endured the financial crash is questionable and depends on the occupation, sector, the city, the national and the regional framework to encounter the risks of the crisis (Donald, Gertler, Tyler, 2012; Vinodrai, 2013). Moreover, the ways in which creative workers have performatively resisted the financial crisis reveals clues regarding the production of alternative production networks and underscore the importance of spatial dynamics within which these workers work and live (Bain & McLean, 2013). How immigrant creative workers, in the case of Halifax in Canada, are able to survive the financial crisis is also of concern and has not been taken into normative accounts of creative industries (Grant & Buckwold, 2013).

Where do the game developers stand in this larger picture of the creative industries?

Game Developer magazine's 11th and 12th annual salary surveys reveal certain tendencies. The

11th annual survey released in 2012 proposes "cautious optimism."[39] The average salary had

increased from $ 80, 817 in 2010 to $ 81,192 in 2011. Layoffs were also mentioned in this report

where "only 13 % of the respondents were laid off in 2011, compared to 14 % in 2010 and 19 %

in 2009" (Miller, 2012, p. 7). Among those laid off, "58 % found new employment in the games

industry, 19 % went into contracting or consulting, 10 % founded a new company, 13 % haven't

found new game development work" (Miller, 2012, p. 11). The qualitative comments for the

survey are striking. The developers critical of industry practices consider the "attitude toward

work life balance absolutely terrible" and regard the hit-driven mentality of the industry as

killing creativity and innovation, while giving no incentive to independent game development.

Racism and sexism in the industry are targeted in comments suggesting that some of the

hilarious content "might offend certain groups of people" (Miller, 2012, p. 13). The more

optimistic remarks, on the other hand underline the positive aspects of social and mobile games,

as well as the great change introduced by changing technology.

The 12th annual survey similarly mentions an average salary increase of $ 3,100 to $ 84,

337 in the United States of America, while salaries in Canada witnessed a slight decrease. In

contrast to 2011, the percentage of respondents who went through a layoff decreased from 13%

to 12 %. However, the qualitative remarks again underscore the ways in which hit-driven logics

diminish the joy developers derive from production, as well as address precarity, unstable

futures, and the undervalued nature of QA (Miller, 2013):

---

[39] The survey was conducted in February 2012 for the fiscal year January 1, 2011 through December 31, 2011 and gathered 4, 132 responses from developers. See Miller (2012).

When I got my first industry job in 2005, it felt like there were all these
Sure Bet Career jobs out there. Now, less than 10 years later, I can't think
of a single job that will be safely guaranteed to be around for 5 years.

It was more enjoyable when it was less mature.

QA is undervalued and not compensated fairly.

I'm seeing the failures (some spectacular) of more and more studios
lately. New ones are sprouting up as well, but it doesn't feel like there are
as many new ones as there are failing old ones. I worry about long term
sustainability for my career as I continue to get older (I'm 41 now).

The game developers at Super Mario shared these sentiments, as well. A survey I conducted in

mid-2012 (109 out of 186 full time employees participated) revealed that 65% of the participants

had concerns regarding job security, while 63% of the participants expressed concerns regarding

the stability of the studio.[40] Ninety-six percent of the participating developers were concerned

about losing senior talent and the lack of ability to replace it. Like those who participated in the

survey conducted by *Game Developer*, developers at Super Mario also criticized producing

similar IPs in expansions and sequels, and wanted to be able to work on different titles. Slightly

more than half of the developers found the gaming industry to be unstable in general. Finally, 88

% of the participants expressed their desire to see more studios in the area.

 Game Developer also conducted a Quality of Life survey, which exposed the joys and

material pains of game development. According to this survey, flexible working hours provide

the freedom immaterial laborers enjoy, while strictly defined schedules diminish their quality of

life (Miller and Bulkley, 2013). An important feature of this survey is that the expectation of

layoffs (23 %) is actually higher than the existing rate of layoff indicated in the 2011 Salary

---

[40] As Matthew once mentioned in an interview after the auction: "The first president's time, we basically lived from project to project. If any one project failed, we'd probably be dead in the water. There was a bit of desperation there, like, this has to sell, this has to do well. Cause if not, we may not exist after this … I am a little bit nervous to think what's gonna happen if we come up with a title that is not very profitable. I am actually a little bit concerned for our next game. It's not as strong of a title as our previous game."

Survey (13 %). Fifty-two percent of the developers experienced crunch of between 40-60 hours, while 32 % reported 61-80 hours of crunch.

These numbers and remarks of the developers leave us with a question about the ways in which game developers resist multiple forms of precarity. Deeply engrained within the lives of the game developers, precarity never disappears but is articulated into new structures of production and ownership. In this sense, the scope of precarity and how it is experienced by game developers can never be constrained to workplace policies and regulations, particularly because work is always mediated through the domestic sphere and local, regional, and national institutional frameworks. In this highly complex environment, how do game developers cope with precarity?

One solution to precarity is the individual choice of quitting. As a report by *Gamasutra* reveals, "the easiest thing to do is quit and find a better situation somewhere else" (Legault & Weststar, 2013). What is more striking about this report is that mobility and precarity are existential especially within creative clusters in locales where there is more than one game studio, providing options that liberate both employees and employers. Within a creative cluster, quitting and finding another job becomes easier. To quote from the *Gamasutra* report:

> Employers are waiting in line at my door," said one. "Yeah, we get a lot of calls," said another, adding that "There's a lot of headhunters. There's a lot of employee-pilfering... even inside here. (Legault & Weststar, 2013)

Does the freedom to job-hop fix problems in the broader industry? Not really, since "most studios operate the same way" (Legault & Weststar, 2013). High turnover rates, the report rightly suggests, are not only detrimental to work-life balance but also to the stability of the industry which delays personal maturing since developers job-hop when dissatisfied.

However, this hectic scene within the creative industries and the willingness of its

workers in general to overwork themselves gives way to the perception that "there is no way out of flexploitation" (de Peuter, 2013, p. 12). Indeed, the industry has witnessed moments of dissent. Political action is part of the repertoire of the game developers who might choose to take office supplies to home or share sensitive information with competitors, dropping Easter Eggs to gain credit. While game studios and managers have "open-door policies" for the developers to just walk in and express their discontent, game developers sometimes sue their employers and win these battles, totaling "more than $ 39 million, and affected over 1,200 employees" (Legault & Weststar, 2013).

Dissent has found an institutional base, too. The International Game Developers Association (IGDA) is the most organized institution to address the discontent of the immaterial game workers. IGDA more recently became involved with encouraging some game studios to stop undesirable workplace policies. However, IGDA's power and lack thereof is related to the voluntary basis of participation. It can invite game studios to improve working conditions but does not have the power to pursue legal action. When channels are blocked for pursuing legal action at an institutional level to improve working conditions, then it is up to other subjects – spouses of video game developers – to push to create favorable working conditions.

However, as Legault and Weststar (2013) rightly point out, media outcries such as EA Spouse do create significant buzz, but lack leadership and any sustained means of organization in old or new forms, as researchers on precarious creative labor suggested (Rodino-Colocino, 2007; de Peuter, 2013). Perhaps what is needed is to rethink unions in relation to immaterial game developers. As Legault and Weststar (2013) argue, "[organizing a union] will not be successful without a dramatic increase in knowledge among developers about what options are available in terms of union models and a greater understanding on the part of existing unions about what

217

developers need." Such organizational forms are dialectically created; they need to develop historically and through the material experience and creative capacities (in terms of both production and organization) of game developers, rather than the intrinsically perceived revolutionary nature of immaterial workers. Indeed, whether the developers will be willing to engage in organizational forms to reduce or terminate these exploitative processes is likely to depend not *just* on their digital capabilities to cooperate but also their political desires and material actions on the ground to push such collaborative spaces and transform the "hidden abode of production" into their own commons.

Conversations with the field

Jobs and employment constitute a major portion of our everyday conversations and discussions in the public sphere. On the one hand, politicians tell their citizens that the nation as a whole needs to stick together and work even harder to compete effectively in a global economy. Citizens respond to this call by working more. We work at home, at the coffee shop, and during vacations. On the other hand, in the "commanded society of enjoyment" as described by Todd McGowan (2003), we are invited to stop prohibiting ourselves and enjoy every aspect of life. In contrast to traditional forms of work that involve toil, work is redefined in our times. Now considered a classic, Steve Jobs' remarks at Stanford University's commencement (2005) are revealing about what work in our contemporary society should be. He advises the new graduates "to find what you love", where love refers to both personal relationships and work. He continues:

> Your work is going to fill a large part of your life, and the only way to be
> truly satisfied is to do what you believe is great work. And the only way
> to do great work is to love what you do. If you haven't found it yet, keep
> looking.

The narratives I have traced in this dissertation suggest that the video game industry is where work finds love and fuses with play. Super Mario is one place in which game developers have

found their love, with which they have developed a precarious relationship. It is this precarious

relationship that combines play and labor: playbour. What does it mean, though, to love one's

job and perform playbour? And more importantly, how does this study speak back to the political

economy of media industries and cultural studies?

In his discussion of the political economy of labor, Vincent Mosco argues that "labor

remains a blind spot of western communication studies, including the political economy

tradition" (2011, p. 358). This observation, however, should be contextualized within the fact

that studies of the political economy of communication still focus largely on the very important

macro processes of convergence through which giants of the industry keep building alliances and

strengthen their power in light of the challenges and opportunities brought about by digital

platforms and new markets (McChesney, 2013). Fortunately, this labor blindspot and the

fetishization of these quite powerful structural forces seems to be disappearing thanks to the

emergence of a number of scholars addressing labor and labor process within media and creative

industries (Ross, 2003; Gregg; 2011; Deuze, 2007; Cohen 2011; Brophy 2011; de Peuter 2013;

Neff, 2012; Hesmondhalgh & Baker, 2011a; Perlin, 2011).

In following the path opened by these scholars, I have, first of all, brought together

political economy, cultural studies, and theories of immaterial labor through an ethnographic

lens. Enabled by a fortunate and unrivalled access to a medium-sized game studio in the U.S., I

have illuminated the lives of precarious playborers in Super Mario through an examination of

their everyday joys, anxieties, discontents, creative energies, all mediated within financialized

and networked environments. In this respect, I intervene to break the hegemony of media owners

that dominate narratives within the tradition of political economy of communication. Inspired by

ethnographic studies of creative labor (Hesmondhalgh & Baker, 2011a), tensions and

219

contradictions of playbouring are revealed. Moreover, this study has added to studies of governmentality through ethnography, and has questioned the success of governmental strategies. Rather than assuming the success of such strategies, my study has revealed the ways in which subjectivation processes are contested and negotiated at the everyday level. Perspectives of governmentality, on the other hand, has enabled a better understanding the thin line between autonomy and precarity where the former is generally assumed to be a distinct feature of good work but in fact can accelerate processes of self-exploitation and over-work. At the same time, I suggested the utility of recuperating concepts such as alienation and exploitation. These are critical tools to address strict regimes of intellectual property in the game industry where developers are assumed to be free. However, the reality is more complex; these workers are deprived from their own products, which they "freely" agree to disown even before they start playbouring.

Secondly, this study has recovered the significance of space and intervened with respect to both political economy of communication and cultural studies. Space has long been a neglected issue. However, as chapter 4 shows, it is no longer a topic that can be marginalized given the interest in the economic potential of creative industries and the branding attempts around the creative city. A focus on space also has implications for understanding the affective subjectivities productive of social relations at the everyday level. Along these lines, photography has enormous potential to illuminate what it means to love one's job and what it means to work with machines where there is no clear break between work and pay.

Thirdly, apart from the media buzz and critical takes on intense hours in the industry, the role of domestic relationships – mostly heterosexual in this case – has largely been ignored within media and communication studies and game studies. In this sense, this dissertation has

taken the opportunity to reveal the dialectical relationship between the playbour ethos at Super Mario and the sacrificial labor performed by partners, in this case women. The role of women in sustaining the game industry was not an initial concern during the earlier phases of this work and in that sense is indicative of a gender blindspot in research in political economy of communication (Meehan & Riordan, 2002). In this sense, while political economy of communication has traditional sought to address power through the corporation and its lobbying efforts with the state, this ethnographic study examined how power relations unfold in the workplace, at home, and at the urban level.

That my study reveals few indications of an alternative proposal or modes of working doesn't mean that game developers at Super Mario are not producing everyday tactics or strategies to ease their workload or counteract demands by the management. This is where the framework for autonomist Marxism is useful to strengthen the studies in political economy of media industries which do not pay much attention to labor subjectivity and risks reifying capitalism as a system without any contradictions that can be resisted by labor's creative capacities and potential for sabotage. As Nick Dyer-Witheford argues, "labor is for capital always a problematic 'other' that must constantly be controlled and subdued, and that, as persistently, circumvents or challenges this command" (1999, p. 65). Especially when we consider that video game developers are trained, by way of play, within the networks of consoles, arcades, trade magazines, and increasingly online environments, the leisure spaces through which productive subjects are cultivated become important arenas for investigation. Indeed, "one of the insights of autonomist thought is that under contemporary capitalist production and reproduction, power acts on subjects in ways that work directly on pre- or sub-individual elements, such as the affective and libidinal structures of the subject" (Weidner, 2011,

p. 34). In other words, autonomist Marxism provides insightful paths for investigating video gamer workers' subjectivities by bringing the realm of the extra-economic into discussion. In addition, emerging research does hint at the ways in which immaterial laborers across the creative industries are experimenting with different ways of organizing and resisting processes through which media workers are required to provide not only the their labor power but also soul, free time, and desire (de Peuter, 2013; Cohen, 2011; Brophy, 2008; Rodino-Colocino 2007).

Finally, if labor as a blindspot within communication and media studies is drawing increasing attention among scholars, this needs to be translated into the realm of pedagogy. Communication and media studies need to be more involved in interdisciplinary exchanges with the fields of urban and labor studies. It seems to me that the magical commodity behind the fantastic or troubling media images and representations – labor power – needs to be systematically studied and theorized by scholars of media and communication studies, whose own increasingly precarious conditions of labor are inseparable from those that shape the lives of existing media workers or workers that aspire to join the media workforce through unpaid interns.

REFERENCES

Albom, M. (2013, March 17). Live in Your Office? You Might at Google. *Detroit Free Press*. Detroit. Retrieved March 21, 2013, from http://mitchalbom.com/d/journalism/11137/live-your-office-you-might-google

Alferoff, C., & Knights, D. (2003). We're all partying here: Targets and games, or targets as games in call centre management. In A. Carr & P. Hancock (Eds.), *Art and Aesthetics at Work* (pp. 70–92). London: Palgrave Macmillan.

Andrejevic, M. (2007). Surveillance in the Digital Enclosure. *The Communication Review*, *10*(4), 295–317.

Andrejevic, M. (2008). Watching Television Without Pity: The Productivity of Online Fans. *Television and New Media*, *9*(1), 24–46.

Andrejevic, M. (2009). Exploiting YouTube: Contradictions of User-Generated Labor. In *The YouTube Reader* (pp. 406–424). Stockholm: National Library of Sweden.

Andrejevic, M. (2012). Estranged Free Labor. In Trebor Scholz (Ed.), *Digital Labor: The Internet as Playground and Factory* (pp. 149-165). New York & London: Routledge.

Aneesh, A. (2001). Skill Saturation: Rationalization and Post-Industrial Work. *Theory and Society*, *30*(3), 363–396.

Aneesh, A. (2006). *Virtual Migration: The Programming of Globalization*. Durham: Duke University Press.

Arvidsson, A., & Sandvik, K. (2007). Gameplay as design: uses of computer players' immaterial labour. *Film & Media Studies Yearbook*, *5*(1), 89–104.

Arvidsson, A., Malossi, G., & Naro, S. (2010). Passionate Work? Labour Conditions in the Milan Fashion Industry. *Journal for Cultural Research*, *14*(3), 295–309.

Ashton, D. (2011). Upgrading the self: Technology and the self in the digital games perpetual innovation economy. *Convergence: The International Journal of Research into New Media Technologies*, *17*(3), 307 –321.

Bain, A., & McLean, H. (2013). The artistic precariat. *Cambridge Journal of Regions, Economy and Society*, *6*(1), 93–111.

Banks, M. (2007). *The Politics of Cultural Work*. UK: Palgrave Macmillan.

Banks, M. (2010). Autonomy Guaranteed? Cultural Work and the "Art–Commerce Relation." *Journal for Cultural Research*, *14*(3), 251–269.

Barbrook, R., & Cameron, A. (1996). The Californian Ideology. *Science as Culture*, *6*(1), 44–72.

223

Bauman, Z., & Mazzeo, R. (2012). *On Education: Conversations with Riccardo Mazzeo*. UK: Polity Press.

Beaulieu, A., & Hoybye, M. T. (2011). Studying Mailing Lists: Text, Temporality, Interaction, and Materiality at the Intersection of E-Mail and the Web. In S. N. Hesse-Biber (Ed.), *Emergent Technologies in Social Research* (pp. 257–275). Oxford: Oxford University Press.

Bell, D. (1976). *The Coming of Post-Industrial Society: A Venture in Social Forecasting*. New York: Basic Books.

Bell, D., & Jayne, M. (Eds.). (2006). *Small Cities: Urban Experience Beyond the Metropolis*. New York: Routledge.

Benjamin, W. (1934/2008). The Author as Producer. In M. Jennings, B. Doherty, & T. Levin (Eds.), *The Work of Art in the Age of its Technological Reproducibility* (pp. 79–96). Cambridge, Massachusetts: Harvard University Press.

Binark, M., & Bayraktar-Sutcu, G. (2008). *Dijital Oyun*. Istanbul: Kalkedon.

Boellstorff, T. (2009). *Coming of Age in Second Life: An Anthropologist Explores the Virtually Human*. Princeton, N.J: Princeton University Press.

Bogost, I. (2011). *How to do Things With Videogames*. Minneapolis: University of Minnesota Press.

Boltanski, L., & Chiapello, E. (2005). *The New Spirit of Capitalism*. London; New York: Verso.

Boyle, J. (2003). The Second Enclosure Movement and The Construction Of The Public Domain. *Law and Contemporary Problems*, *66*(Winter-Spring), 33–74.

Bradley, A., & Hall, T. (2006). The festival phenomenon: festivals, events and the promotion of small urban areas. In D. Bell & M. Jayne (Eds.), *Small Cities: Urban Experience Beyond the Metropolis* (pp. 77–91). New York: Routledge.

Braverman, H. (1998). *Labor and Monopoly Capital; the Degradation of Work in the Twentieth Century*. New York: Monthly Review Press.

Brennan, T. (2009). Intellectual Labor. *South Atlantic Quarterly*, *108*(2), 395–415.

Brophy, E. (2006). System Error: Labour Precarity and Collective Organizing at Microsoft. *Canadian Journal of Communication*, *31*(3). Retrieved from http://cjc-online.ca/index.php/journal/article/view/1767

Brophy, E. (2008). *The Organization of Immaterial Labour: Knowledge Worker Resistance in Post-Fordism* (PhD). Queen's University, Canada.

Brophy, E. (2011). Language Put to Work: Cognitive Capitalism, Call Center Labor, and Worker Inquiry. *Journal of Communication Inquiry*.

Brophy, E., & de Peuter, G. (2007). Immaterial Labor, Precarity, and Recomposition. In C. McKercher & V. Mosco (Eds.), *Knowledge Workers in the Information Society* (pp. 177–191). Lanham, MD: Lexington.

Burawoy, M. (1978). Toward a Marxist Theory of the Labor Process: Braverman and Beyond. *Politics Society*, *8*, 247–312.

Burawoy, M. (1979). *Manufacturing Consent: Changes in the Labor Process Under Monopoly Capitalism*. Chicago: University of Chicago Press.

Burawoy, M. (1991). The Extended Case Method. In M. Burawoy, A. Burton, A. Ferguson, K. Fox, J. Gamson, N. Gartrell, … S. Ui (Eds.), *Etnography Unbound* (pp. 271–287). Berkeley: University of California Press.

Burawoy, M. (Ed.). (2000). *Global Ethnography: Forces, Connections, and Imaginations in a Postmodern World*. Berkeley: University of California Press.

Burston, J., Dyer-Witheford, N., & Hearn, A. (Eds.). (2010). Digital Labour: Workers, authors, citizens. *ephemera*, *10*(3/4), 214–537.

Camfield, D. (2007). The Multitude and the Kangaroo: A Critique of Hardt and Negri's Theory of Immaterial Labour. *Historical Materialism*, *15*(2), 21–52.

Caoili, E. (2012, February 29). Blizzard cuts 600 employees in organizational shift. *Gamasutra*. Retrieved December 18, 2013 from http://www.gamasutra.com/view/news/163398/Blizzard_cuts_600_employees_in_organizational _shift.php

Carey, J. W. (1992). *Communication as Culture: Essays on Media and Society*. New York: Routledge.

Cassell, J., & Jenkins, H. (1998). *From Barbie to Mortal Kombat: Gender and Computer Games* (illustrated edition.). The MIT Press.

Castells, M. (1989/2007). The Informational Mode of Development and the Restructuring of Capitalism. In J. T. Roberts & A. B. Hite (Eds.), *the Globalization and Development Reader: Perspectives on Development and Global Change*. USA: Wiley-Blackwell.

Castells, M. (2009). *Communication Power*. USA: Oxford University Press.

Chess, S. (2010). A 36-24-36 Cerebrum: Productivity, Gender, and Video Game Advertising. *Critical Studies in Media Communication*, *28*(3), 230–252.

Cho, M.-R. (2002). Flexibilization Through Metropolis: The Case of Postfordist Seoul, Korea. In G. Bridge & S. Watson (Eds.), *The Blackwell City Reader* (pp. 147–161). UK: Blackwell Publishing.

Cifaldi, F. (2011, September 14). ESA Head Advocates Games For Education To House Committee. *Gamasutra*. Retrieved December 10, 2013 from http://gamasutra.com/view/news/37245/ESA_Head_Advocates_Games_For_Education_To_Hou se_Committee.php

Cohen, N. (2008a). The Valorization of Surveillance: Towards a Political Economy of Facebook. *Democratic Communique*, *22*(1), 5–22.

Cohen, N. (2008b). (Bio)Power to the People? Harnessing Potential in the Creative and Cultural Workplace. *Stream: A Graduate Journal of*, *1*(2).

Cohen, N. (2012). Cultural Work as a Site of Struggle: Freelancers and Exploitation. (C. Fuchs & V. Mosco, Eds.)*TripleC: Cognition, Communication, Co-operation*, (Special Issue: Marx is Back), 141–155.

Coleman, G. (2010). Ethnographic Approaches to Digital Media. *Annual Review of Anthropology*, *39*, 487–505.

Consalvo, M. (2003). Hot Dates and Fairy-Tale Romances: Studying Sexuality in Video Games. In M. Wolf & B. Perron (Eds.), *The Video Game Theory Reader* (pp. 171–195). New York & London: Routledge.

Consalvo, M. (2009). Convergence and Globalization in the Japanese Videogame Industry. *Cinema Journal*, *48*(3), 135–141.

Cote, M., & Pybus, J. (2007). Learning to Immaterial Labour 2.0: MySpace and Social Networks. *ephemera*, *7*(1), 88–106.

Cote, M., & Pybus, J. (2011). Learning to Immaterial Labour 2.0: Facebook and Social Networks. In *Cognitive Capitalism, Education and Digital Labor* (pp. 169–195). New York: Peter Lang.

Coughlan, S. (2012, February 28). Eye-controlled computer games for disabled children. *BBC News*. Retrieved June 19, 2013 from http://www.bbc.co.uk/news/education-17179405

Curtis, T. (2012a). What's NASA doing making video games? *Gamasutra*. Retrieved December 18, 2013 from http://gamasutra.com/view/news/40282/Whats_NASA_doing_making_video_games.php

Curtis, T. (2012b). New game to teach students about slavery, the American Civil War. *Gamasutra*. Retrieved December 18, 2013 from http://www.gamasutra.com/view/news/129232/New_game_to_teach_students_about_slavery_th e_American_Civil_War.php

Curtis, T. (2012c, February 3). Report: Layoffs hit EA's Vancouver branch as company makes digital shift. *Gamasutra*. Retrieved October 20, 2013 from http://www.gamasutra.com/view/news/40099/Report_Layoffs_hit_EAs_Vancouver_branch_as_c ompany_makes_digital_shift.php

Dalla Costa, M., & James, S. (1972). *The Power of Women & the Subversion of Community*. England: Falling Wall Press.

De Peuter, G. (2010). *The Contested Convergence of Precarity and Immaterial Labour* (PhD). Simon Fraser University, B.C, Canada.

De Peuter, G. (2011). Creative Economy and Labor Precarity: A Contested Convergence. *Journal of Communication Inquiry*. 35 (4). 417-425.

De Peuter, G. (2012). Level Up: Video Game Production in Canada. In I. Wagman & P. Urquhart (Eds.), *Cultural Industries.ca: Making Sense of Canadian Media in the Digital Age* (pp. 78–94). Toronto: Lorimer.

De Peuter, G. (2014). Confronting Precarity in the Warhol Economy. *Journal of Cultural Economy*. Volume 7 (1). 31-47.

Dean, J. (2004). The Networked Empire: Communicative Capitalism and the Hope for Politics. In P. Passavant & J. Dean (Eds.), *Empire's New Clothes: Reading Hardt and Negri* (pp. 267–291). New York: Routledge.

Dean, J. (2009). *Democracy and other neoliberal fantasies: communicative capitalism & left politics*. USA: Duke University Press.

Dean, J. (2012). *The Communist Horizon*. London: Verso.

Deleuze, G., & Guattari, F. (1977). *Anti-Oedipus: Capitalism and Schizophrenia*. New York: Viking Press.

Denning, M. (2010). Wageless Life. (S. Watkins, Ed.)*New Left Review, 66*(November-December), 79–97.

Deuze, M. (2007). *Media Work*. Cambridge UK: Polity.

Deuze, M., Martin, C. B., & Allen, C. (2007). The Professional Identity of Gameworkers. *Convergence*, *13*(4), 335–353.

Donald, B., Gertler, M., & Tyler, P. (2012). Creatives after the crash. *Cambridge Journal of Regions, Economy and Society*, *6*(1), 3–21.

Downey, G. J. (2002). *Telegraph messenger boys: Labor, technology and geography, 1850-1950*. New York: Routledge.

Dunn, K. (2004). Africa's Ambiguous Relation to Empire and Empire. In P. Passavant & J. Dean (Eds.), *Empire's New Clothes: Reading Hardt and Negri* (pp. 143–163). New York: Routledge.

Dyer-Witheford, N. (1999). *Cyber-Marx: Cycles and Circuits of Struggle in High-Technology Capitalism*. Urbana: University of Illinois Press.

Dyer-Witheford, N., & de Peuter, G. (2009). *Games of Empire: Global Capitalism and Video Games*. Minneapolis: University of Minnesota Press.

Edensor, T., Leslie, D., Millington, S., & Rantisi, N. (2010). Rethinking creativity: Critiquing the creative class thesis. In T. Edensor, D. Leslie, S. Millington, & N. Rantisi (Eds.), *Spaces of Vernacular Creativity: Rethinking the Cultural Economy* (pp. 1–16). New York: Routledge.

Evans, G., & Foord, J. (2006). Small Cities for a Small Country: Sustaining the Cultural Renaissance? In *Small Cities: Urban Experience Beyond the Metropolis* (pp. 151–169). USA: Routledge.

Everett, A., & Caldwell, J. (2003). Issues in Theory and Practice of Media Convergence. In A. Everett & J. Caldwell (Eds.), *New Media: Theories and Practices of Digitextuality* (pp. xi–3). London and New York: Routledge.

Fairclough, N. (2006). *Language and Globalization*. London: Routledge.

Federici, S. (2012). *Revolution at Point Zero: Housework, Reproduction, and Feminist Struggle*. USA: PM Press/Common Notions/Autonomedia.

Ferenstein, G. (2011). Bill Gates Takes On Education's Biggest Bureaucratic Beast With Video Games. *FastCompany*. Retrieved October 17, 2013 from http://www.fastcompany.com/1750540/bill-gates-takes-educations-biggest-bureaucratic-beast-video-games

Fineman, S. (Ed.). (1993). *Emotion in Organizations*. London: SAGE.

Flanagan, M. (2009). *Critical Play: Radical Game Design*. Massachusetts: The MIT Press.

Florida, R. (2005). *Cities and The Creative Class*. New York, London: Routledge.

Foucault, M. (2008). *The Birth of Biopolitics: Lectures at the Collège de France, 1978-79*. Basingstoke [England]: Palgrave Macmillan.

Frisby, D. (1985). *Fragments of Modernity: Theories of Modernity in the Work of Simmel, Kraucer and Benjamin*. Cambrdige: Polity Press.

Fuchs, C. (2010). Class, knowledge and new media. *Media, Culture & Society*, *32*(1), 141–150.

Gabe, T., Florida, R., & Mellander, C. (2013). The Creative Class and The Crisis. *Cambridge Journal of Regions, Economy and Society*, *6*(1), 37–53.

Galloway, A. (2006). *Gaming: Essays on Algorithmic Culture*. Minneapolis: University of Minnesota Press.

Galloway, A. R., & Thacker, E. (2007). *The Exploit: A Theory of Networks*. Minneapolis: Univ Of Minnesota Press.

Gill, R. (2007). *Technobohemians or the New Cybertariat?: New Media Work in Amsterdam a Decade after the Web*. Amsterdam: Institute of Network Cultures.

Gill, R., & Pratt, A. (2008). In the Social Factory?: Immaterial Labour, Precariousness and Cultural Work. *Theory, Culture & Society*, *25*(7-8), 1–30.

Gramsci, A. (2000). *The Antonio Gramsci Reader: Selected Writings 1916-1935*. (D. Forgacs, Ed.). NY: New York University Press.

Grant, J., & Buckwold, B. (2013). Precarious creativity: immigrant cultural workers. *Cambridge Journal of Regions, Economy and Society*, *6*(1), 113–126.

Gregg, M. (2009). Learning to (Love) Labour: Production Cultures and the Affective Turn. *Communication and Critical/Cultural Studies*, *6*(2), 209–214.

Gregg, M. (2011). *Work's Intimacy*. UK: Polity Press.

Hall, S. (1988). Brave New World. *Marxism Today*, *October*(1988), 24–29.

Hancock, P., & Tyler, M. (2000). The look of love: gender and organization of aesthetics. In J. Hassard, R. Holliday, & H. Willmott (Eds.), *Body and Organization* (pp. 108–129). London: SAGE.

Hannigan, J. (2002). Fantasy City: Pleasure and Profit in the Postmodern Metropolis. In S. Fainstein & S. Campbell (Eds.), *Readings in Urban Theory* (pp. 305–325). UK: Blackwell Publishing.

Hardt, M., & Negri, A. (2000). *Empire*. Cambridge, Mass: Harvard University Press.

Hardt, M., & Negri, A. (2012). *Declaration*. New York: Argo-Navis Author Services.

Harvey, D. (1990). *The Condition of Postmodernity*. Oxford: Blackwell.

Harvey, David. (2001). *Spaces of Capital: Towards a Critical Geography*. New York: Routledge.

Harvey, David. (2002). From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism. In G. Bridge & S. Watson (Eds.), *The Blackwell City Reader*. UK: Blackwell Publishing.

Harvey, David. (2003). *The New Imperialism*. Oxford: Oxford University Press.

Harvey, David. (2005). *A Brief History of Neoliberalism*. Oxford: Oxford University Press.

Harvey, David. (2010a). *The Enigma of Capital*. New York: Oxford University Press.

Harvey, David. (2010b). *A Companion to Marx's Capital*. London: Verso.

Hassard, J., & Holliday, R. (Eds.). (1998). *Organization Representation: Work and Organizations in Popular Culture*. London: SAGE.

Hay, J. (2011). The Birth of the "Neoliberal" City and its Media. In J. Packer & S. Wiley (Eds.), *Communication Matters Materialist Approaches to Media, Mobility and Networks* (pp. 121–141). London and New York: Routledge.

Head, S. (2003). *The New Ruthless Economy: Work and Power in the Digital Age*. Oxford: Oxford University Press.

Hearn, A. (2010a). Reality television, The Hills, and the limits of the imma- terial labour thesis. *TripleC: Cognition, Communication, Co-operation*, *8*(1), 60–76.

Hearn, A. (2010b). Structuring Feeling: web 2.0, online ranking and rating, and the digital "reputation" economy. (J. Burston, N. Dyer-Witheford, & Hearn, Eds.)*ephemera*, *10*(3-4), 421–438.

Hedges, N., & Beynon, H. (1982). *Born to Work: Images of Factory Life*. London: Plato.

Hesmondhalgh, D., & Baker, S. (2011a). *Creative Labour: Media Work in Three Cultural Industries*. New York & London: Routledge.

Hesmondhalgh, D., & Baker, S. (2011b). Toward a Political Economy of Labor in the Media Industries. In J. Wasko, G. Murdock, & H. Sousa (Eds.), *The Handbook of Political Economy of Communications* (pp. 381–401). USA: Wiley-Blackwell.

Hochschild, A. R. (1983). *The Managed Heart: The Commercialisation of Human Feeling*. Berkeley: University of California Press.

Hong, R., & Chen, V. H.-H. (2013). Becoming an ideal co-creator: Web materiality and intensive laboring practices in game modding. *New Media & Society*, *0*(0), 1–16.

Howard, P. (2002). Network Ethnography and the Hypermedia Organization: New Media, New Organizations, New Methods. *New Media & Society*, *4*(4), 550–574.

Huntemann, N., & Aslinger, B. (Eds.). (2013). *Gaming Globally: Production, Play, and Place*. New York: Palgrave Macmillan.

Huws, U. (2003). *The Making of a Cybertariat: Virtual Work in a Real World*. Monthly Review Press.

Jarrett, K. (2013). The Relevance of "Women's Work": Social Reproduction and Immaterial Labour in Digital Media. *Television and New Media*, *XX*(X), 1–16.

Jenson, J., & De Castell, S. (2010). Gender, Simulation, and Gaming: Research Review and Redirections. *Simulation & Gaming*, *41*(1), 51–71. doi:10.1177/1046878109353473

Jin, D. Y., & Chee, F. (2008). Age of New Media Empires : A Critical Interpretation of the Korean Online Game Industry. *Games and Culture*, *3*(1), 38–58.

Johns, J. (2006). Video games production networks: value capture, power relations and embeddedness. *Journal of Economic Geography*, *6*, 151–180.

Kellner, D. (1989). *Critical Theory, Marxism and Modernity*. Baltimore: Johns Hopkins University Press.

Kellner, D. (1997). Critical Theory and Cultural Studies: The Missed Articulation. In J. McGuigan (Ed.), *Cultural Methodologies* (pp. 12–42). London: SAGE.

Kerr, A. (2006). *The Business and Culture of Digital Games: Gamework/Gameplay*. London: SAGE.

Kerr, A. (2013). Space Wars: The Politics of Games Production in Europe. In N. Huntemann & B. Aslinger (Eds.), *Gaming Globally: Production, Play, and Place* (pp. 215–233). New York: Palgrave Macmillan.

Kline, S., Dyer-Witheford, N., & de Peuter, G. (2003). *Digital Play: The Interaction of Technology, Culture, and Marketing*. Montreal & Kingston: McGill-Queen's University.

Knights, D., & Willmott, H. (Eds.). (1990). *Labour Process Theory*. London: MacMillan.

Kocieniewski, D. (2011, September 10). Rich Tax Breaks Bolster Video Game Makers. *The New York Times*. Retrieved from http://www.nytimes.com/2011/09/11/technology/rich-tax-breaks-bolster-video-game-makers.html

Kücklich, J. (2009). Virtual Worlds and Their Discontents Precarious Sovereignty, Governmentality, and the Ideology of Play. *Games and Culture*, *4*(4), 340–352.

Kunter, A., & Bell, E. (2006). The Promise and Potential of Visual Organizational Research. *M@n@gement*, *9*(3), 177–197.

Kuehn, K., & Corrigan, T. F. (2013). Hope Labor: The Role of Employment Prospects in Online Social Production. *The Political Economy of Communication*, *1*(1). Retrieved from http://polecom.org/index.php/polecom/article/view/9

Landry, C. (2008). *The Creative City: A Toolkit for Urban Innovators*. New Stroud, UK: Comedia.

Lazzarato, M. (1996). Immaterial Labor. In P. Virno & M. Hardt (Eds.), *Radical Thought in Italy* (pp. 133–51). Minneapolis: University of Minnesota Press.

Lees, L. (2006). Gentrifying down the urban hierarchy: "the cascade effect" in Portland, Maine. In D. Bell & M. Jayne (Eds.), *Small Cities: Urban Experience Beyond the Metropolis* (pp. 91–105). New York: Routledge.

Lefebvre, H. (1991). *The Production of Space*. Oxford: Basil Blackwell.

Lefebvre, H. (1996). *Writings on Cities*. Oxford, UK: Wiley.

Lefebvre, H. (2003). *The Urban Revolution*. Minneapolis: Univ Of Minnesota Press.

Legault, M.-J., & Weststar, J. (2013, January 9). Are Game Developers Standing Up for Their Rights? *Gamasutra*. Retrieved July 14, 2013 from http://www.gamasutra.com/view/feature/184504/are_game_developers_standing_up_.php

Leibovitz, J., Bell, D., & Jayne, M. (Eds.). (2006). Jumping Scale: From Small Town Politics to a Regional Presence? Redoing Economic Governance in Canada's Technology Triangle. In *Small Cities: Urban Experience Beyond the Metropolis* (pp. 45–59). UK: Routledge.

Leonard, D. (2009). Young, Black (& Brown) and Don't Give a Fuck. *Cultural Studies ↔ Critical Methodologies*, *9*(2), 248 –272.

Ligman, K. (2013, April 25). More layoffs hit EA. *Gamasutra*.

Liu, A. (2004). *The laws of cool: knowledge work and the culture of information*. Chicago: University of Chicago Press.

Lloyd, G., McCarthy, J., & Peel, D. (2006). The Re-construction of a small Scottish city: re-discovering Dundee. In D. Bell & M. Jayne (Eds.), *Small Cities: Urban Experience Beyond the Metropolis* (pp. 105–121). New York: Routledge.

Lorey, I. (2006). Governmentality and Self-Precarization On the normalization of cultural producers. *Transversal*.

Lovink, G., & Rossiter, N. (Eds.). (2007). *MyCreativity Reader: A Critique of Creative Industries*. Amsterdam: Institute of Network Cultures.

Lucas, R. (2010). Dreaming in Code. *New Left Review*, *62*(March-April), 125–132.

Malaby, T. (2009). *Making Virtual Worlds: Linden Lab and Second Life*. Ithaca & London: Cornell University Press.

Manzerolle, V. (2010). Mobilizing the audience commodity: Digital labour in a wireless world. (J. Burston, N. Dyer-Witheford, & A. Hearn, Eds.)*ephemera*, *10*(3/4), 455–469.

Marazzi, C. (2008). *Capital and Language: From the New Economy to the War Economy*. Los Angeles, CA: Semiotext(e).

Marcus, G. (1986). "Critical Response." Critical Studies in Mass Communication 3(1): 77-81.

Markusen, A., Lee, Y.-S., & DiGiovanna, S. (Eds.). (1999). *Second Tier Cities: Rapid Gworth Beyond the Metropolis*. Minneapolis; London: Univ Of Minnesota Press.

Martin, R., Rafferty, M., & Bryan, D. (2008). Financialization, Risk and Labour. *Competition and Change*, *12*(2), 120–132.

Marx, K. (1876/1990). *Capital: Volume 1: A Critique of Political Economy*. Penguin Classics.

Massey, D. (2008). A Global Sense of Place. In T. Oakes & P. Lynn Price (Eds.), *The Cultural Geography Reader* (pp. 257–264). London and New York: Routledge.

Mayer, V., Banks, M., & Caldwell, J. T. (Eds.). (2009). *Production Studies: Cultural Studies of Media Industries*. New York & London: Routledge.

Mayer, V. (2011). *Below the Line: Producers and Production Studies in the New Television Economy*. Durham: Duke University Press.

McCarthy, C. (2011). Reconstructing Race and Education in the Class Conquest of the City and the University in the Era of Neoliberalism. In C. McCarthy, R. Mejia, & H. Greenhalgh-Spencer (Eds.), *New Times: Making Sense of Critical/Cultural Theory in a Digital Age* (pp. 86–107). New York: Peter Lang.

McChesney, R. (2013). *Digital Disconnect: How Capitalism is Turning the Internet Against Democracy*. New York: The New Press.

McGonigal, J. (2011). *Reality is Broken: Why Games Make Us Better and How They Can Change the World*. New York: The Penguin Press.

McGowan, T. (2003). *The End of Dissatisfaction? Jacques Lacan and the Emerging Society of Enjoyment*. New York: SUNY Press.

McGuigan, J. (2012). The Coolness of Capitalism Today. (C. Fuchs & V. Mosco, Eds.)*TripleC: Cognition, Communication, Co-operation*, (Special issue: Marx is Back), 425–438.

McKercher, C., & Mosco, V. (Eds.). (2007). *Knowledge Workers in the Information Society*. Lanham: Lexington Books.

McRobbie, A. (2003). "Everyone is Creative". Artists as Pioneers of the New Economy?

McRobbie, A. (2011). Reflections On Feminism, Immaterial Labour And The Post-Fordist Regime. *New Formations*, *Number 70*(Winter), 60–76.

Meiksins, P. (1994). Labor and Monopoly Capital for the 1990s: A Review and Critique of Labor Process Theory. *Monthly Review*, *46*(6), 45–59.

Mejia, R. (2012). *Playing the Crisis: Video Games and The Mobilization of Anxiety and Desire* (PhD). University of Illinois, Urbana-Champaign, Urbana.

Meyer, A. (1991). Visual Data in Organizational Research. *Organization Science*, *2*(2), 218–236.

Miles, M., Hall, T., & Borden, I. (Eds.). (2004). *The City Cultures Reader* (2nd ed.). New York & London: Routledge.

Miller, D. (1987). *Material Culture and Mass Consumption*. Oxford: Blackwell.

Miller, D. (Ed.). (2005). *Materiality*. Durham and London: Duke University Press.

Miller, P. (2012). 11th Annual Salaray Survey. *Game Developer*, *April*, 7–13.

Miller, P. (2013, April 4). Industry in flux: What we learned from Game Developer's 2012 Salary Survey. *Gamasutra*. Retrieved June 28, 2013 from http://gamasutra.com/view/news/189893/Industry_in_flux_What_we_learned_from_Game_Developers_2012_Salary_Survey.php

Miller, P., & Bulkley, B. (2013). Game Developer Quality-of-Life Survey. *Gamasutra*.

Miller, T. (2006). Gaming for Beginners. *Games and Culture*, *1*(1), 5 –12.

Mills, C. W. (1951). *White Collar: The American Middle Classes*. New York: Oxford University Press.

Montfort, N., & Bogost, I. (2009). *Racing the Beam: The Atari Video Computer System*. Massachusetts: MIT Press.

Mosco, V. (1999). New York.Com: A Political Economy of the Informational City. *Journal of Media Economics*, *12*(2), 103–116.

Mosco, V. (2004). *The Digital Sublime: Myth, Power, and Cyberspace*. MIT Press.

Mosco, V. (2009). *The Political Economy of Communication* (2nd ed.). London: SAGE.

Mosco, V. (2011). The Political Economy of Labor. In J. Wasko, G. Murdock, & H. Sousa (Eds.), *The Handbook of Political Economy of Communications* (pp. 358–381). USA: Wiley-Blackwell.

Nakamura, L. (2009). Don't Hate the Player, Hate the Game: The Racialization of Labor in World of Warcraft. *Critical Studies in Media Communication*, *26*(2), 128–144.

Nakamura, L., & Chow-White, P. (Eds.). (2011). *Race After the Internet*. New York & London: Routledge.

Neff, G., Wissinger, E., & Zukin, S. (2005). Entrepreneurial Labor among Cultural Producers: "'Cool'" Jobs in "'Hot'" Industries. *Social Semiotics*, *15*(3), 307–334.

Negri, A. (2008). *Reflections on Empire*. Malden, MA: Polity Press.

Neilson, B., & Rossiter, N. (2008). Precarity as a Political Concept, or, Fordism as Exception. *Theory, Culture & Society*, *25*(7-8), 51 –72. doi:10.1177/0263276408097796

O'Donnell, C. (2008). *The Work/Play of New Economy: Video Game Development in the United States and India* (PhD). Rensselaer Polytechnic Institute, New York.

O'Donnell, C. (2009). Praxis: The everyday lives of video game developers: Experimentally understanding underlying systems/structures. *Transformative Work and Cultures*, *2*.

O'Donnell, C. (2012). This is Not a Software Industry. In P. Zackariasson & T. Wilson (Eds.), *The Video Game Industry: Formation, Present State, and the Future* (pp. 17–34). New York & London: Routledge.

Ong, A. (2006). *Neoliberalism as Exception: Mutations in Citizenship and Sovereignty*. Durham: Duke University Press.

Orland, K. (2011a). Firms Using Game-Like Simulations To Cull Job Applicants. *Gamasutra*. Retrieved September 8, 2013 from http://www.gamasutra.com/view/news/37457/

Orland, K. (2011b). EA's Riccitiello Offers Policy Suggestions For Encouraging U.S. Tech Jobs. *Gamasutra*. Retrieved April 25, 2013 from http://www.gamasutra.com/view/news/37403/EAs_Riccitiello_Offers_Policy_Suggestions_For_ Encouraging_US_Tech_Jobs.php

Oudenampsen, M. (2007). Back to the Future of the Creative City: An Archaeological Approach to Amsterdam's Creative Redevelopment. In G. Lovink & N. Rossiter (Eds.), *My Creativity Reader* (pp. 165–177). Amsterdam: Institute of Network Cultures.

Painter, J. (2002). Regulation Theory. Post-Fordism and Urban Politics. In S. Fainstein & S. Campbell (Eds.), *Readings in Urban Theory* (pp. 92–110). UK: Blackwell Publishing.

Peck, J. (2005). Struggling with the Creative Class. *International Journal of Urban and Regional Research*, *29*(4), 740–770.

Perlin, R. (2011). *Intern Nation: How to Earn Nothing and Learn Little in the Brave New Economy*. New York & London: Verso.

Pink, S. (2001). *Doing Visual Ethnography*. London: SAGE.

Plunkett, L. (2012). Every Game Studio That's Closed Down Since 2006. *Kotaku Australia*. Retrieved February 15, 2013 from http://www.kotaku.com.au/2012/01/every-game-studio-thats-closed-down-since-2006/

Postigo, H. (2008). Video Game Appropriation through Modifications. *Convergence: The International Journal of Research into New Media Technologies*, *14*(1), 59 –74.

Postigo, H. (2010). Modding to the big leagues: Exploring the space between modders and the game industry. *First Monday*, *15*(5).

Pratt, A., Gill, R., & Spelthan, V. (2007). WORK AND THE CITY IN THE e-SOCIETY: A critical investigation of the sociospatially situated character of economic production in the digital content industries in the UK. *Information, Communication & Society*, *10*(6), 922–942.

Raley, R. (2009). *Tactical Media*. Minneapolis: Univ of Minnesota Press.

Ramsay, M. (2012). *Gamers at Work: Stories Behind the Games People Play*. New York: Apress.

Read, J. (2001). The Hidden Abode of Biopolitical Production: Empire and the Ontology of Production. *Rethinking Marxism*, *13*(3-4), 24–30. doi:10.1080/089356901101241965

Read, J. (2003). *The Micro-Politics of Capital*. New York: SUNY Press.

Rodino-Colocino, M. (2007). High-Tech Workers of the World, Unionize! A Case Study of WashTech's 'New Model of Unionism. In C. McKercher & V. Mosco (Eds.), *Knowledge Workers in the Information Society* (pp. 209–227). Lanham, MD: Lexington.

Rose, M. (2011, October 19). EU Commission Grants 2.8M Euros Towards Future Video Game Hardware Research. *Gamasutra*. Retrieved May 13, 2013 from http://www.gamasutra.com/view/news/127723/EU_Commission_Grants_28M_Euros_Towards_Future_Video_Game_Hardware_Research.php

Rose, M. (2011, December 12). Call of Duty: Modern Warfare 3 Activision's Latest Billion-Dollar Title. *Gamasutra*. Retrieved January 4, 2012 http://www.gamasutra.com/view/news/39083/Call_of_Duty_Modern_Warfare_3_Activisions_Latest_BillionDollar_Title.php

Rose, M. (2013, January 31). Take-Two's share price falls as GTA V is delayed. *Gamasutra*. Retrieved December 12, 2013 from http://www.gamasutra.com/view/news/185825/TakeTwos_share_price_falls_as_GTA_V_is_delayed.php

Rose, M. (2013, April 3). Layoffs at Activision's High Moon following Deadpool completion. *Gamasutra*. Retrieved July 26, 2013 from http://www.gamasutra.com/view/news/189771/Layoffs_at_Activisions_High_Moon_following_Deadpool_completion.php

Rose, N. (1990). *Governing the Soul: The Shaping of the Private Self*. New York: Routledge.

Rose, N. (1996). *Inventing Our Selves: Psychology, Power, and Personhood*. Cambridge, [England]: Cambridge University Press.

Rosler, M. (2010). Culture Class: Art, Creativity, Urbanism. *e-flux*, *21*(12).

Ross, A. (2003). *No-Collar: The Humane Workplace and its Hidden Costs*. PA: Temple University Press.

Ross, A. (2007). Nice Work if You Can Get It: The Mercurial Career of Creative Industries Policy. In G. Lovink & N. Rossiter (Eds.), *My Creativity Reader* (pp. 17–41). Amster: Institute of Network Cultures.

Ross, A. (2009). *Nice Work If You Can Get It: Life and Labor in Precarious Times*. New York: NYU Press.

Rustin, M. (1989). The Politics of post-Fordism: Or, the Trouble with "New Times." *New*, *1*(175), 54–77.

Ryan, B. (1992). *Making Capital from Culture: The Corporate Form of Capitalist Cultural Production*. Berlin: Walter de Gruyter.

Sack, W. (2000). Conversation Map" An Interface for Very Large-Scale Conversations. *Journal of Management Information Systems*, *17*(3), 73–92.

Sassen, S. (2002a). from "Globalization and Discontents." In G. Bridge & S. Watson (Eds.), *The Blackwell City Reader* (pp. 161–171). UK: Blackwell Publishing.

Sassen, S. (2002b). Cities in a World Economy. In S. Fainstein & S. Campbell (Eds.), *Readings in Urban Theory* (pp. 32–57). UK: Blackwell Publishers.

Schiller, D. (1999). *Digital Capitalism: Networking the Global Market System*. Cambridge, Mass: MIT Press.

Schlichtman, J. J. (2006). Temp Town: temporality as a place promotion niche in the world's furniture capital. In D. Bell & M. Jayne (Eds.), *Small Cities: Urban Experience Beyond the Metropolis* (pp. 33–45). New York: Routledge.

Scholz, T. (Ed.). (2012). *Digital Labor: The Internet as Playground and Factory*. New York: Routledge.

Schumacher, L. (2006). Immaterial Fordism: the paradox of game industry labour. *Work Organisation, Labour and Globalization*, *1*(1), 144–155.

Seigworth, G., & Gregg, M. (2010). An Inventory of Shimmers. In M. Gregg & G. Seigworth (Eds.), *The Affect Theory Reader* (pp. 1–29). Durham: Duke University Press.

Sennett, R. (1999). *The corrosion of character : the personal consequences of work in the new capitalism*. New York ; London: W.W. Norton.

Sennett, R. (2006). *The culture of the new capitalism*. New Haven & London: Yale University Press.

Siwek, S. (2010). *Video Games in the 21st Century: Economic Contributions of the US Entertainment Software Industry*. Washington: Entertainment Software Association.

Smith, K. M. C. (2004). Electronic eavesdropping: The ethical issues involved in conducting a virtual ethnography. In M. D. Johns, S.-L. S. Chen, & J. G. Hall (Eds.), *Online Social Research: Methods, Issues and Ethics* (pp. 223–238). New York: Peter Lang.

Soja, E. (2002). Six Discourses on the Postmetropolis. In G. Bridge & S. Watson (Eds.), *The Blackwell City Reader* (pp. 188–197). UK: Blackwell Publishing.

Southwood, I. (2011). *Non-Stop Inertia*. UK: Zero Books.

Strangleman, T. (2004). Ways of (not) seeing work: the visual as a blind spot in Work, Employment and Society? *Work, Employment and Society*, *18*(1), 179–192.

Terranova, T. (2000). Free Labor: Producing Culture for the Digital Economy. *Social Text*, *18*(2), 33–58.

Thrift, N. (2010). Understanding the Material Practice of Glamour. In M. Gregg & G. Seigworth (Eds.), *The Affect Theory Reader* (pp. 289–309). Durham: Duke University Press.

Tsianos, V., & Papadopoulos, D. (2006). Precarity: A Savage Journey to the Heart of Embodied Capitalism. *European Institue for Progressive Cultural Policies*, *10*. Retrieved from http://eipcp.net/transversal/1106/tsianospapadopoulos/en

Toscano, A. (2011). The Limits of Autonomy: Cognitive Capitalism and University Struggles. In M. Peters & E. Bulut (Eds.), *Cognitive Capitalism, Education and Digital Labor* (pp. 259–275). New York & London: Peter Lang.

Turner, F. (2006). *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*. Chicago: Chicago University Press.

Tyler, M., & Taylor, S. (1998). The Exchange of Aesthetics: Women's Work and the Gift. *Gender, Work and Organization*, *5*(3), 165–171.

Ungerleider, N. (2011). Army Tweaks Recruitment Video Game To Train Soldiers For Real "Hurt Locker" Situations. *FastCompany*. Retrieved September 12, 2012 from http://www.fastcompany.com/1771044/army-tweaks-recruitment-video-game-train-soldiers-real-hurt-locker-situations

Vinodrai, T. (2012). Design in a downturn? Creative work, labour market dynamics and institutions in comparative perspective. *Cambridge Journal of Regions, Economy and Society*, *6*(1), 159–176.

Virno, P. (2004). *A grammar of the multitude : for an analysis of contemporary forms of life*. Los Angeles: Semiotext(e).

Waitt, G. (2006). Creative small cities: cityscapes, power and the arts. In D. Bell & M. Jayne (Eds.), *Small Cities: Urban Experience Beyond the Metropolis* (pp. 169–185). New York: Routledge.

Walker, A. (2011). Creativity loves constraints': The paradox of Google's twenty percent time. *ephemera*, *11*(4), 369–387.

Wark, M. (2007). *Gamer Theory*. MA: Harvard University Press.

Warren, S. (2002). Show Me How It Feels to Work Here: Using Photography to Research Organizational Aesthetics. *Ephemera*, *2*(3), 224–245.

Warren, S. (2008). Empirical Challenges in Organizational Aesthetics Research: Towards a Sensual Methodology. *Organization Studies*, *29*(4), 559–580.

Weeks, K. (2011). *The Problem with Work: Feminism, Marxism, Antiwork Politics, and Postwork Imaginaries*. Durham and London: Duke University Press.

Weidner, J. (2011). Governmentality, Capitalism, and Subjectivity. In N. Kiersey & D. Stokes (Eds.), *Foucault and International Relations* (pp. 25–51). London and New York: Routledge.

Whyte, W. (1956). *The Organization Man*. New York: Simon and Schuster.

Williams, D. (2002). Structure and Competition in the US Home Video Game Industry. *The International Journal on Media Management*, *4*(1), 41–54.

Williams, R. (1977). Culture is Ordinary. In I. Szeman & T. Kaposy (Eds.), *Cultural Theory: An Anthology* (pp. 53–60). UK: Wiley-Blackwell.

Winseck, D., & Jin, D. Y. (Eds.). (2011). *The Political Economies of Media*. London: Bloomsbury Academic.

Witz, A., Warhurst, C., & Nickson, D. (2003). The labour of aesthetics and the aesthetics of organization. *Organization*, *10*(1), 33–54.

Zhang, L., & Fung, A. Y. (2013). Working as playing? Consumer labor, guild and the secondary industry of online gaming in China. *New Media & Society*, *0*(0), 1–17.

Zizek, S. (2011). Liberalism as politics for a race of devils. *ABC*. Retrieved March 16, 2013 from http://www.abc.net.au/religion/articles/2011/11/22/3373316.htm

Zukin, S. (2002). Whose Culture? Whose City? In *Readings in Urban Theory* (pp. 325–335). UK: Blackwell Publishing.

Compiled by Eric Wall for
Gamesareevil.com

Blue=Sold
Brown=Split
Green=Formed from Former Members
Red=Merger
Orange=Name Change
Magenta=Folded in
Black=Studio Satalites
Cyan=Corporate Structuring
Yellow=Partners/2nd Party

APPENDIX B[41]: INTERVIEW QUESTIONS

Attachment 16: Measures (Interview Questions for Individuals)

Questions to employees

What is your role in the game studio?

What is drawing you into this business?

What other job would you do if you weren't employed in gaming?

Are there ways in which your past education is useful for the job you perform here?

What are the positive and negative sides of this business?

How would you define your job in terms of fun and work?

What does it mean to work for a game studio whose parent company is a big player in the video game market?

What aspects of technology change in your business?

What is the role of group work in this business?

How would you define the culture in the game studio?

How do you adapt to technological changes in terms of competition and skill formation?

Do you recommend this career path to others?

What aspects of technology change in your business?

How do you adapt to new technology?

What does crunch time look like?

How do you balance family life and work?

In terms of work and play, how do you define your job?

What is the centrality of information to your job?

How are the developments in software and hardware related to each other?

Can you explain what the role of language and communication and design in this business?

Part of your job is to create and manipulate effects and symbols. How do you do it? What are the criteria when you create certain effects and symbols? What to you pay attention to? What makes an effect good or bad?

Is your life outside the game studio tied to your job here inside the studio? If so, how? How does information and knowledge you possess in your everyday life relate to the production process?

---

[41] I would like to thank Casey O'Donnell for sharing his own research questions with me. They have helped me to come up with my own set of questions.

What are the virtues (beyond skills) that one should have to be involved in this business?

Is this business just limited to the workplace or does it go beyond the studio in terms of lifestyle, hobbies?

Questions to Human Resources

What specific skills are you looking for in your future employees?

What kind of work culture are you trying to establish in the game studio?

What is the turnover rate in the company?

What are you doing to cultivate creativity in the company?

What are your criteria for hiring people?

What are the positive and negative sides of this business?

What does it mean to hire people for a studio whose parent company is a big player in the video game market?

Are there specific techniques you employ to increase productivity?

How are annual reviews prepared?

Do you have expectations from educational institutions in terms of your future employees?

How do you adapt your employees to technological changes?

What does crunch time look like?

Can you explain what the role of language and communication and design in this business?

Questions to Management and Finance Department

What is the history of the game studio?

Why did you choose this place to run this business?

How do you deal with market fluctuations?

Where do you see this market going?

How has the economic downturn impacted your business?

What has changed after you became a subsidiary to a larger company?

What are the positive and negative sides of this business?

What does it mean to work with a mother company that is a big player in the video game market?

What do you do to keep people in the company, given that the industry is known for its high turnover rates?

How do you allocate people for specific projects?

What is the rate for the company innovate its technology?

What do you pay attention to when you devise new games?

Videos games are often characterized as entertainment for young, white, heterosexual males. How would you respond to that?

Could gaming be applied to education?

What could education learn from gaming?

Do you have expectations from educational institutions in terms of your future employees?

Are there differences between traditional manufacturing and gaming industry?

What does crunch time look like?

In terms of work and play, how do you define this business?

What do you as a studio, and the mother company, do to ensure control over IP?

What is the centrality of information to your job?

How do you decide on the market and the target audience?

What types of employees are extremely central to production?

There are more and more products where we see examples of games and films converging, like Tomb Raider. What can you say about the convergence between film and video game industry?

How are the developments in software and hardware related to each other?

Industry is composed of 4 parts: hardware manufacture, software developing, software publishing and retail. Where is Super Mario and how do you define its place within the industry?

Are developers strong in the market? What is their bargaining power? What determines their market share and power?

How do you reward your employees?

I assume your job is different from traditional manufacturing. So, can you explain what the role of language and communication and design in this business?

Can you explain what the role of language and communication and design in this business?

Part of your job is to create and manipulate effects and symbols. How do you do it? What are the criteria when you create certain effects and symbols? What to you pay attention to? What makes an effect good or bad?

Is your life outside the game studio tied to your job here inside the studio? If so, how? How does information and knowledge you possess in your everyday life relate to the production process?

What are the virtues (beyond skills) that one should have to be involved in this business?

Questions and multiple-choice options

Working in the video game industry has always been my dream job.
I am currently concerned about my job security.
I am concerned about the stability of the studio.
I am concerned about the financial status of the corporate.
I am concerned about the fact that we are losing senior talent and cannot replace them easily.
To remain a stable studio, we need to be producing at least two games.
IP fatigue is a concern for me because I want to be able to work in different titles.
IP fatigue is a concern for me because consumers may get tired of our game.
Gaming industry in general is unstable and this is a concern for me.
Because of the nature of the content in our franchise, I would actually prefer to work in a different title if I were able to choose.
Switching to the next generation means you need to relearn and update many of your skills.
The game industry is moving towards the Hollywood model.
The City is providing a pleasant environment for creative employees like us.
I would want more game studios around this area.
Through mobile technologies, my work bleeds over to my domestic space or leisure time and this sometimes bothers my spouse and emerges as a discussion matter.
Passion for work sometimes leads to overworking yourself.
Working on sequel games have negative impact on how creative I feel about my job.