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The experience of crunch in the video games industry amongst current and aspiring developers

An Honors Paper for the Department of Sociology

By Radu-Ioan Stochita

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Introduction

When I was younger, in my days as a gamer, I would roam through the streets of Vice City in Grand Theft Auto, imagining what it would be like to develop a video game. People around me who were playing video games had similar thoughts, thinking that just because playing them was fun, development could be the same.

The profession presents itself as fun, and the ludic component of video games makes players believe that making them might indeed be a joyful experience. Some developers experience that, but not all, especially when researchers have concluded that producing video games structurally suffers from relying on unpaid overtime work. In the video games industry, the practice of working long-hours, often towards the end of a project, trying to finish on time the development of the game is known as *crunch*. Developers enter crunch mode by sacrificing weekends, time with their families and by staying longer in the office, toiling over their keyboards, pushing their bodies and minds in order to finish developing the game. According to a 2004 International Game Development Association survey only 2.4% of the respondents mentioned having worked in a place where there was no crunch (Williams, 2022). In a 2005 survey among nearly 1000 industry professionals, the IGDA found such conditions to be endemic with 35% of workers reporting that they worked 65–80 hours during crunch periods, while 46% reported that this overtime went uncompensated (Woodcock, 2016).

As information related to the working conditions becomes more widely available, in recent years, researchers have been looking at crunch as a structural issue dominant in the industry at large. Game developers started expressing their voices on social media forums and news outlets to present the real living conditions, showing how companies took advantage of their passion for developing video games to keep them longer in the office. If the news about

crunch in the industry is now widespread, with everyone who is interested in securing a job at a video game development company knowing about it, why are people still entering the industry?

In the following pages, I argue that game developers' relationship to crunch is contradictory: on the one hand, they view it as a matter of passion, referencing their desires to toil in the video games industry in order to make a product they deeply care about. On the other hand, they deploy it as a critical lens through which they reflect on the working conditions. This is partly because neoliberalism has captured this passion and turned it into a tool for exploitation. As a response, some game developers seek alternative ways to maintain their passion for game developing. By interviewing the aspiring and current developers, I was looking to answer the following research questions: How do people's personal relationship to video games influence their desire of working inside the video games industry? Despite the growing research on crunch in the video games industry, why do aspiring developers still plan to enter it?

Theoretical Framework

Over the years, scholars have been documenting the changes in work-life balance and how eroding labor legislation leaves workers to put up with longer working hours and less protections (Guest, 2002; Warren, 2021). The current work ethic, described by scholars as the neoliberal work ethic, sets the expectation that every activity workers are doing in life must be productive and must be thought of in business terms (Bloom, 2007; Crary, 2022). Neoliberalism refers to a government approach which favors free market enterprise, a reduction in government spending and also a transformation of one's life in a business endeavor. Corporations emphasize productivity, trying to push more to be achieved in less time, in order to raise profits (Harvey, 2007). If that is not the case, workers must stay overtime to finish the assigned tasks for them, which were already crammed in a very short amount of time.

They live in a constant state of imbalance, and as Peter Bloom argues, workers are coerced to believe that work-life balance is attainable, and that the problem rests within their own misallocation of resources (Bloom, 2016). People use their free time as moments to polish their resumes, to look for a different job, to develop coding or to prepare themselves better as a worker in society (Adorno, 1991).

Workers are not outrightly forced to stay overtime in all cases and industries, or to put in some additional labor at home. They feel the pressure when looking around at the other workers or when their employers remind them of the important mission of the company or when they know their contract depends on performance (Crary, 2019). Aside from the long working hours, the employers nowadays rely on tactics of “gamification”, creating tasks for their employees that resemble levels in a video game (Webster & Martocchio, 1993). Gamified workplaces rely on techniques of game design to increase the productivity of the workplace and also to contribute to better workers’ satisfaction (Oprescu, Jones & Katsikitis, 2014). Work is constructed as play and workers must come into the office with a smile on their face, ready to take on the day’s tasks (Avey, Hughes, Norman & Luthans, 2008).

There are countless leadership theories, which emphasize the need of having enthusiastic employees, teaching the managers in exchange how to give their workers the biggest smiles (Bono, Foldes, Vinson & Muros, 2007). What those leadership theories overlook is the alienation that employees experience from their own emotions when they put on a facade in order to do the job (Brook, 2009). The smile they are putting on is no longer theirs, the emotions they are showcasing are not natural, but rather part of the job description. This process allows the employers to feel that the way they are managing the company and the work they are doing is right, to which Hochschild says: “Officials in institutions believe they have done things right

when they have established illusions that foster the desired feelings in workers, when they have placed parameters around a worker's emotion memories, a worker's use of the as if. It is not that workers are allowed to see and think as they like and required only to show feeling (surface acting) in institutionally approved ways" (Hochschild, 2012).

With the changing nature of work, researchers are warning that our society might further continue to destabilize labor legislation in favor of more flexible working arrangements (Veen, Oliver, Goods & Barratt, 2019). The work-life balance is eroding in ways that promote more invisible labor that is not remunerated and is presented as necessary for one in order to achieve their goals in life: to advance on their career track, to start a business (Braedley & Luxton, 2010). There is enough criticism on the changing dynamic of work, yet not everyone considers those changes to be negative. The hustle culture, which shows people pulling themselves by their bootstraps in order to reach their financial dreams, is very much alive, being portrayed extensively on social media (Carter, 2016). There are people who speak positively about having to work every day, to wake up and get straight to work and to continue working on their business even when getting home.

The hustle culture is present across the working world, with people in the video games industry working hard in order to show their allegiance to the company and to prove that they deserve to be there. The study of labor relations inside the video games industry goes back to the pioneering work by game scholars De Peuter and Dyer-Witherford's, *Games of Empire*, in which they present video games as an important part of the preservation and expansion of the capitalist Empire. They call the socio-economic system of late capitalism an Empire, given the multilayered institutional agencies that allow it to function uninterrupted all across the globe and for people to reproduce it without consciously noticing it (De Peuter, Dyer-Witherford, 2009).

The Empire they are referencing does not resemble the old Roman Empire or Habsburg Empire, but rather a form of dominance through which the socio-economic system spreads across the world, changing every relationship it finds in its way into a production one. De Peuter and Dyer-Witherford critique video games, thinking about the global chain of production and how the relations of production that go into the video game reproduce the socio-economic system from which they arise.

Moreover, De Peuter and Dyer-Witherford argue that the video games industry, and its product, the video game, serve as crucial tools that reproduce the relations of production that exist in other sectors, such as technology and animation. The video games industry modifies the global labor relations, shifting the trend from a separation between work and private life, as it was during the Fordist times, to one in which work, play and leisure become inseparable. The separation of work from play contributes to new dynamics in production, in which not only game developers, but players themselves are responsible for generating value. The developers are not the only ones toiling, but so are players, since video games are not a product that is only meant to be consumed. By placing video games production in the wider context of capitalist production, De Peuter and Dyer-Witherford argue that game companies had to rely on networks of immaterial labor, reaching far beyond the studio, incorporating very passionate fans who would modify the game to their liking and promote it freely on internet forums and in real life. The production of video games does not stop the moment the game is delivered, but continues in players' homes, where they fidget with it, become advocates for it, and further share it. The players do not simply play the game, and the product is no longer just a distraction from the perils of the workday. Players engage in virtual worlds where they keep on creating content that further solidifies the presence of the industry and its product in the lives of the people.

While every player contributes to this production process, video game developers are the ones who set the foundation of the virtual world where it is possible. The practices of laboring inside the video games industries have been documented heavily in the press, covering scandals of overworking employees, stripping them of their contracts after a project ended or pay-discrimination based on their identity (Welsh, 2010; Grayson, 2018; Glasner, 2019). The scandals have brought to surface what game scholars A.C. Cote and B.C. Harris refer to as crunch: “the practice of working long-hours during certain periods of time” (Cote & Harris, 2021). Crunch has been extensively studied in the video games industry, with games scholars such as Vanderhoef and Curtin claiming it to be not only an issue in the United States, but everywhere video game companies are formed (Vanderhoef & Curtin, 2015). Other game scholars, such as Bogost draw attention to how it is less common for developers not to be overworked, than to have a clear, regular 9-to-5 schedule (Bogost, 2010). Cote and Harris analyze the trends in the industry, claiming crunch to be a structural issue that many developers in big companies have experienced and many more expect to face at a point.

Of course, claiming that all video game companies enforce crunch would be misleading, as some companies have taken action to avoid the practice and foster a better work environment for its employees (Niemela, 2021). That said, crunch is still regarded as a widespread issue: 53% of workers reporting crunch to be an expected part of the job in 2019 (TakeThis, 2019). Crunch becomes part of expectations from developers and is cherished as a measure of dedication to the video games industries across a variety of companies (Cote, Harris, 2021; Cote, Harris, 2021b).

The existence of crunch inside the industry allows for the employers to maximize and squeeze out of the workers their creative power. With crunch being studied as a structural issue, Woodcock, Dyer-Witherford & De Peuter for instance look at crunch from the perspective of

management and analyze why and how managers implement it. They note that the upper management represents crunch as a temporary practice, promising the workers that it won't stretch beyond a short period of time. However, in practice, companies often expand crunch until the final stage of the production of a videogame (Woodcock, 2016; Dyer-Witherford & De Peuter, 2009).

As a response to exploitative working conditions, employees engage in tactics of resistance, seeking to either eliminate crunch or make it more manageable. Games Studies scholar Ergin Bulut aims to understand how some developers have implemented tactics of resistance to crunch, and how that affects the labor relations in the field. His work reveals signs of unrest surrounding the customs and behaviors in the video games industry, which are now being challenged by unionization practices (Bulut, 2020). The struggles in the industry are emblematic of the underlying conditions, argues Bulut, showing that when the conditions of work become too much for people to bear, retaliation against the company might occur.

In addition to scholars who are interested in crunch and resistance against it, others explore the ideological mechanisms through which developers tolerate the exploitative working conditions. While acknowledging the importance of crunch in the video games industry, game studies scholar Jamie Woodcock goes beyond the question of crunch and explores the ideological dimension of the industry. He argues that companies use passion as a tool to justify longer hours, lower compensation, and fewer benefits than in the software industry. Another games studies scholar, Katherine Cross joins the conversation to show that passion is necessary for developers to show their allegiance to development firms. Developers are expected to work long hours at the office, serve the customer with a smile on their face, while being told that there are hundreds of people eager to take their place if they step out of line (Cross, 2018). Cross looks

at the widespread deployment of passion in the industry as an ideological force, one in which the employers give developers the impression that they must feel very fortunate for working for their companies and for having the chance to work on video games as many others are denied this opportunity. Working inside video games is presented as a privilege by the management of the companies, installing a sense of pride amongst the developers that could “make it.”

Passion is not the only ideological force at play in the industry though. By analyzing the pioneering companies and developers in the field, Jamie Woodcock links the development and emergence of video games in the US to the rhetoric of the counter-cultural movements of the 1960s: reject the 9-to-5 mindset of the older generation parents and take risks (Woodcock, 2016). The passion has mingled intricately with a desire of doing creative work, even if that means being stuck in the office for a longer time and laboring over the keyboard to create virtual worlds. Developers were expected to embrace the spirit of entrepreneurship: if they took initiative and worked hard enough, they could be the next big names in the video games industry.

My research also focuses on labor relations, and more specifically crunch, from the perspective of game developers. In my research, I am looking at the diverse and contradictory ways in which game developers relate themselves to crunch, with some enjoying it and not considering it exploitative, while others are developing tactics to resist or plan quitting the industry altogether. And finally, as the scholars argued that crunch is exploitative, why are game developers still entering the industry? By asking these questions, I aim to understand the ubiquity and power of crunch in the public discourse and how it shapes developers’ subjectivity.

In pushing the boundaries of work, people find themselves subject to labor elements at all times, whether during their time in the office or on the bus. Aspiring video game developers are not exempt from the rule, having to navigate a world in which crunch has been heavily

publicized in the press, while still working hard to land a job. The literature on labor relations looks at crunch practices among current video game developers, but does not consider how aspiring developers prepare for the industry or how they think about it. This leaves a very important question unanswered: How do discussions about crunch circulate in public? How do the developers come to know about this? And finally, how does this knowledge shape their relationship to the industry?

I decided to interview current and aspiring video game developers to get a better sense of how they began knowing that exploitation in the industry exists and how they position themselves with regards to it. My research looks at crunch not only as an exploitation practice existing in the present, but tries to link it back to the way people came to know about it, accept it or resist it.

Methods

In conducting this research, I conducted 17 interviews, 8 with aspiring developers, and 9 with current ones, in order to find out their impressions about the video games industry. I talked to current game developers in order to understand how their experience inside video game companies has influenced their relationship to the industry. Additionally, I chose to include people who have not worked yet in the industry, to get a sense of the image they have developed about the field in which they aspire to profess one day. By including aspiring developers, I wanted to show if there are differences in perception about the video games industry, and if working in the industry might have caused them.

Out of the 8 aspiring developers, 2 of them mentioned that they had serious feelings about giving up on joining the video games industry, redirecting their attention towards either animation or software development. Despite their desire of potentially quitting one day, those 2

aspiring developers said that they might still give the video games industry one chance, at least to try it out and see if it fits their personality. I categorized the interviewees as aspiring game developers based on their desire of joining the industry, even if some are already thinking about quitting.

In selecting the sample, I have relied on a previous personal connection I have had with a game developer who helped me identify other potential subjects. He connected me with other current game developers who later recommended me to more people who are already working in the industry. By using the snowball sampling method, I was able to start from an individual and get more research subjects through the personal connection he had with others. Additionally, he encouraged me to identify game development programs at various universities in the United States, which I have done by searching them online, and contact faculty with the hope of promoting the research to their students. I found success with an American university on the East Coast from which two students, both aspiring game developers contacted me with an interest of partaking in the research. Again, by employing the snowball sampling method, those two aspiring developers have recommended me to other aspiring ones which in turn have connected me with their peers who were having similar aspirations. Not everyone who I have been recommended to responded back to, some declined the offer to be interviewed saying that their career might be prejudiced if anyone finds out they talked about their expectation about the industry.

I have granted all my interviewees full anonymity and any reference to their personal or professional lives has been anonymized, in order to protect them from any potential retaliation. I have used pseudonyms instead of their names and I abstracted the names of their universities where they were preparing for a career in game development or the names of companies where

they worked at. I conducted each interview digitally, through Zoom and each lasted between 45 - 90 minutes. Out of the 17 interviewees, 14 of them identified as male, 2 others as female, and one as non-binary. With the exception of one current developer being 40, all the other aspiring and current developers were between the ages of 20 - 24.

The interviews allowed me to understand the way current and aspiring video game developers think about the industry, once having known or having experienced crunch. Talking to aspiring developers offered a glimpse into the world of someone that is currently trying to land a job at a video game company, putting in labor even after school, in order to polish their skills. The current game developers reflected on their journey of how they landed in the industry, offering tactics that could empower aspirants to score a job. The discussions revealed a strong desire to work hard, showing the employer and the players that they were devoted to video games and that they should get the job.

Aside from the transcribed and coded interviews, I have relied on existing academic literature about the video games industry and newspaper articles explaining labor relations inside the video games industry to answer my research questions. I collected data from online forums, blogs and newspapers by doing various searches on different search engines, using specific terms such as: "video games industry; crunch; crunch in the video games industry; overtime video games industry." I took notes on articles I found and I used those to flesh out the experiences of game developers, to further support the data I collected from the interviews.

The newspaper articles provided a great insight into the video game companies, to information, such as discussions about the working conditions at specific companies, that researchers often do not have access due to the practice of requiring a Non-Disclosure Agreement (NDA) clause in the contract. The newspaper articles provided an understanding of

how crunch has evolved over the years, from an issue on the outskirts of the industry, known only to people that were actively working inside, to widely-known phenomenon covered internationally. Besides the crunch cases that my interviewees referenced, the articles broadened my horizons, providing an understanding of major documented past crunch phenomenon, situating the working conditions in a more intricate web of events.

Crunching, yet some enjoy it

Benjamin, a current developer, who joined a video game development company on the East Coast of the US a year ago says: “When I am typing the lines of code, working on mechanics that will be later seen in [the] game that will hit the stores, [it] does not feel like work to me. I do receive a paycheck, I have a contract and I have insurance, yet it feels like play. It still feels like a dream to have played video games since infancy and now have the chance to develop them.” Benjamin believes that the work he performs does not fall in the stereotypical mold of what would constitute labor, instead making him feel like he is continuously playing, thus eroding the distinction between work and play time. The video games industry portrays itself as a playful place, which according to game scholar Ergin Bulut goes in accordance with the historical moment of “ludic contract” (Bulut, 2021). The ludic contract refers to the governments and corporations’ desire to have playful kinds of capital, playful cities, playful production, and to shift the rhetoric that work does not have to be boring or dreadful. Working inside the video games industry is presented as play, as a place where people who are passionate about this medium can come in and develop products that can put smiles on players’ faces.

Benjamin discusses his passion for video games as stemming from his desire of not having a typical 9-to-5 job, stuck in an office, where he does not have to use his creativity: “Even if I have a regular schedule, I feel like I am very creative and I can behave exactly the way I want

to. If I want to code while sitting down, I can. If I want to do it wearing my sweatpants, the Metallica t-shirt or a random baseball cap, I can.” For Benjamin, the video games industry represents an alternative to the cubicle life in which a strict etiquette is required and where one’s creativity is killed in favor of their capacity to repeat a specific set of tasks. Thus, the video games companies portray themselves as counter-cultural places, where developers have the chance to be whoever they want to, dress in the clothes they prefer and work as they please.

According to games scholars, Dyer-Witheford and De Peuter, the video game companies attract people who are “youthful, predominantly male, technically wizard, skeptical towards suits, outside the union traditions, and ideologically in varying proportions, libertarian, entrepreneurial and idealist” (Dyer-Witheford & De Peuter, 2009). The video game developers who are skeptical towards suits follow a tradition of hacker culture which opposes the 9-to-5 work lifestyle, instead presenting itself as a counter-cultural phenomenon, encouraging people to do whatever they want, to devote the time they felt like on a project which seemed meaningful. For video game developers, opposing the suit lifestyle meant regarding video games as a distinct creative product, different from the other industrial products that capitalism assembled in manufacturing plants. For video game developers, games represent art pieces, and for which putting in additional working hours is regarded as an act of dedication to the art form, but also stemming from one’s passion for developing (Woodcock, 2016).

While opposing the suit lifestyle means working long hours, putting up with crunch , game scholars Cote & Harris distinguish between *good* and *bad* crunch, saying that the former occurs when employees themselves want for it to happen and regard working on the video game as play. Matthew, a game developer at an indie studio says that there are times when he needs to

put in 12-hours working days, but he sees them as fun, since the environment itself is regarded as cool:

You feel different from all the other industries, it feels fun. Working on a game, it feels cool. Pretty casual, relax, no one is walking around in suits. I wanna say they are usually happy, fun environment.

In this case, crunch is seen as something good not only for the industry, but for the people themselves who have the chance to polish their work. Enthusiastic game developers, willing to put in the extra hours, think of those tasks as fun, as a way to contribute to a project they deeply care about. When asked if he reconsidered working in the video games industry, upon finding out about crunch Matthew said: “For a second yes, but I thought that devoting more time to something that I am passionate about is not a bad thing at all. I could be spending that time doing something miserable, yet I am working on video games which I deeply love.” Matthew mentions love and passion as emotions that tie him to the industry, giving him the strength to continue despite the long working hours that he has encountered at various companies. Yet, as I’ll show in the following section, Matthew has an ambivalent and contradictory attitude towards the industry. He was also critical of the industry and disavowed his passion for game development. Developers perceive this crunch as being good, since they work in a fun environment and because they are passionate about video games.

Matthew talked at large about his passion for video games: “There is passion for the medium and I always feel like working more. Even after I finish my tasks, I go home, connect to various Discord servers where I discuss the games I have worked on. I try my best to be nice to everyone, even to those that judge negatively.” Matthew’s work time does not finish the moment he leaves the offices, but rather continues at home, where he voluntarily becomes an advocate for

various games. He spends time online, engaging with the players, serving the customer with a smile and a servile attitude during every possible interaction. The emotional labor is similar to that of fast food employees who no longer just have to prepare the food, but must be brand advocates to everyone coming in the restaurant, greeting the customers with a smile (Mann, 2007). In this way, Hochschild's emotional alienation typology is exceeded: "You must perform for both the public and your fellow employees, in a way that alienates you from your true self" (Cross, 2018). Cross references Hochschild's research on emotional labor, which she sees as applicable in an industry that relies on making people feel not only grateful for working having a job inside of it, but happy. The developers are told to believe that they are working in the greater interest of the player, that they are sacrificing everything for the player, so that they can have a lovely play experience. For the developers, the player is the final judge who decides whether or not a video game is an enjoyable experience and if this developer or the studio that produce the game should retain credibility in the industry (Cross, 2018). Developers observe players' discussions on online forums and discussion boards, as well as engage with video commentary created by gamers on Youtube, in order to get a sense of how satisfied players are. Aside from one's passion for developing video games, people that profess in the video games industry share a passion of bringing pleasure into the gamer's life.

Gabriel, a current game developer, spoke about how happy he feels when logging into his work station, adding more components to the video game he has been working on or developing a new skill. He mentioned putting in long working hours and often continuing the tasks back home, which he finds at times not even to be work, given how fun it is. Gabriel mentions "I am very passionate about video games, thus developing them is more of a fun task to do than actually a typical dreadful job." In Gabriel's words, the importance of passion when developing

video games resounds, driving him to keep working, considering the task of creating a capitalistic product something inherently different from a manufacture or office job, which he regards as dreadful. The passion Gabriel mentions is an important component in both putting up with dreadful working conditions, but also securing a job. In all the interviews I conducted, people mentioned passion for video games as a strong desire for them to work in the field. An analysis of advertisements about community engagement jobs in the video games industry, dating back to 2015 shows that “passion” was the most frequently used term (66), “gaming knowledge” (50), while communication skills fall on inferior positions (Kerr & Kelleher, 2015). This excludes the boundary between work and play, actively excluding from the ranks of the industry those who do not consider themselves to be passionate game players.

Like current game developers, aspiring developers also mentioned passion for video games as an important component for wanting to pursue a career in the industry. Lawrence, an aspiring game developer who is currently attending university, stated “Even if I have to crunch, that is not a problem, since I really enjoy working on video games. I have already created some in my free time, spending long nights just to finish projects.” Even if Lawrence has not experienced crunch in a company setting, he has pushed himself on top of school responsibilities, to develop video games, pulling all-nighters in order to finish the product. He links it to the passion for video games, showing his desire to sacrifice himself for the creative act.

Lawrence referenced working hard on his craft in his free time to further polish his portfolio: “Whatever they teach us in classes, I take and practice further at home whenever I have some free time.” He emphasized the importance of developing industry-specific skills and having a portfolio that showcases to the employer what you can bring to the table. The same is true for Daniel a current game developer who teaches at a university in the Southern US who

said: “You may have a diploma in programming or 3d modeling, but if the skills are not applicable to the video games industry, then it is extremely hard to get into.” He emphasized the importance of developing specific skills to the industry, showing a barrier that one must overcome by having a passion to learn the tools specific to the field. Murphy-Hill, Zimmermann, and Nagappan conducted a study in 2014 trying to understand what the differences between software and game developers are. They found that game developers are reliant on in-house tools and on specific skills which often do not transfer back and forth between the games and software industry (Murphy-Hill, Nagappan & Zimmermann, 2014).

Daniel graduated university with a degree in 3d design in the early 2000s, and after not being able to secure jobs, he took 6 months to perfect his skills, to align them to the industry’s standard and try his luck again:

I joined a modding (modifying the video game assets) team, didn’t do a lot of work for them, but helped here and there. That helped me with taking six months for building a very specific portfolio of what I wanted to do. I had to showcase my work, my work had to be good and also there was an element of luck. I scored my first job at a studio on the West Coast that was then developing a game for the PlayStation.

Daniel emphasized that even if he had knowledge of 3d design, a degree to accredit his achievements, his skills were not tailored to the industry. While most of my interviewees attended a university course on video game development, all of them were tinkering with game development in their own time, expanding on their portfolio, regarding it as the essential part of getting a job. Daniel said that nowadays it is easier to build the portfolio and that there are more game opportunities for an aspiring developer:

What changed is that when I started the tools weren't easily available. In 2009/2010, you couldn't get an educational copy of Autodesk Maya [costly 3d animation software], Blender [free 3d animation software] was a[n] unusable piece of garbage at that time. I managed to build my portfolio by pirating software.

Daniel makes reference to the last decade as a period when tools were not necessarily easily available, and if one wanted to become a game developer, they had to first know about those resources, then pay for them. Game development tools are now so widely available, that computer science departments around the world use them to teach basic programming skills (Comber, Motschnig, Mayer and Haselberger, 2019). People such as Gabriel took the matter in his own hands in high school when he became aware of the existence of game development engines:

The initial learning curve for just learning programming was fairly steep, but as soon as I got the hang of it, I signed up for online game programming classes where I learned C# for Unity [a game engine]. As soon as I got the hand of programming, game programming was not difficult to get into.

During the interview, Gabriel referenced how accessible game development tools are nowadays and how easy it is for someone to just download the software and create a game. A study conducted by Wang & Wandermark shows that technical aspects of game production have become easier during the last 5 years but the demands of the players are higher, who are now expecting better mechanics and better graphics: "...game development itself has not been become easier due to higher player expectations and higher game complexity" (Wang & Nordmark, 2015). While technical aspects have become easier, with more tools coming out daily to resolve tasks which previously required tens of hours of laborious work, Gabriel mentions that the

complexity of the job, at least in his case, has increased. He mentions spending most of his job and also free time designing, coming up with intricate systems that will satisfy the player.

Working on video games is an intricate process which requires thousands of hours of practice and specific skills. The game development tools are advancing fast, introducing new technologies which require developers to always research and learn the up-and-coming tools. Gabriel talked about how his free time, after he finishes work at 6pm, is spent learning about different mechanics that he does not have the time to cover during his job time. The neoliberal order which emphasizes always working on one's skills, making one become more marketable is present in the video games industry, with workers always sharpening their abilities to fit the needs of a fast-growing industry.

To design a video game, one must have played a video game and understand how fun is created on screen, how elements of play are coded for the digital realm and how it differs from other entertainment mediums (Vella, 2015). People that enter the industry are accustomed to video games mechanics, have played video games in the past, which can lead to the boundary between work and play to be blurred (Yee, 2006). Aspiring and current game developers have developed the curiosity of designing video games by playing them, being immersed in digital worlds and understanding how they function.

People's aspirations of working inside the industry can be traced back to early childhood passions of playing video games with their parents or with their peers. Jason, an aspiring video game designer who creates visual assets in his free time says: "I remember the nights I spend in front of my PlayStation, dreaming about how fun it could be to develop video games. Now I am working towards this career, building everything by myself." Jason spoke about the passion he developed during childhood as being the driving force that made him consider a career in the

video games industry. When asked about crunch, he confessed he found it troubling, but said: “I do not think that always working hard on a project is necessarily something bad, when you enjoy it. I lose track of time when I design those visuals, those character designs. I might sit down at the desk in the afternoon and forget to lift myself up from the chair.” For Jason, working long hours is not necessarily seen as an exploitative practice, but rather as something enjoyable, that allows him to put in practice his passion for video games.

Aside from the passion for developing video games coming from a personal interest in playing them, aspiring and current developers subscribe to the logic of neoliberalism, eroding the barrier between the private and the workplace. They bring in the development process in the bedroom, working on their skills, crafting new mechanics and interacting with the gamers’ communities. The work does not finish at the office and there does not seem to be a clear demarcation between one’s private life from their work time.

To work long hours, to toil over the keyboard and give more of one’s free time to the development process is not seen by some aspiring and current game developers as exploitative. They mention their passion for video games and the enthusiasm they experience when creating assets for the digital worlds as being the force that pushes them to work harder. In doing that, they differentiate between themselves and other workers, such as those that sit down at the office and press numbers on a keyboard. The video game developers regard their work as play, given how much pleasure it induces when developing a product they have been interacting with from a young age.

Crunch as exploitation

While many aspiring and current developers spoke positively about crunch and about how their work does not resemble the traditional work of being in a cubicle, there have been

voices who have been fighting against overtime work. Christopher an aspiring video game developer from the East Coast, mentioned “I have played video game since a young age, and given my creative endeavors I have started thinking about how I could turn my passion of playing into creating.” He recalls his childhood when his passion for video games developed to emphasize the link that people have to the industry. Yet, Christopher mentioned that people’s passion towards a video game is a toxic trait that allows them to put up with working conditions that at times do not reflect a balance between one’s work and private life by saying:

Activision Blizzard King [video game company] have a policy that when they are hiring someone, those coming in must be passionate about the games. In this way they make sure they are truly invested and that they put up with whatever it is asked from them.

Christopher regards people’s passion as being a blinding factor in some cases, allowing themselves to be exploited, giving up on their free times for a product they love. The passion that current and aspiring game developers have mentioned leads them to put up with long and tiring working hours. The desires are diverse and while in the interviews I conducted, the passion one carries for the medium was the dominant reason invoked for putting up with crunch, there have been documented cases of people working long schedules, wishing for a promotion (Woodcock, 2016). Game developers crunch on tasks, give up their free time for the company to show their allegiance for the industry, wishing that they will be granted a full-time position.

Games scholar Jamie Woodcock says that the game industry has increasingly learned to feed on volunteer production as a source of innovation and profit (Woodcock, 2016). Woodcock argues that in order to understand the work relationships in the video games industry, we need to get back to the hacker culture of the 1980s and 1990s when game companies were only

emerging. We can go back to the times when John Romero and John Carmack were working in the early 90s on developing the widely influential video game DOOM (Kushner, 2004).

According to Romero, they were entering *crunch mode*, “the death schedule”—a masochistically pleasurable stretch of programming work involving sleep deprivation, caffeine gorging, and loud music (Kushner, 2004). The “death schedule” has prevailed throughout years, as Shane Neville, a developer at EA Games in the 90s declares having worked for nearly four months without a day off, averaging 90 to 110 hours per week making a racing game (Grayson, 2018). Dave Chan, an audio designer at BioWare in the 90s remembers the “death march crunch,” similar to Romero’s and Carmack’s “death schedule,” when he was working 12-to-16 hours a week, 7 days a week (Glasner, 2019).

Crunch has been around since the origins of the video games industry, but documented cases of it were scarce until bigger scandals took the issue into the mainstream. In 2004, the spouse of a worker at EA Game came out on a blogging platform, condemning the company for the stress they induced in their husband (Dyer-Witthford & De Peuter, 2006). In 2010, the wives of Rockstar Games employees spoke about the long working hours their partners had to endure, and since 2017 CD Projekt Red has been involved in multiple scandals, being accused of pushing their employees to the limits (Ortega, Guzdial & Reed, 2010; Jackson, 2019). Crunch has been dominant in the video games industry to such an extent that in a 2004 IGDA survey only 2.4% of the respondents mentioned having worked in a place where there was no crunch (Williams, 2022). In a 2005 survey among nearly 1000 industry professionals, the IGDA found such conditions to be endemic with 35 percent of workers reporting that they worked 65–80 hours during crunch periods, while 46 per cent reported that this overtime went uncompensated (IGDA, 2005).

It comes as no surprise that all the developers I interviewed, both current and aspiring, were aware about the crunch in the video games industry and some even went as far as claiming that the working conditions makes them hate the industry. As passion becomes a tool of exploitation, fun turns into frustration. Christopher, the aspiring game developer from the East Coast declared the entire industry as being built on a major lie:

When you look at a game, and what goes into, the crunch developers face and how they made a video games and how much of a lie they are, in the literal sense, what is going on behind the scene. It is more curious to see the behind the scenes to understand how much of a lie there is.

Christopher aims to showcase the audience the unknown aspects to the public when they play a video game. The gamers usually interact with the final product, they pick up the joystick and dive into the digital world, without direct connection to the production cycle. The production cycle is so remote from them that they cannot even imagine how the console on which they are playing the game ended up in their houses, how the digital assets were created or how the online forums are moderated. Christopher describes video games as a lie, in the same manner that labor scholars Chan, Selden, & Pun regard the iPhones or other Apple electronic lies (Chan, Selden, & Pun, 2020). Customers are sold a product which values privacy, connection with other people, an ease of sharing files over the phone's network, while the conditions in which those phones are produced are foreign to many of us.

Crunch is not always directly stipulated in the contract and sometimes managers do not directly mandate the employees to work overtime. Cote and Harris argue that in the case of Uncharted 2 the company never mandated crunch but suggested they were able to get away with this because they "hired people with personality types that make them hard-working, willing to

accept responsibility, and perfectionists and that led to many months of long hours, late nights, and truncated or skipped weekends” (Cote & Harris, 2021). Even if they did not mandate crunch, they were able to enforce it, because they got people who were willing to put up with it.

Talking to Christopher, he mentioned having discovered crunch while reading through online publications focused on video games:

I was spending time online reading about the video games industry and this article popped up showcasing what working on Anthem looked like. I clicked on it and saw multiple links to other ones in Kotaku [video games online publication] which led me in a hole where I was reading everything available about crunch.

Christopher came in contact with crunch spending time online, reading about the industry, yet he claims that everything came as a surprise to him. Previously he referenced the industry being built on a major lie, but the moment of that realization inflicted a “strong feeling of disgust” inside, making him question whether or not he would like to be working inside the video games industry. All the aspiring and current game developers I interviewed mentioned having learned about crunch from online forums, from online publications and that upon realization of the working conditions, they have thought twice whether or not a career inside video games is what they would like.

While some perform the work with a smile on their face, Cote & Harris remind us that there is also a bad crunch which often is imposed from top-down, with workers being thrown in a situation they have not had a say in (Cote & Harris, 2021). Although as we saw in the previous section Matthew who previously emphasized his positive view of crunch, he also described the crunch that was expected of him as being intense, making him ponder whether or not he should stay in the industry for longer:

Treyarch and Infinity Ward definitely made me wanna quit for a while. Do I really want to do this? Okay, it is a bad studio, I need to get out of this situation, get to a good studio. I just needed someone, a professional who knows what is normal - if the working conditions are normal or abnormal. Okay, I can stay in the industry, I just need to find a healthier studio.

Staying overtime is detrimental, as it was the case with the previously mentioned games which were major disappointments and were partially fixed years after their launch through patches. Matthew mentions that for him crunch was not a positive experience, was not something he believed could help his team deliver a better product on time, especially right around the delivery date. He said that studios just normalize it, and that “It is a matter of luck to find a study where crunch-culture is addressed.” There is a belief that more hours spent on a project will lead to an increase of productivity, but game analyst Cross is skeptical of this approach, since there is no evidence to prove that working additional hours over the regular schedule actually increases one’s productivity (Cross, 2016). On the contrary, research conducted by IGDA in the early 2000s proves that the 40-hours workweek, with very limited uses of overtime, but preferably none is what gives the public the best results (IGDA, 2005). By working more, developers do not necessarily achieve more, but on the contrary cause more mistakes and lead to more bugs existing in video games.

In a 2006 game development panel, two years after the major scandal of ea_spouse, critics such as Matthew Sakey got in front of an audience to talk about crunch and what is the impact of long working-hours on the developers ’quality of life, but also on the final product. Sakey targeted the bosses of video companies saying that:

They have publicly argued that game developers are "passionate" people; that "passion" can only manifest itself in relentless schedules and minimal compensation, like a deranged high school football coach screaming at a player to make a touchdown with a broken leg. They insist that if scheduling or compensation models changed, the passion would evaporate - that poor quality of life is necessary for the industry's existence (Allen, 2006).

Sakey refers to the need of developers to prove their allegiance to the company by putting up with a long schedule. Matthew mentioned that he had to work longer hours, not because he was necessarily passionate about the project, but because he knew that in order to secure a better job, they had to perform well at this one. Matthew mentioned having to stay in the office for 12 hours a day, wishing for a better-paid and more secure position in game development.

Throughout the interview, Matthew expressed contradictory views, talking at times his tolerance for crunch and how working hard made him feel happy, while towards the end, he was talking about the necessity of putting up with a long schedule in order to secure a job. The contradictions present the ambivalence in both being passionate about creating video games, wanting to devote his life to the creative process, while feeling the negative pressure of having to put in long working hours to prove his allegiance to the industry.

Over the years, video game developers have been developing strategies to cope with the working conditions. Many of those that enter the industry quit and the average turnover life for a video game developer is roughly 3-5 years (Woodcock, 2016). People often move to better paid positions at software development or animation firms where they feel like they can achieve a better life balance. Aside from crunch, the instability of the industry arising from its project-based business model makes people reconsider whether or not to devote their time working for a

company. Even if a game might be hit, there is no guarantee that the company will survive another year, as was the case with the Boston-based Irrational Games. After a successful launch of Bioshock Infinite, deemed by some to be one of the greatest games in history, the company shut down a year later, laying off its entire staff (Schreier, 2021).

Regardless of the negative news present in the press, when asked what keeps people still working in the video games industry, Christopher re-iterated one's passion for the field as well as the endless opportunities the discipline can offer. Christopher learned about crunch from the internet forums, making him apathetic towards the product that he was interacting with: "I hate video games, especially since I started realizing what goes into making this product." For Christopher, video games are a medium that is very accessible for him, but admits that "not everything that happens in the industry aligns to his own understanding of what making video games means (sic)." Christopher finds himself in a situation similar to other developers who have learned about crunch either from the internet or by directly working inside the industry. Ortega, a developer who worked on the Borderlands series describes himself as "working with compromised games made by people killing themselves to get them out the door month after month after month" (Semuels, 2019).

One interviewee disillusioned by the video games industry, quit his job as a developer and focused rather on teaching to maintain his passion for game developing, while Christopher finds himself at a roadblock and says that he does not derive particular passion from the thought of working in the video games industry, especially when crunch is an imminent possibility.

People might quit a game development position, but keep working closely on video games due to their passion for video games. Daniel, the person who took six months off to perfect his skills, after having worked for years on big projects, decided to accept the position of

lecturer at a university in a Southern state in the US He mentioned a greater sense of satisfaction, considering his work to be more meaningful since he was engaged in teaching. Daniel spoke about the need of teaching his students about the labor relations inside the video games industry in order to showcase to them the reality of what developing video games entails.

With an increase in reporting on the working conditions in the video games industry, companies seem to have made the work-conditions better, but according to Christopher who has been in contact with game developers: “I definitely articulated this point: I do not have very positive views unless it is for very specific pockets where companies are fighting literally against crunch.” The IGDA 2021 satisfaction survey confirms Christopher’s observation: a third of respondents reported that their job included crunch and 22% said that they worked overtime which was not formally classified as crunch (IGDA, 2021). The number of people experiencing crunch has been on a downward trend in the past years, yet the issue persists with more allegations coming out every year. Over the years the use of crunch by companies has been decreasing, with the majority of workers putting in around 40 hours of labor a week. There are certain exceptions where people still work 80 hours a week, but to describe crunch as a phenomenon happening in all companies provides an inaccurate image of the industry (Legault & Weststar, 2017). Despite the overall decrease, in 2022, there are still companies which rely on this practice, utilizing it in order to keep the project on track (Ding, 2022). Other companies have pledged not to utilize overtime work in their project or at least to reduce it to an absolute minimum. For example, companies such as Crispy Creative claim to “craft excellent games and experiences, as well as take creative risks other studios may shy away from. All the while enforcing a healthy work/life balance without crunch” (Carpenter, 2021). Multiple small indie companies came forward in the past years, promising a better work-life balance, a respect for

workers' rights and a workplace where they can be thriving. Warframe's developer said in 2019 that he and his team avoid crunch by regarding the game development process as not a "sprint, but a marathon", relying on fluid release dates that allow workers to take the time needed to finish the product (Kent, 2019).

Avoiding crunch or at least making promises to avoid this practice is not only common to smaller video game companies such as the aforementioned ones, but has spread onto the bigger ones. In 2020, Nintendo postponed its most awaited game at that point, Animal Crossing, in order to avoid having to subject workers to crunch, since "for us, one of our key tenets is that we bring smiles to people's faces, [and] that applies to our own employees. We need to make sure that our employees have a good work-life balance" (Handrahan, 2019). On a similar note, 18 months after having been accused of subjecting their employees to crunch, Rockstar Games promised to alter the development process for its future games, allowing more time for employees to work on designated products, without the pressure of a clear deadline (Schreier, 2020).

Aside from outright quitting the industry or finding employment at the intersection of video games and education, all aspiring and current game developers mentioned unionizing as a tool that they think could better the working conditions. Christopher said that even if he does not have a very positive view of the video games industry, "unions are trying to push for a better change, not only in terms of bringing more diverse people on board, but also in making sure that workers are adequately compensated and that they do not have to work their lives away." He talked about the recent unionizing discussions surrounding the scandal unfolding at Activision Blizzard where hundreds of employees have walked off the job and some started organizing with Communications Workers of America (Kilkenny, 2022). In the United States, labor unions inside

the video games industry started taking form only towards the end of 2021 and beginning of 2022. The hostile American environment towards labor unions, combined with the counter-cultural ethic of many people working inside the industry made game workers reluctant to form one. In Sweden, workers at Paradox Interactive have already formed a union, as well as video game developers in France, South Korea, the United Kingdom (Carpenter, 2021).

The unionization drive and developers' desires to speak up against the working conditions shows the determination of fighting against the neoliberal work order and include a more clear demarcation between the office and one's personal space. Some aspiring and current game developers favor the current work conditions, saying that working on video games does not feel like work at all. Despite those testimonials, the previous examples have shown a dissatisfaction towards the work ethic that keeps them on the grind at all times, making them think about work at all times, bring tasks in their bedroom and limit their personal time.

Conclusion

When asked if they heard about *crunch*, both aspiring and current game developers nodded in agreement, speaking of their own experience of finding out about crunch. Some of the current developers experienced crunch first-hand, with some pushing through the long working hours with a smile on their face. Others were more skeptical and when offered the opportunity to escape the video games industry, they joined the ranks of academia, worked at the intersection of video games and arts or joined software development firms.

All aspiring developers are aware of crunch and they are willing to put up with it for a limited amount of time, in order to at least get their foot in the industry. With more reports coming about the long working hours, aspiring and current game developers become more concerned about the work-life balance, developing second plans, in case it becomes too much.

Some plan to quit altogether, while some are more optimistic about the industry, deciding to search around for a better company.

Based on my findings, future research could dive even deeper in the motivations of aspiring developers to enter an industry which has accumulated a bad reputation over the years. While passion is a big component, and my research has focused primarily on it, researchers should also look at the career prospects of working inside the industry, the remuneration and if those might be factors worth pushing people down a video game development path. To continue this research means to uncover the labor relations in an industry which has kept them secret for years, benefitting from people's passion to keep them in the office for longer.

While my research sheds light on aspiring developers' desires of entering the video games industry, there is more work to be done on how crunch propagates as a discourse in mainstream media, as well as on people's invisible labor while playing video games. One must ask how does gamers' playtime, their open advocacy for a video game as well as the money spent on a game contribute to the industry's reproduction of the labor conditions. It is worth looking at passionate developers who spend their free time working on mods, developing additional content to a game, for which they are not remunerate, but which allows the video game to further expand. Keeping those in mind, there is space for more imagination when it comes down to labor conditions and as the video games industry prepares for new mediums, VR, AR or the metaverse, our research will have to cover how labor gets shaped by those transformations.

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