GAMERS' GAMES

Narratives of conflict, independence and engagement in video game culture

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I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University

Abstract

In this dissertation I look at various ways in which the relation between gamers and games has been discussed in video game culture in recent years. Gamers and games are currently being positioned by many scholars and industry experts as experiencing a series of major changes. From one perspective, gamers are said to be getting more and more access to the means of production of video games. Video games, in turn, are frequently analysed in terms of the effects they can have on their users. I argue that the discourses surrounding these phenomena have the effect of reinforcing the separation between gamers and games, considering both terms as separate and distinct entities. Throughout this dissertation I offer a series of readings of the relationship between the two, of how this relationship is currently being discussed by various actors and of how it could be narrated otherwise. I look at the narratives about the historical origins of both gamers and games, the conflicts between consumers and publishers, the production of independent games and the use of games for *doing things*. Drawing on deconstruction (Derrida 1976, 1980, 1985, 1988) and cultural and media studies scholarship, I interrogate the mechanisms behind many of the stories surrounding the contaminated and parasitical relations (Serres 1982) between gamers and games, whereby both categories are seen as emerging from the process of boxing consumers and products into discrete entities. I offer a reading of contemporary video game culture through a study that aims to encourage all of us who study and play (with) games to raise ethical questions for our own role in shaping the objects of research and for our involvement in the discourses we produce, as both gamers and scholars. What is ultimately at stake in this project is the possibility of outlining an alternative mode of thinking about the medium of the video game, one that blurs the distinction between *studying*, *playing*, *making* and *living with* video games through the invention of narratives about the unresolved relations (Laclau and Mouffe 1985) between gamers and games.

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Table of Contents

Introduction

In recent years the discourses produced by scholars, journalists and industry experts surrounding the medium of the video game have often insisted on proclaiming a series of allegedly revolutionary changes when it comes to the relationship between gamers and games. These changes supposedly involve things that gamers do with games, such as modifications of existing games, forms of participatory co-creation of content or of entirely new games, and even hacking of games consoles and hardware. Conversely, transformations are also said to be happening in the understanding of what games can do to gamers, such as soliciting participation in processes of social change through political messages, and working as tools for self-improvement and socialisation. For instance, Ian Bogost has proposed in *How to do Things with Videogames* (2011c) that video games could be used for a variety of purposes such as improvement of a work environment, for promotional and political purposes, or even to create artworks. Moreover, according to several authors the allegedly new possibilities offered by the medium are apparently being progressively democratised as access to the means of production, promotion and distribution is widening. Anna Anthropy, in her text *Rise of the Videogame Zinesters* (2012), strongly argues that a new age for digital gaming is approaching, one where everyone will have access to the tools and skills required to make and release a video game. This, she says, will eventually lead to more diversity and to various minorities being represented better in video games.

Similar claims supporting these visions of the future of the medium have been replicated by industry experts and game consumers alike, often through specialised and mainstream press. For instance, Sony Computer Entertainment has been promoting Gaming 3.0 as a leading concept for their business in this decade.[1] According to Sony executives, Gaming 3.0 follows the 1.0 era of the early

[1] Radd, D. (2007), 'Gaming 3.0', *Bloomberg Business Week Innovation and Design*, 9 March 2007

home consoles and the 2.0 era of online gaming. In the first two ages video game products remained unmodified by players after their purchase. Gaming 3.0 focuses instead on the personalisation of the gaming experience, on continuous updates and, more importantly, on the user rather than the developer as a key figure in the production of new content within the game. Gaming 3.0 has been used by Sony as the leading principle behind its development of software and hardware in recent years. This includes products such as the PlayStation Network, an online environment where gamers can access a variety of services such as online gaming and social networking, now a key tool for Sony's consoles. Also, Sony's bestselling game series *Little Big Planet* (2008-ongoing), released for both home consoles and handheld devices, is framed in terms of the production of objects and levels designed by the players. The game offers, apart from a limited single-player experience, a series of tools to shape new parts of the game to be shared online with other gamers [See Appendix: images 1 and 2].

Probably as a consequence of the trend of involving gamers in the production of content, gamers are now much more prone to starting forms of mass protest whenever the possibility of being involved is denied to them. Ownership of the products, and freedom to manipulate them, are often causes of controversy between producers and consumers. As I will discuss in chapter three of this dissertation, the very same Sony's PlayStation Network has been the target of what is so far the largest instance of hacking a game system, caused by Sony's decision to alter and remove some of the features of its product without consulting the consumers first.[2]

Moreover, the medium of the video game has been re-evaluated by many commentators as a tool which could potentially be used for social change and artistic expression. The availability of the means of production is seen as partly responsible for this re-evaluation. Easily accessible development tools (such as

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http://www.businessweek.com/stories/2007-03-09/gaming-3-dot-0businessweek-business-news-stock-market-and-financial-advice; Krotoski, A. (2008), 'Little Big Planet signals the start of 'Game3.0'', *The Guardian*, 6 November 2008 http://www.theguardian.com/technology/2008/nov/06/little-big-planet-lbp-indiegames-games [Last accessed 7/11/2014].

[2] Quinn, B. and Arthur, C. (2011), 'Playstation Network hackers access data of 77 million users', *The Guardian*, 26 April 2011 http://www.theguardian.com/technology/2011/apr/26/playstation-network-hackers-data [Last accessed 7/11/2014].

Unity, Twine, the RPG Game Maker series or Microsoft's now dismissed XNA) and forms of financing such as crowdsourcing have in fact allowed for more diverse people to be involved in making games. Such games are not necessarily presented as being made with the intention of selling enough to repay the initial investment, and instead propose experimental forms of game design that would not receive support from more established publishers because of their experimental or politically controversial content.[3] Players are now seen, in the reports and talks about the state of the industry, as capable of making and publishing their own independent games, reaching wide markets through online distribution.[4]

Drawing on this trend in which video games are seen as widely accessible tools and potentially useful for the creation of social and political awareness, the last few years have also seen the rise of gamification, a phenomenon discussed in more detail in the final chapter of this dissertation. Gamification has been presented in the marketing and business sectors as a technique for applying game design in a non-game environment in order to increase the affiliation of customers. On top of its commercial purposes, gamification has also been claimed as the technique that will revolutionise the active participation of citizens in the public sphere. Game design is here seen as a technique to inspire the resolution of real-life problems, such as the improvement of physical health or raising public awareness of environmental issues, by assigning clear goals and rewards to the players/citizens.

Indeed, similar stories have already appeared in the context of different media. Web 2.0 has been similarly centred on user engagement for the production of content on websites. The concept of the prosumer, a contraction of producer and consumer, has been circulating since its first official use by Alvin Toffler in his text *The Third Wave* (1980). For instance, the ideal player of *Little Big Planet* could be described as a prosumer, although in the context of a video

[3] Examples of this trend are games such as *Braid* (Blow 2008), *Cart Life* (Hofmeier 2011), *Papers, Please* (Pope 2013) and the games by Molleindustria http://molleindustria.org [Last accessed 7/11/2014]. These and many other examples of independent games will be extensively discussed in chapter four of this dissertation.

[4] The work of Anna Anthropy is particularly significant in this context. Anthropy is a game designer and author who has been narrating the events of her own personal life through video games: http://www.auntiepixelante.com/games/ [Last accessed 7/11/2014].

game, as the act of playing involves a process of constructing the game itself by modelling and sharing new levels, characters' costumes and other kinds of content. Also, attempts to re-imagine the gamers-games relationship have had several notorious predecessors in the last two decades of the history of digital gaming. In 1997, long before claiming the advent of a 3.0 era for digital gaming, Sony released Net Yaroze (in Japanese "yaroze" means "let's work together" or "let's do it"), a PlayStation development kit for the computer programming hobbyist [See Appendix: images 3 and 4]. The kit contained a Net Yaroze console and manuals to introduce users to game development techniques. In 1998 the Game Developer UK competition hosted the best games produced on Net Yaroze, and some of them were released in the last issue of *Official PlayStation Magazine UK* in March 2004. Although this was not the first time an official kit for producing games on a console had been released,[5] Net Yaroze was the first technology released explicitly for game producer hobbyists that featured an official contest for the best home-made video game. A significant effort was made by the producer to sponsor and distribute the games. In 1998, the same year, the first edition of the Independent Games Festival took place in San Francisco, California. The event hosted games produced with an 'indie spirit', as the submission form put it (and still does, as seen in the documentation for the 2014 event). The phenomenon of modifying and hacking video games has attracted the attention of video game magazines since the early 2000s. Some of these modifications were unofficial "patches" to the original software, that is, unofficial improvements and updates. Others were large-scale modifications of video game software, released unofficially on the Internet. The most notorious, *Counter-Strike*, was a modification of Valve's popular game *Half Life*. The duo who designed *Counter-Strike* unofficially modified the original single-player experience of Valve's title into a multi-player game. The modification was later

[5] Other official development kits for game consoles include: Develo (for NEC's PC Engine, 1987); WonderWitch (for Bandai's WonderSwan handheld console, 1999); GP32 (a handheld console developed by Korean manufacturer GamePark in 2001, which later became a tool for producing, sharing and hosting home-made video games). Early cases include: Bally's Astrocade, released in 1977, which had a BASIC programming language cartridge for developing software; Family BASIC, 1984, a development tool for Nintendo's console Famicom. Home computer Commodore64 had two interesting games/design tools: *Boulder Dash Construction Kit* (First Star Software 1986) and *Shoot-em-up Construction Kit* (Sensible Software 1987). Game construction sets are further discussed in the second chapter of this thesis.

acquired by Valve itself and is now part of its intellectual property [See Appendix: images 5 and 6].

Furthermore, over the same period, the game art scene caught the attention of gallery curators and art critics. Usually referred to as the production of drawings and animation in an early stage of game development, game art is now also used for artistic works inspired by or based on video games.[6] Last but not least, machinima, short for "machine cinema", became popular in the late 1990s. Machinima are animation movies made by recording, editing and dubbing scenes from video games.[7] This practice, which originally manifested quite an unexpected use of a video game, was first confined to what could be described as a subculture (Menotti 2014), mostly revolving around the recording sessions of players competing against each other. Later on, machinima became less dependent on the original texts from which the concept developed, and participants began to elaborate new stories made with video game graphics. Both the players and the commentators who were involved with the online communities devoted to machinima began describing these experiences as an example of the creative potential of video game consumers, who were now viewed in terms of their ability to reinterpret video game software for new purposes.

As I will discuss in chapter two, these are only the most notorious and recent attempts to re-imagine some of the ways in which game consumers can engage with games. The emergence of similar design concepts can be seen in several products of the last decade. *Little Big Planet* by Sony has often been compared to *Second Life* by Linden Lab, originally released in 2006. *Second Life* is centred on the players as determining actors in shaping the online world. The islands of the online game are in fact empty spaces, to be filled with 3D objects

[6] Introducing the book *Gamescenes: Art in the Age of Videogames* (Bittanti and Quaranta 2006), Matteo Bittanti describes game art as 'any art in which digital games played a significant role in the creation, production, and/or display of the artwork. The resulting artwork can exist as a game, painting, photograph, sound, animation, video, performance or gallery installation' (2006: 9). He also distinguishes these works from 'art games', i.e. video games designed with artistic purposes and with no explicit relation to the previous titles.

[7] The website http://machinima.com, the most authoritative reference for machinima producers, explains what machinima is through a machinima video, now available at: https://www.youtube.com/watch?v=pGAt3R5oCY8 [Last accessed 18/09/2014]. In the video, the *Counter-Strike* police character explains that 'machinima is filmmaking within a real-time 3D virtual environment of a video game. It's the use of video game graphics technology to create animated films.' This is just before the terrorist character kicks in to 'ruin the presentation…'.

designed by users. The opportunity to earn money for the exchange of these items and to convert the in-game currency into US dollars has made the experiment of *Second Life* particularly successful from a commercial standpoint [See Appendix: image 7]. The game *Minecraft* (2011), designed by the duo collectively known as Mojang, originally encouraged players to collaborate by offering few or no clues about how to proceed and move forward within the game. *Minecraft* puts the player in a world with no other human characters and no instructions on how to survive or what to do. Online communities of gamers have, however, created in-depth guides to, and videos about, the possibilities offered by the game by gathering the information collected by the dispersed players. The experience of playing *Minecraft* has been imagined since its early days design as being completely dependent on the existence of these online user-generated guides [See Appendix: image 8].

In this dissertation, the term "gamers' games" refers to the many and emerging cases in which the relation between gamers and games is presented as the outcome of a new framework in which the production and consumption of video games, as well their uses and effects, are being radically changed. These changes, as I have argued, include different aspects of video gaming, such as the democratisation of game production, the use of games for achieving specific effects, the appropriation and use of games and game technologies from the side of consumers and for unexpected purposes, and so on. However, I also claim that the stories surrounding gamers' games, despite being so abundant in revolutionary claims, mostly tend to reinforce what we already knew about both terms. I argue, in fact, that these narratives are better understood as conservative descriptions of the state of events, as they confirm existing conceptual binaries and posited separations such as production and consumption, expected and unexpected uses and interpretations, as well as old and new technologies (with the newest supposedly having an unprecedented power to affect their users and the reality surrounding them). I also believe that the reliance on, and repetition of, the already existing conceptual frameworks, although in new guises, is not only a problem to be attributed to the marketing and industry parlance, which often takes the lead in shaping the discourses surrounding video game culture, but is also strongly present in the questions posed by gamers and game scholars

themselves. Furthermore, and as I would like to argue throughout this dissertation, these narratives have a performative value, as they bring about those same realities they describe. It is precisely because of this performative potential that, I propose, gamers' games can prove to be relevant for the study of the medium in this contemporary period, as well as for the practices of playing with and making video games. Thanks to this capacity to generate and bring about the very reality it describes, the study of video games can imagine different configurations and modes of thinking about both gamers and games – starting from a reconsideration of what it is that separates the two in the first place. I will now further inquire into what I believe to be the key problem with gamers' games, and illustrate the potentiality and necessity of a critique of this phenomenon.

What is the problem with gamers' games?

I believe one of the main problems with gamers' games is grounded in the obsession with newness that is so often replicated in the discourses surrounding them. Significant technological changes have indeed taken place that allow for unprecedented forms of collaboration between consumers, for the production and sharing of new games and for a wider accessibility to technologies for digital gaming. My query is with the ways in which this element of newness causes the freezing of the present condition and of the previous ones, confining game technologies into "boxes", often equivalent to the products sold on the market. Kember and Zylinska, in *Life After New Media* (2012), effectively summarise how linear narratives of technological progress are entangled with a deterministic view of media, one that freezes media into isolated tools. They also argue that such a process of isolation has to do with the temporality of a 'developmental narrative':

> The old versus new division [...] not only brings together affect and matter but also inscribes media into a progressive developmental narrative. In other words, it introduces the question of time into debates on media while simultaneously freezing this question by immediately dividing 'media time' into a series of discrete spatialized objects, or products that succeed one another.

> Thus we are said to progress *from* photography *to* Flickr, *from* books *to* e-readers. (2012: 3)

The process of the 'temporal freezing' of technologies dedicated to digital gaming is replicated, for instance, when the alleged democratisation of video game development is said to be happening because of Twine, Unity and other licensed production tools. Something similar occurs when the involvement of consumers in the production of content is said to be happening through and thanks to *Second Life*, *Minecraft*, *Little Big Planet* and other game environments identifiable as packaged products – environments which are open to users' modifications but which are still branded as cohesive wholes. These and other similar causal relations are often present in the discourses produced by industry experts and specialised journalism. I argue that these and other similar narratives of newness and determinism tend to simplify or completely overshadow the ideological and political implications that underlie the emergence of participatory and open forms of production and consumption. Moreover, in the academic analyses the reassuring idea that openness and access might be good per se and the implications of re-evaluating the individual as an agent of change through personal entrepreneurship are rarely debated.

Let me now introduce two examples that are paradigmatic of the issues I have just outlined. The first is a series of speeches delivered by US president Barack Obama supporting the democratisation and wide accessibility of game production and its potential for education. During the Computer Science Education Week in December 2013, in what soon became a popular speech among gamer communities, Obama invited students to not 'just play a video game' but also to 'make one'.[8] The speech was part of a longer series of direct appeals promoting a wider adoption of computer science in educational programmes. Previously, Obama's administration also promoted the use of video games to 'solve problems'.[9] In March 2011 Obama invited the students of the Tech Boston Academy to 'be stuck on a video game that's teaching you something

[8] De Loura M. and Paris R. (2013) 'Don't Just Play on Your Phone, Program It', *The White House Blog,* 9 December 2013, http://www.whitehouse.gov/blog/2013/12/09/don-t-just-play-your-phone-program-it [Last accessed 7/11/2014]

[9] Gaydos M. (2012) 'Using Video Games to Solve Problems', *The White House Office of Science and Technology Policy*, 15 April 2012, http://www.whitehouse.gov/blog/2012/04/15/using-video-games-solve-problems [Last accessed 7/11/2014]

other than just blowing something up'.[10] The second case I want to discuss is an advertisement by the international bank HSBC, released in January 2013 as part of the *In the Future* campaign commissioned from the agency JWT Dubai.[11] In this video we see Emir, a young man from Istanbul, making a video game called *Sticky Weasel*. In the plot of the advertisement, the game suddenly and unexpectedly reaches worldwide popularity, with people everywhere in the world playing it on their mobile phones. The boy decides to protect the trademark, merchandise the game and further expand the brand. Ultimately *Sticky Weasel* inspires the production of a film and Emir goes to Hollywood, where he is interviewed on the red carpet of the movie premiere. All this happens thanks to HSBC, which guarantees funding of the project and lets it attain popularity in a global market. In the final scene, Emir's mother stops her son from working and reminds him it is time for dinner, which should probably remind us that HSBC is a global bank that also preserves local values, as is repeated in their slogan [See Appendix: images 9 and10].

These examples are not only paradigmatic of the wide popularity reached by a new and positive understanding of the medium of the video game also on the part of political and financial organisations. They are also examples of the contradictions and of the rather repetitive nature of the stories that are usually told, by industry experts and commentators, about the things that gamers can now do with video games, and that games can do to gamers. The similarities between these two examples go beyond the reference to video games. In both cases we are presented with a scenario where it is the responsibility of the individual to take risks and reap eventual benefits resulting from work – a practice that now potentially includes making video games. However, the proposed liberating effects of the technological and social evolution that should allow this new scenario are moderated by the not-too-subtle confirmation of already existing economic and power relations. HSBC remind us that for each Emir, or any other self-made, one-person company and independent

[10] Lee J. (2011) 'President Obama Talks Education in Boston: "A Moral and Economic Imperative to Give Every Child the Chance to Succeed"', *The White House Blog,* 8 March 2011, http://www.whitehouse.gov/blog/2011/03/08/president-obama-talks-education-boston-moral-and-economic-imperative-give-every-chil [Last accessed 7/11/2014]

[11] JWT Dubai (2013) *App Tycoon campaign*, https://www.jwt.com/en/dubai/work/hsbcapptycoon/ [Last accessed 7/11/2014]

entrepreneur who accepts President Obama's suggestion to make games, there must be a significant investment that makes that dream possible and guarantees a safety net in case of failure.

In chapter four I will further inquire into the political layer that pervades the alleged democratisation of the production of video games. Authors such as Julian Kücklich (2005) and Olli Sotamaa (2009, 2010) have considered the political and economic perspectives involved in the processes of video game production, particularly in relation to contemporary forms of independent game making. Sotamaa suggests that 'the increased access to the means of media production does [...] not necessarily equate to increased freedom' (2009: 99). Kücklich notices how individualised forms of game production could be defined as precarious labour, which ends up being reliant on the already established publishers who, in their own turn, can now outsource any risk involved in the production process.

However, the problem I see here is not only concerned with the inequalities confirmed or introduced in the video game industry by individualised and precarious forms of labour. It has also to do with how contemporary changes in video game culture replicate existing ideologies already framing the understanding of the individual as an agent of social and cultural change. From my perspective the new trends of video game culture appear to be mimicking, rather than revolutionising, the oppressive and constraining dynamics of over-individualised labour.

In both of my examples, actors from a position of power in the political and financial world have been replicating common sense claims of innovation and a fascination with the newness of technologies, taking for granted the deterministic effects that these should have on society as a whole. In both cases it is an allegedly linear technological evolution that leads us to the current scenario: Emir uses online communication, smartphones and laptops in almost every scene of the 30-second advertisement, while Obama reminds us that this change he is now seeking follows naturally from the invention of the Internet – also presented as an outcome of public investment in science and research.[12]

[12] The full quote of Obama's words is reported on the White House blog: '…and in the same way that we invested in the science and research that led to the breakthroughs like the Internet, I'm

However, if the skills required in media production and the necessary technology are becoming more easily available, as Lister et al. (2009: 33-35) acknowledge while discussing computer-based technologies, it is also true that video games, being computer-based since their origin, have not followed the same path.

The progressive evolution towards a wide accessibility of the necessary equipment, often claimed by institutionalised voices in statements about gamers' games, does not look like an evolution and, even if it is one, is certainly not progressive. Low-budget productions in the video game industry were the norm in the 1980s and early 1990s, when bedroom coders – that is, one or a few programmers who managed a whole game development company – designed the majority of video game products. As previously mentioned, teams of a similar size now seem to be re-emerging under the label of independent, with the old publishers now substituted by new gatekeepers such as Valve and Microsoft. These publishers now promote and sell in their online markets, retaining a certain percentage of the final price, those independent games they believe can generate the largest profits for themselves. In doing so, they also confirm their position of power, as their choice of which games to sell often determines the economic success of those same games.

The argument I propose is not simply a case against newness and determinism as incorrect or untrue descriptions of a more complex reality. I am much more interested in seeing how these descriptions came about and what else could be said about the same phenomena. Newness and determinism are a problem, from my perspective, because of their reassuring and comforting function of confirming the notions we already have about media and technologies – of which video games are here a more specific case. As argued by Caroline Bassett (2007), newness and determinism have a strong ideological force, as newly introduced information technologies are 'often perceived to be powerful or transformative, able to create new cultural forms and practices, remediate others and render others still entirely irrelevant', and yet they 'so often

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calling for investments in educational technology that will help create digital tutors that are as effective as personal tutors, and educational software that's as compelling as the best video game. I want you guys to be stuck on a video game that's teaching you something other than just blowing something up.' (Lee J., 8 March 2011, *The White House Blog*) http://www.whitehouse.gov/blog/2011/03/08/president-obama-talks-education-boston-moral-and-economic-imperative-give-every-chil , last accessed 18/09/2014).

disappoint' (47).

In order to evade this force, Bassett offers to put narratives about technology back in the centre of our interest. Narrative, as a reaction to the discontinuity of information, is also seen by Bassett as capable of bringing information into being and producing concepts about information technologies (3). She argues:

> [I]t is narrative 'itself' that is under discussion here, and I explore it neither as a fixed form nor as a contingent content but rather as a formation emerging out of the contemporary interchange between information technology, culture and society. If narrative is socially symbolic then the materials of which it is made, the conditions within which it is read, as well as the forms in which it is written or practised and the tales that it gathers up within itself, *matter*. They are a part of *what* gets symbolized, and *how*. (6)

The problem I intend to highlight here, through Bassett, Kember and Zylinska, is that narratives of gamers' games tend to stabilise and, at the same time, bring about those realities they describe. For instance, the narrative of progression from what Sony had named the 1.0 era of gaming to the 2.0 and eventually 3.0 era can be seen as also establishing those ages and at the same time necessarily freezing the current scenario (Gaming 3.0) in an isolated space in the proposed linearity of technological development. Similarly, Alvin Toffler imagined the 'rise of the prosumer' to be taking place in the contemporary 'third wave', following the first wave, which corresponded to the agricultural revolution, and the second wave of the Industrial Revolution (1980: 265-288). These and other similar processes of freezing and isolation are not seen in this dissertation as merely descriptive endeavours but also as performative ones.

Looking again at the example of Sony's Gaming 3.0, it could be argued that the concept frames the ways of reading the possible relations between gamers and games in a series of divisions and differences while excluding others. The very distinction between gamers (mostly seen by Sony in this narrative as consumers) and games (seen, both software and hardware, as marketed products) is established by replicating a historical progression of the development and marketing of video games. Sony's concept is particularly significant as an example as it is quite clearly a proposal for a historical description of the past and present of digital gaming and at the same time an

influential concept for the research and development of future video games and game technologies. It describes things, but at the same time it does something, as it influences the models for the production of video games.

How is it possible to intervene in these models, concepts and narratives, and offer, through theory, some potential alternatives to them? Through the work of Derrida, I argue in this dissertation that reading the discourses surrounding gamers' games can be seen at the same time as a process of repetition and undoing of the structures that underpin those same discourses. I will consider the repetition of those structures as a moment of 'rupture', an event that displaces and destabilises the centre of the previous discourse (Derrida 1976, 1980, 1985). In other words, I will propose to question the ground that keeps gamers and games alternatively together or separate, depending on the circumstances in which they are presented, and see instead how different grounds, different centres and structures, could be narrated, and with what consequences.

While introducing a rupture into the stories of gamers' games, I will attempt to outline some alternative narratives and at the same time consider these proposals as a way of playing with and studying games themselves. The challenge I set myself with this dissertation is to claim the possibility of intervening into the study of digital games by developing narratives that can question the framings and binaries implied by the contemporary discourses of video game culture. My argument therefore involves a reflection on what theory can do (and should do), in order to bring forth both more interesting technologies and more complex stories about them.

In particular, I consider the process of reading the narratives of gamers' games, understood as a deconstructive, performative practice, to be necessarily both descriptive and normative: on the one hand, I will look at the structures of the discourses of gamers' games, but on the other my reading will also have to say what these structures are, how they are presented and how else they could be. Joanna Zylinska, in *The Ethics of Cultural Studies* (2005), proposes that the difference between description and normativity can be rephrased as a distinction between saying 'how things are' as opposed to 'how things should be' (3). However, while acknowledging that cultural studies always has a normative

aspect, she also argues that descriptions have at the same time a performative side (here drawing explicitly on Austin's notion of performativity).

What does it mean, then, to think about theory, and cultural studies more specifically, as performative as well as normative? I propose, through the work of Zylinska, that embracing a normative and performative dimension of theory makes the distinction between theory and practice collapse. This is after all also how Derrida discusses deconstruction, not as a 'neutralization' of oppositions but a form of intervention, through the 'double gesture' of 'reversal of the classical opposition and a general displacement of the system' (1980: 21). A similar commitment to theory as intervention can also be seen in the work of Judith Butler (1990, 1997, 2010), among others: the idea that saying something is already a way of doing something, it is a way of not only suggesting but also introducing transformations. In this sense I argue that studying gamers' games can be a way of playing with games and making games. It can be a mode of thinking as doing, or reading as enacting, alternative structures and modes of living with video games (the notion of life will be, more specifically, debated in the final chapter of this dissertation).

But what is it, ultimately, that makes these alternatives better, and worthy of being brought about? The problem we are left with, while considering the performativity and normativity of theory, is to understand the ethical problem that theory itself entails as an intervention that must be motivated. Crucially in the work of Zylinska, the ethical question is entangled with the notion of deconstruction, as proposed by Derrida, in a way that I would like to repurpose for my own understanding of gamers' games. To summarise her perspective, ethics involves remaining open to alterity (i.e. otherness), while deconstruction can be seen as a way of examining the logic that keeps opposites together and similarities distant in various structures as well as discourses. As argued by Laclau:

> Deconstruction consists in discovering the undecidability of things which are presented as being either joined or separated. So deconstruction involves two kinds of operation. On the one hand, it shows that between two things which have been portrayed as being essentially linked there is in fact some kind of undecidability which prevents them from being assembled together. On the other hand, deconstruction also involves showing that between two things which are originally presented as separated there is a certain amount of

> contamination. (Laclau 2002, quoted in Zylinska 2005: 8)

Gamers' games is intended in this dissertation as an expression that summarises the merging together of two separate entities, while analysing them in terms of the differences between them and in terms of the undecidability that holds the relationship between the two together. With this deconstructive approach, I also aim to consider the contradictory processes of merging and distancing as necessarily involving ethical questions. This approach entails that the necessary presence of an "other" (which can be a different structure of discourse, an alternative narrative of production and consumption, and so on) needs to be taken into account without reducing my reading to an ontology of gamers and games, i.e. trying to establish their identity once and for all. Zylinska explains this problem well, through the work of Levinas, by arguing that:

> [Ethics is] situated *before* ontology. […I]f ontology (i.e. a 'philosophy of being') is seen as a 'philosophy of power' and 'injustice' (Levinas 1969: 46) that tries to reduce any idea of the other to the terms and categories possessed by the same (which amounts to describing to what extent the other *is* or *is not* like me), ethics should be read as a different mode of thinking, one which 'precedes' ontology in its relation to knowledge and justice. Instead of attempting to thematize and conceptualize the other as always already known, ethics points to the radical and absolute alterity of the other which collapses the familiar order of Being and calls the self to respond to this alterity. This possibility, as well as necessity, of responding to what Levinas defines as an incalculable alterity of the other is the source of an ethical sentiment. (Zylinska 2005: 13)

In the work of Gary Hall (2008) we can see what such a deconstructive and yet ethical approach to cultural studies could be like. Hall looks at how the supposed merging of the concepts of producer and consumer, which confuses the boundaries between the two and their respective roles, can be seen to have both a descriptive and a normative function: while on the one hand the emergence of the prosumer describes a new scenario in the practices of production and consumption, on the other it also delineates a new way of designing and using media. Moreover, the notion of the prosumer, while attempting to blur the distinction between producers and consumers, also maintains such a distinction: '…production and consumption can be brought together like this in the guise of the prosumer only if they are positioned as having somehow been separate and distinct in the first place – which they generally are in narratives of this kind'

(2008: 23).

The problem Hall identifies in this mode of thinking is that concepts such as the prosumer often tend to be rather conservative about existing divisions and hierarchies. As I have noted, this also seems to be the problem with gamers' games, as they mostly tend to confirm the social and economic inequalities already existing in video game culture. Hall also argues that re-interpretations of the practices of production and consumption appear to be based on the same binaries that enforce divisions such as the one between theory and practice, a separation considered by him to be also influential in the contemporary trends in higher education. In these trends, Hall sees a dominance of practice, understood as a supposedly tangible and factual form of learning, as opposed to theory, which is instead seen as purely based on the linguistic domain and therefore always questionable and inaccurate. In this and other similar derivative distinctions, Hall argues that there often lies the tendency to confirm what industries and markets assert higher education should be like. Therefore, re-evaluating theory, and its performative capacity to bring about concepts, can actually be an ethical gesture that may even end up outlining a new way of doing media studies in higher education. Geert Lovink and Ned Rossiter have similarly critiqued the concept of the prosumer by noticing how 'Web 2.0 makes loud noises about the false synthesis of the so-called "prosumer", but this does not get us very far other than reiterating the logic of individualisation', and this is why 'we need a creative subject who is neither a citizen nor a consumer' (2007: 13-14). Hall, in turn, issues an ethical call to scholars in the humanities precisely by questioning the ground that separates theory and practice, as well as the notions of producer and consumer. His attempt is relevant in the context of this dissertation because it shows what could be at stake in reading the discourses surrounding a certain phenomenon while also acknowledging the performativity of the acts of reading and proposing alternative narratives.

I believe it is possible to argue, broadening Hall's appeal, that the study of video games and video game culture equally needs some ethical decisions, and that it needs to step outside the binaries that frame the existing discourses. There are several reasons for doing this. First, it is a way of countering the dominance of the discourses, mostly originated from the industry, in which video

games are assimilated with products, and gamers with consumers. As I have argued earlier on, this kind of logic mostly feeds a fascination with newness and a tendency towards determinism in the accounts of video game culture (while often making these accounts sound repetitive and hence rather disappointing).

Second, these narratives, so often replicated by industry experts, journalists and scholars alike, overshadow the existing economic inequalities and geographical specificities. HSBC's advertising forgets to mention that none of the emerging independent video games represented at the most famous festivals and exhibitions in the last decade actually originate from Turkey. In fact, it is rare to see any independent video game being produced anywhere outside those countries where the industry is already strong (the United States, Canada, the United Kingdom and the Scandinavian countries). This should be a surprising fact, considering that we have been told that video game production is now allegedly available to everyone. Likewise, Obama's address has been welcomed as emblematic of the current positive evaluation of the medium of the video game. However, making games, rather than just playing them, still requires access to a high level of education and expertise, and the availability of economic resources that often run the risk of not being converted back into revenue if an existing publisher does not pick up the product and promote it.

Finally, I believe a study of gamers' games could be a way to experiment with alternative and less conservative narratives about technology in general and gaming in particular. It can also be a way of embracing the performative and ethical dimensions of theory, rarely accounted for in the study of digital games and their players. The study I propose, delineated in detail in the following pages, brings a certain amount of anxiety with it (not least for its author), as it offers to abandon the comfortable presence of the existing categories and of the possibilities that resulted from them for theoretical discourse. Yet Derrida (1980) argues that anxiety is probably a necessary consequence of deconstruction but also a sign of being really (or we might say, ethically) involved in the 'game':

> The concept of centered structure is in fact the concept of a freeplay based on a fundamental ground, a freeplay which is constituted upon a fundamental immobility and a reassuring certitude, which is itself beyond the reach of the freeplay. With this certitude anxiety can be mastered, for anxiety is invariably the result of a certain mode of being implicated in the game, of being caught by the

game, of being as it were from the very beginning at stake in the game. (248)

It is this sort of anxiety that I am aiming at foregrounding and making manifest in the present work, and that I would like to see displayed more often in the overall study of video games.[13]

Research questions and chapters outline

To recapitulate, in this project I aim to understand what is at stake with gamers' games. This leading research objective will require several sub-questions. I will, throughout the present work, try to understand what a gamer's game is, and how dualities such as producer-consumer, new-old, accessible-closed become problematised in a study of gamers' games. The reading I offer will look at how these dualities come about, through discourse, and what their consequences are. Furthermore, I will discuss the ideological perspectives that emerge through the discourses produced with regard to gamers' games and the implications of these ideologies. Finally, my aim will be to inquire into the possibility of formulating some other narratives about gamers' games and to debate what seeking such alternatives entails. This proposal will be underpinned by an ethical question about the necessity and duties of a scholarly intervention. I will now outline the chapters of this dissertation, through which I will attempt to offer my answers to the problems discussed above.

In chapter one (**Literature review and methodology: a study of**

[13] In this dissertation I rarely look at the notion of play, and never in relation to pleasure, or fun, as it often happens in the studies on games and video game culture. As noted by Roger Caillois (1961), play can be 'a source of joy and amusement' (6) but it is also 'an occasion of pure waste: waste of time, energy, ingenuity, skill, and often of money […]. (5-6). Notions of play can be understood as further narratives of our engagement with games, or as 'rhetorics', as argued by Brian Sutton-Smith (1997). In his work, Sutton-Smith looks at the ambiguity of the notion of play and how this ambiguity has been resolved in our culture through discursive practices. These practices share a rhetorical aspect, that is, they attempt to persuade others of their validity, and are presented as objective explanations of what play is. Sutton-Smith finds similarities between the variability of the rhetorics of play and the variability required to living beings as discussed in the theory of evolution by the biologist Stephen Jay Gould (1996, *Full House: The Spread of Excellence from Plato to Darwin*, New York: Harmony Books). In the present work I do not concentrate as much on how the ambiguity of play could be explained, but I investigate the possibility of finding other forms of play – probably as ambiguous and 'rhetorical' as those analysed in the work of Sutton-Smith – within the cultural study of games.

contaminated relations) I introduce and debate the literature that frames the majority of the research questions of my dissertation. I look at how the concepts of gamers and games have been put into place as separate from each other in several academic contributions. In these texts, gamers and games are defined and understood while considering both as strictly separate entities. However, as Dovey and Kennedy (2006) argue, the discourses surrounding the medium of the video game tend to organise themselves around 'dominant technicities': imaginaries about technologies and their users that are replicated in the industry and academic sectors.

I propose to expand on Dovey and Kennedy's view by looking at the discourses on gamers' games as narratives: stories that shape how games are made and played, and how gamers are approached as a category of consumers. The separation between gamers and games can also be seen as one of the results of a dominant technicity, one that originates within the game industry, that is replicated in the academic discourse and that takes into account products and consumers as two separate categories. I look at procedurality (Murray 1997, Bogost 2006) as a method for the development and criticism of games, and as essentially limited by the consideration that gamers and games are separated by a supposed boundary between them. I aim to intervene precisely with and through scholarly and industry conventions, and look, with Derrida's help (1976, 1980, 1985), into the binaries that are so often replicated in the discourses around the medium.

In the rest of the chapter I look at how discourse theory (Laclau and Mouffe) and performativity (Austin, Butler, Foucault) can be seen as methods for reading discursive formations while intervening and being implicated in those very same discourses. I turn to the notion of the 'parasite' (Serres 1982) to propose a non-linear approach to the examination of existing dualisms, such as gamers and games, producer and consumer, product and user. The parasite, rather than being an external element of disturbance, is understood by Serres as necessarily entangled within the system that it exploits and opens to further contamination. The parasite will be taken as a metaphor for a performative reading of discourses, a reading that is always and necessarily implicated in, and constitutive of, the narratives it brings about. I also draw on Serres to propose a

study of gamers' games as a study of ongoing relations and transformations, rather than separate objects or technological boxes.

In the final part of this chapter I discuss the ethical implications of being involved in a study of the relations between gamers and games. A discourse that attempts to be contaminated by the categories it otherwise critiques eschews analysis, ontology and observation in favour of participation. A participative theory, in its own turn, involves the responsibility of having to make choices and posing questions that are going to be part of the discursive formation in which the researcher intervenes. The ethical question that I intend to pose, and not necessarily resolve, throughout the rest of the dissertation concerns precisely the position of the researcher in the process of forming knowledge: what are the implications of avoiding essentialist and hegemonic approaches, and of attempting instead to multiply particularisms and differences through the invention of alternative narratives?

In chapter two (**A history of boxes: archaeologies of gamers' games**) I debate the possibilities of intervening in the processes of "boxing" video game technologies, a trend that I identify as replicated mostly in the historical analyses of the medium and in the predictions about the future of the games industry. I critique the concepts of media archaeology and game archaeology for their use of the notion of materiality, as a mere rhetorical strategy aimed to give a form of authority to historical reconstructions. Materiality, in fact, is often brought into archaeological analyses as supposed proof or evidence that seeks to confirm contemporary notions about games and gamers, often seen as the result of the development and marketing of an entertainment industry. Historical reconstructions, such as those offered by Erkki Huthamo and Jussi Parikka (2011) and Raiford Guins (2014), rely on the presence of tangible evidence to confirm the trustworthiness of the historical narrative they propose.

I critique similar narratives for the stabilising effect these have on the categories and notions of the present. By tracing back the origins of the contemporary games industry, archaeological endeavours solidify the present and construct it as a firm standpoint from which to look at the past. However, it is precisely the present that constitutes the problem of archaeology, as it was originally offered in the project of the 'archaeology of the present' by Michel

Foucault (1972). Following Foucault's proposal (and as further developed in his project of a 'genealogy' of ideas), in this chapter I delineate a study of the present and contemporary ways of saying the truth about the past of the medium of the video game.

From this perspective I look at several stories about the origins of digital gaming as they have been narrated in recent years. I bring forth two stories in particular as significant examples. I look at the story of *Spacewar* (circa 1962), allegedly the first video game ever. *Spacewar* was the name given by researchers and scholars in computer science research centres in the United States to a never-finished series of playful experiments, started in the 1960s, with the PDP-1 mainframe. *Spacewar* became, in the historical reconstructions of the last two decades, an attested video game, even if a consistent unity of this game could not possibly be found. Texts on the history of the medium of the video game traced back the origins of *Spacewar*, including in its analysis experiments that could not be seen by their authors as finished products. *Spacewar* came to be narrated as an experiment whose authors failed to realise its economic potential, despite the absence of the technological conditions for commercialising the game as a video game, for identifying the authors of the game and even for naming it. The second story I look at involves the re-discovery of the dumped cartridges of *E.T. the Extra-Terrestrial*, a commercial failure of the company Atari in the 1970s that allegedly resulted in the company trashing the unsold copies of the game in the desert of New Mexico. The story had circulated as a legend in the histories of the video game industry. As a response to this legend, a group of self-professed video game archaeologists decided to prove the trustworthiness of the story by organising an expedition into the area. I conceive of this event as tautological research into the material evidence (the dumped cartridges) of something that was already known to be there (the co-ordinates of the location where the cartridges had been buried in New Mexico provided the reason for the search to be carried out in that specific location). Most importantly, I see the expedition as a process that confirms the established notions of the present, an approach to historical reconstructions that reinforces the knowledge we already have. The myths that kept circulating after the controversial (non-)discovery of one or several cartridges of *E.T.* vaporised the supposed materiality of the video game

and gave birth to a new series of conspiracy narratives about the reasons behind the expedition. The non-event brought back present and past to very unstable territories. The stories about the video game *E.T.*, before and after the expedition, made the evidence of game history relevant and valuable for gamers and game historians but they also deprived the historical research of any confidence about the reliability of material proof. It is precisely the performative potential of narratives, I conclude, that needs to be investigated and seen in its capacity to reinforce the categories of contemporary discourses as given unities, or to destabilise those same unities.

In chapter three (**Narratives of conflict: the hacking of PlayStation *as a* Network**) I look precisely at one such story of destabilisation. The hacking of Sony's PlayStation3 and its online service PlayStation Network, as it occurred between 2010 and 2011, has been extensively reported in mainstream as well as specialised media. It is the most popular case of conflict between producers and consumers in the history of the video game industry. It is also, I argue, an important case of unboxing a video game console, as it allowed people to revisit the definitions, limits and uses of PlayStation3.

I propose that hacking into the PlayStation Network can be better understood as the hacking of PlayStation *as a* network, with network here understood as the multitude of cultural and material nodes that constitute the very definition of the object PlayStation3. More than a clash between producers and consumers, the PlayStation3 hacking case can be read as an ontological dispute over what PlayStation3 is, over what the distinction between its hardware and its software is, and over the extent to which it should be opened up to the intervention of multiple actors.

I initially look at the statements produced by the actors involved in the events surrounding the PS3 hack. I observe that the dispute is not only about the rights claimed by both sides in their favour (which are, in any case, noteworthy and valuable for legislative reasons). The clash mostly revolves around the very definition of the boundaries of PlayStation3 and the actors involved in the production and consumption of this technology. I then argue that the number of definitions, actors and voices involved in the hacking of PlayStation3 brings into being an unlimited number of different interpretations of who the consumers

and producers of PlayStation3 are and, ultimately, what PlayStation3 *is.*

In fact, the contexts from which discourses have been produced are varied, and include not only reports in mainstream and specialised newspapers but also the legal trials that occurred in the California state court between Sony and the hacker George Hotz, and between Sony and the consumers association. These contexts produced and defined who was in charge of saying what PlayStation3 *is*, in relation to its material and immaterial boundaries, and to its ownership and control over a limited time and space. In light of the multiplicity of actors involved, I propose to read the institutionalised discourses as being produced by a restricted number of voices. I also look in this chapter at the possibilities offered by the many unofficial voices, and at the alternative narratives of conflict that these have been delineating. What other forms of hacking have become possible, and what can be learnt from these?

In order to evaluate and make sense of the multiple actors who have introduced different modes to rethink PlayStation3, I offer to reconsider the figure of the hacker as a mediator. Drawing on Bruno Latour's actor-network theory (1999, 2005), I argue that hackers can be seen as actors who introduce a modification within a network. However, the hackers of the stories I present here are themselves involved in the modifications they introduce. By proposing alternative definitions of PlayStation3, they also define themselves in relation to the technology they define. Presenting an alternative vision of how the video game console could be used and modified, they position themselves in relation to the same technology they intend to use and modify. Thus they become hybrid mediators, the 'upshot of ongoing configurations of heterogeneous associations' (Michael 2000: 22), who discursively produce their own definition and position within an unstable network.

Ultimately, I raise the question of how to evaluate the mediations these hybrid actors introduce. If the hackers featured in the official stories on the hacking of PlayStation3 appear to replicate a masculine and aggressive freedom to own the technological products once these are bought, other forms of hacking could be imagined where more inclusive and participated networks are framed.

Questions of hospitality and relation with the other are also the centre of chapter four (**Narratives of independence: taking care of one's own game**),

where I look more specifically at the narratives of independence that surround contemporary video game culture. Independent video game productions are an emerging phenomenon in the game industry. In the context of video game culture, independence usually refers to the possibility of producing and releasing a video game outside the control and constraints of a major publishing company, which might impose limitations on the content in order to appeal to a broader audience. However, independence has also been critiqued by many gamers and game journalists for re-introducing the same relations of power it originally attempted to surpass. As independent games become easier to produce, new forms of competition arise between designers who struggle to gain sufficient attention from their potential audience, thus requiring the same or new publishers to promote their games on mainstream channels of distribution in exchange for part of the revenue. However, independence can also mean different things. It can be presented, as it is in the work of game designers Molleindustria and Anna Anthropy, among others, as a political proposal aimed towards inclusion and participation in the production of video games -- and not necessarily oriented to commercial distribution.

I claim in this chapter that independence can be seen, through the work of Laclau (1990) and Laclau and Mouffe (1985), as a floating signifier: a word that acquires a specific meaning only when associated with other signifiers but that does not, by itself, refer to anything that is conceptually delimited. However, it is precisely the difficulty or impossibility of defining independence that forces the actors involved to constantly produce self-definitions and explanations of how they relate their work to other independents, or to the video game industry. I look at the institutionalised contexts (game magazines, movies, websites and festivals about independent games) where these self-definitions are solicited and produced. Like a 'thorn in flesh' (Foucault 2005), independence is at the same time a repressive and productive power that limits individuals through specific practices of self-production (including incubators and workshops where game designers are taught how to become independent through a series of specific instructions).

While looking at the multiple contexts in which contradictory definitions of independence are formulated and at the different individuals that are

produced through the notions of independence, I also propose that the concept is valuable in contemporary video game culture precisely due to its unstable, floating condition. In fact, what I find particularly interesting is the unresolved question of how a game designer relates to other independent designers or to the non-independent video game industry, to the other independent-which-is-not-me and the universal outside the independent territory. These continuous processes of tracing unstable boundaries between oneself and a form of alterity that is not part of one not only contribute to constructing both the individual and its outside but also force one to take into account one's other, the differently independent or non-independent. I ultimately look at the emergence of independent gaming as the source of an ethical question that is opened up (even if not articulated directly) in the culture of video game development. The way in which this question is resolved (again, often indirectly) by various designers creates the difference between independence as a narcissistic condition or a purely solipsistic and destructive self-reclusion. Such question also opens up to the possible formulation of new forms of hospitality towards the other, as opposed to aggressive claims of self-fulfilment in opposition to an allegedly repressive video game industry.

In chapter five (**Narratives of engagement: gamification and the performativity of video games**) I focus on another series of contemporary narratives about the mutating relations between gamers and games. The "evangelists" (mostly designers, marketing consultants and social entrepreneurs) of gamification have been proposing in recent years that video games can be used not only for entertainment purposes but also to affect players in specific ways. Engaging with players through video games can result, in these contexts, in new forms of political or activist propaganda where players are moved to action through the messages conveyed in a video game, or to new business solutions that attract customers via game-like environments.

I suggest that this perspective on games and gamers conceives of both as static and separated, and as one potentially affecting the other in predictable and often quantifiable ways. Moreover, this view reduces games to objects with identifiable properties and gamers to subjects that can be affected and controlled in their behaviour. I therefore recommend to consider some alternative

narratives of engagement, where games and gamers are seen as being in movement rather than remaining static.

To accomplish this, I turn to the work of anthropologist Tim Ingold (2010, 2011) and his reading of Martin Heidegger (1971a) and Henri Bergson (1914, 2001). In the work of Ingold, objects are considered in their vitalism, in the constant movement and mutation that occur within an environment populated by 'things' (Heidegger 1971a), as well as by ourselves. Following on from Ingold's theory, I look at video games not as abstractly influencing gamers from a supposedly separated position but as participating and *living* in the same environment. What is more, theory itself, including theories of gamification and approaches to the use of video games, can be said to be participating in the same reality they describe and bring about.

From the theory of participation and 'dwelling' (Heidegger 1971b), I then develop an alternative narrative of engagement, one that involves the study of games and gamers more broadly. In the conclusions I propose a method for doing game studies as a form of involvement and participation, one that takes into account the *life* of theory, of gamers and games. Drawing on Bergson's (2001, 1914) notion of creativity, I intend to call this approach creative game studies: a participated, critical and anti-authoritarian project for telling narratives about gamers and games while *playing with* both. Creative game studies will be outlined as a process of ethical invention, as a mode of 'cutting' (Kember and Zylinska 2012) across the multiple forms of participation with gamers and games, and as a way of reintroducing the humanities and cultural studies approaches into the research on video game culture.

In the conclusions (**Why we need creativity now - the end of gamers, the end of games**) I further propose how to look at recent developments in video game culture through the perspective outlined in the dissertation. I discuss how the recent (at the time of writing) case of GamerGate, quickly polarised by many commentators as an attack by misogynist gamers on the inclusion of women in the production of video games, might hide more intricacies than are apparent at first glance. The individual perspectives that have revolved around the GamerGate case reveal a large number of conflicting views on the role that gamers and games should play in our society. I present this case as a final and

contemporary comment on the need for a creative study of gamers' games, one that questions the given categories and dualisms and that asks, in a post-structuralist fashion, what it is that keeps similar things separate, and what keeps opposing categories together.

I would like to present this work as the result of a long process that started well before the beginning of a PhD programme. As a gamer and game journalist, I had been confronted by many different stories about video games and their players. What provoked me to begin this research project was an undefined feeling of dissatisfaction with the repetitive nature of those stories, and the apparent difficulty of finding new questions and voices within video game culture. In the final analysis, I believe that this dissertation serves as an attempt at re-evaluating the possibility of saying something about video games and their players without denying a certain involvement in the things we say. Indeed, I have defined myself as a gamer for a long time, but my game is not the same as that of the hard-core consumers, the game artists, the independent developers, the console hackers or the misogynist aggressors I present in this work. Understanding the similarities and differences between these different types of gamers and myself remains an open question. The dissertation I am here offering is my personal game, a game that has kept me busy on a daily basis for many years (as intensely as a more conventional gamer might feel playing a video game). My final appeal for creative game studies is also a possible beginning of a new project, one that does not rest on the assumption that there should be much difference between studying, playing and living with video games.

Chapter 1
Literature review and methodology: a study of contaminated relations

In this chapter I will discuss the methodology of my research project and the relevant theoretical literature that has contributed to it. I will also set out a number of theoretical issues this dissertation intends to address. I will attempt to understand how to study games and gamers through the multiple relations that occur between the two while looking at both gamers and games as unstable categories, open to many different configurations. Gamers and games, as outlined in the introduction, appear to be defined through many discursive performances, often focusing on the newness of technologies and their unprecedented, liberating effects. But these narratives of newness and determinism can also be opened up to new and unexpected questions. This first chapter intends to examine what sort of questions these could be, how we could approach them and why we should.

This chapter also aims to set the study of gamers' games as focused on the discursive formations that emerge in this context. As a narrative, the relation between gamers and games will be examined by focusing on several discursive performances, pronounced by a variety of actors. I will look at how video game studies have rarely been influenced by the post-structuralist tradition, particularly in the ways it has been debated in cultural studies – which, in my view, is a regrettable omission. Authors such as Michel Serres, Jacques Derrida, Ernesto Laclau, Michel Foucault and Judith Butler will be approached in this chapter in my attempt to understand discourse in its descriptive and performative capacities.

Performativity, in particular, will bring me to a discussion of the problem of the involvement of theoretical discourse in the objects it looks at, blurring the distinction between the practices of observation and participation. This

participated, contaminated and parasitic approach to theory will be discussed for its novelty in respect of the current trends in game studies. It will also be seen as a method for deconstructing, in the post-structuralist, or, more specifically, Derridean sense, the existing binaries and fixities, such as the separation between gamers and games, but also that between production and consumption.

Drawing on discourse theory, post-structuralism and performativity, I will aim to outline in this chapter what can be defined as a cultural study of gamers' games. The difference I ultimately intend to introduce through this approach, in respect of the previous accounts of the medium and its users, is the abandonment of essentialist, ontological questions about never-resolved definitions of gamers and games. These are the sorts of questions that have tended to reinforce the dualities and boundaries that I aim to dissolve. Instead, I propose to adopt an ethical and participative involvement in the gamers' games relation. Rather than questioning what gamers and games *are*, how they work and what effects they should allegedly produce, I want to interrogate how these very questions – so often asked in game studies – came about, how we are involved in them and how we could answer them while keeping ourselves involved through the invention of some new and alternative narratives.

Studies of gamers and games

In the opening part of this chapter I will discuss how the field of game studies has so far approached the analysis of both gamers and games. Studies around this topic have mostly aimed at nuancing the debates on the practices of production and consumption in video game culture, drawing initially on the categories and clusters developed by the industry. The notions of gamers and games have been mostly associated with a study of consumers and the products of their consumption, often reinforcing categories (product types, audience sectors, etc.) conceived in the market research departments of video game publishers. I will start by overviewing and discussing some of the most notorious and relevant studies of video game culture, trying to understand the limitations of the perspectives proposed so far and their performative potential in reinforcing and

bringing about notions about the production and consumption of video games.

Joystick Nation: How Videogames Ate Our Quarters, Won Our Hearts and Rewired Our Minds by J. C. Herz (1997) was one of the first popular books about video game culture. In it, Herz is mostly concerned with understanding the emergence of the category of gamers, seen as a new group of consumers with varied habits and styles. As an early attempt to understand the video game industry and the culture surrounding its products, the book provides an overview for the inerudites and introduces each term carefully, while explaining its origins. Herz comments on the origins of the video game genres, on the different kinds of audiences and on the styles of game fans. The issue at stake, according to Herz, is how games culture is redefining itself in the emergence of a new, mainstream market. In 1997, in fact, the video game market was changing significantly by opening itself up to embrace some new, unexpected market sectors (such as consumers in their late thirties). At the same time, Herz shows us a world of previously underestimated entrepreneurs now growing their companies and becoming part of a multi-billion-dollar market. She also describes a world of teenagers and fans who are mostly concerned with maintaining a conservative stance against the major changes of the video game market.

Joystick Nation is an elaboration of the narratives that were used to describe and make sense of video game culture in the late 1990s. It is interesting to see how this first attempt maintains a view of video game culture as, mostly, a kind of counterculture, while at the same time showing a certain fascination with the ways in which the game industry creates a mainstream international market. Such a view keeps together the goals of an expanding industry that is attempting to involve new categories of consumers, with more conservative approaches and styles of consumption of those who really made the video game industry and the hard-core, true gamers. Herz focuses quite explicitly on individual actors and on technologies as determining agents of change. Such change is therefore social, economic and technological. The story of the video game *Doom* and the production company id Software is emblematic of it. In the chapter 'Why *Doom* Rules', Herz combines the myth of the lonely genius (the two nerds, John Carmack and John Romero, who founded id Software) with the possibilities offered by new technologies (mostly Apple II and the advent of the Internet). The author shows

how the new video game industry is 'rewiring our minds', as the title of the book suggests, thanks to the conjunction of both human and technological elements, and how it is shaping a new culture that is at the same time mainstream and 'counter-' (Herz 1997: 83-90).

A similar view is maintained by Steven Poole in another popular text, *Trigger Happy: The Inner Life of Videogames* (2000). Here Poole observes how an industry that started almost accidentally in an academic laboratory became a cultural phenomenon that would shape the minds of a generation. In a similar fashion to Herz, Poole is fascinated by what appears to be a new emerging phenomenon, which starts as an underrated form of entertainment for teenagers and now outperforms the cinema industry in terms of economic growth.

Many of the early accounts of the emergence of the video game industry and video game culture tend to treat both producers and consumers of game products enthusiastically. Only much later does a more critical or moderate approach start to appear in the literature on the medium. Aphra Kerr, in her book *The Business and Culture of Digital Games* (2006), still considers that it is of key importance, as both Herz and Poole do, to debate the relevance of the hard-core sector in the design and publishing of a video game. She argues that market research has not always been considered essential by game publishers. The consequence of this is that most video games designed and released on the market are influenced by a perception of the typical game consumer as a hard-core gamer, a male teenager, who is believed to form the bulk of the demand for new games. Kerr notices, for example, that simple puzzle and trivia games with a fast learning curve of the game mechanics are not included in most studies of game consumers. She concludes that the game market would look quite different were more attention paid to this sort of game (2006: 113). The situation nowadays is quite different from the one Kerr described in 2006, and the last few years have seen a large number of releases of free puzzle and trivia games for online playing or as mobile apps. These games usually require skills of speed, intelligence and management of resources, and are addressed to general, mainstream audiences. Publishers seemed to have accepted what Kerr noticed in her work, as some of the results of their audience research were being affected by an outdated assumption regarding the demographics of game consumers.

Kerr's text is important not only for its predictive qualities. Her work offers one of the first extended accounts of how economic as well as social factors contribute to the shaping of the video game industry and to the perception of the stereotypical consumer of video game products. The most significant aspect, I believe, is Kerr's critique of the idea that the progression of, and current developments in, the game industry are driven by purely rational behaviour. She shows instead how the development of both software and hardware is also largely influenced by a certain image of, and expectations about, the potential consumers of those products. Kerr also argues that, in their own turn, game consumers tend to describe themselves in terms of the image proposed by the mainstream products and specialised press. In the past this resulted, for instance, in the marginalisation of the female and casual audiences. Kerr notices that the image of an emerging female sector, as often claimed by industry experts, depends largely on the introduction of market research specifically oriented towards that audience: female gamers have always existed, but the industry had never looked for them until recently. Kerr's discussion of the role played by hard-core gamers in creating the image of the typical game consumer resulted from her exploration of 'the entire production cycle from producer to distributor to final user and the linkages and relationships between these stages' (6). While reviewing the models used to describe the relationship between media producers and media consumers, she maintains that 'one must always be careful to acknowledge that such models may act to simplify complex social processes and divert attention from other factors, peculiar to certain places and times' (7).

Jesper Juul, in *A Casual Revolution: Reinventing Video Games and Their Players* (2009), also investigates the relation between the development and marketing of video game products and their expected consumers. Juul shows how the video game industry and the culture of digital gaming are being reshaped by the trend for designing games for a casual audience, that is, for consumers who are no longer spending large periods of time committing to a specific game but are instead demanding a quick and easy gaming experience. Juul, confirming Kerr's findings, acknowledges that the 'casual revolution' happened because those working in game publishing had stopped assuming that the majority of gamers were 'obsessed' young male teenagers (1-23). Kerr

already acknowledged that 'publishers seem to lack the tools and information to enable them to understand non-traditional (i.e. non-hard-core) consumers both in established and in newly emerging markets globally' (2006: 76). Both Kerr and Juul show how the nature and products of the video game industry have been determined by a belief in a particular sort of consumer. The expectations of those working in marketing, as well as the game designers and executives, were shaped by this perception. The video game industry has been and still is predicated on certain narratives of production and consumption.

Moreover, scholars in video game culture have also frequently started their research with a certain ready-made idea of what to expect from their inquiry. For example, T.L. Taylor (2006) became puzzled while visiting an *EverQuest*[14] convention as an ethnographic researcher. She writes: 'I wonder, as I have in the past, why that singular image of the male teenage isolate hanging out and gaming online holds so strong in the face of real players. The demographic truth is much more mundane' (4). Taylor looks at online game players in offline environments, such as conventions and public events. Her key insight is that a distinction between online worlds and real worlds is misleading as the two are intermingled and help to define each other. Taylor's study reveals the extent to which common prejudices shaped her expectations of the demographic of online video game consumers. Her work is motivated by a desire to confront this expectation with the demographic truth.

Taylor (2006) is concerned with the productive potential of the consumers of online video games. She looks at how gamers interact with the game world in a way that resembles a form of labour. Gamers, according to Taylor, contribute to the online game world in a way that makes them more than just passive users of software. She writes:

> The word 'participatory' might raise red flags for some designers. The idea that players can act as meaningful agents within the overarching game structure is generally seen as naive. But let me reframe this: players *already are* core actors in the maintenance and life of the game. There is no culture, there is no game, without the labor of the players. Whether designers want to acknowledge it

[14] *EverQuest* is a massive multiplayer online role-playing game (MMORPG) published by Sony Online Entertainment in 1999. It is still, thanks to its sequel *EverQuest II*, one of the most played online video games.

> fully or not, MMOGs15 *already are* participatory sites (if only partially realized) by their very nature as social and cultural spaces. (2006: 159)

Taylor points out that gamers participate in a number of ways, through the:

> …creation of game guides, walk-throughs, answers to frequently asked questions (FAQs), maps, object and monster databases, third-party message boards and mailing lists, play norms, server guidelines, tweaks to user interfaces (UI), macro sharing, fanfic, game movies, counter-narratives, comics and fan gatherings. (2006: 155)

When she describes this culture as 'participatory', she explicitly refers to Henry Jenkins' book *Textual Poachers: Television Fans and Participatory Culture* (1992). Both Taylor and Jenkins' concern is to illustrate how consumers engage with products. This involves not only interpreting and/or decoding a text differently but also producing new texts, such as those listed by Taylor. Games, suggest both authors, are not just played but also continuously redefined. This process happens as much inside the game simulation and eventually in its online communities as it does outside it, in other texts that are not part of the game itself. This is what Taylor calls a 'play between worlds': gamers actually connect the online world of the game with activities in the offline real world of their daily lives.

What is particularly noteworthy in the way Taylor reads the participatory aspects of consumer culture in relation to the medium of the video game is how existing distinctions between consumers and producers, in-game environments and outside real world, and ultimately gamers and game products are used as the starting assumption to be nuanced and understood. On the one hand, Taylor's perspective can be seen as being based on those existing distinctions, which she then tries to unpack and confront with her own personal engagement with the communities of video game players. On the other hand, this approach discursively reinforces those distinctions by acknowledging the existence of different sorts of hierarchies between industry products and their buyers, real and simulated worlds, and gamers and games.

In this dissertation I will question what generates these distinctions in the first place, how they are replicated and how they could be thought otherwise.

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15 MMOG: Massive multiplayer online game. An MMOG is a game played online by a large number of people connected at the same time to the same server, eventually in a persistent world (an online environment that is constantly available for playing).

How could these hierarchies and differentiations be understood and reformulated differently? And what are the consequences of proposing a different perspective on these issues? Why is it needed and what would the implications of a different approach be? In the following section I will look at how other authors have tried to address these questions. Mostly, I will see how dominant narratives, originated in the industry and in the mainstream and specialist press, have been challenged and countered by game scholars and with what consequences.

Challenging imaginaries and dominant technicities

In *Game Cultures: Computer Games as New Media* (2006) Dovey and Kennedy acknowledge how a limited number of models dominate the debate on video game culture. The authors start by analysing how video games can be placed within the broader category of new media because of their tendency towards interactivity, participation, immersion and co-creation of content. These trends complicate the division between producer and consumer of digital media, and of video games as part of that category. According to the authors, video games and new media make it easier to 'access, alter and disseminate symbolic texts' (2006: 15). Nonetheless, Dovey and Kennedy argue that this tendency overshadows, and at times is in conflict with, some other aspects of the emergence of video games. They suggest that the overarching conditions that shape video games and new media generally are to a large extent determined by an optimistic narrative of openness, even as other areas of video game development are hindered by this tendency.

Dovey and Kennedy draw attention to the way that specific events in the history of the medium are turned into histories and images, highlighting the extent to which these texts contribute to a mythology of the game designer and game culture more generally. For instance, their analysis of the biographical accounts of early game designers supports this view:

> [… R]ather than view these accounts as primary historical evidence, we have to

> understand that they are themselves part of the discourse of the hacker mythos, the lone individual genius, breaking into hi-tech equipment and repurposing it for pleasure and fun. Similarly, cyborg discourse informs these accounts in the notions of early designers with machine-like minds and inhuman propensities. (2006: 69)

These discourses are elsewhere called 'dominant technicities' by Dovey and Kennedy. The presence of these notions, as the two authors argue, can lead to a misunderstanding of what is at stake in gamers' practices. The view of the phenomenon of independent gaming, for example, which will be further discussed in chapter four of this dissertation, is distorted by being viewed through the lens of other media:

> As we have seen in the film and music industries, the 'indy' tag may not signify much more than 'wannabe'. In other words, the power of already established publishers may in fact be strengthened by the creation of an industrial diaspora of hopeful independents looking for commercial sustainability by copying game formats that already exist. If the concept of independence is really to change the nature of existing game cultures it might have to incorporate some understandings of the cultural forces that have shaped what we already have. (2006: 141)

Giddings and Kennedy ('Digital Games as New Media' 2006) further argue that digital games are part of what they call a technological imaginary. In this shared imaginary, video games co-exist with cyberpunk dreams of interconnected minds, hackers, spaceships and cyborgs. It is the same imaginary that frames movies such as *Tron* (1982) or *The Matrix* series (1999-2003), cited by the authors, where computer-generated worlds are represented and that consistently resemble video games in their aesthetics. On the one hand, video games seem to bring about this imaginary of a hi-tech future; on the other, the evolution of video games is shaped and determined by the very same imaginary. Lister et al. (2009) also argue that the technological imaginary shapes our collective understanding of the progression from old to new media while also framing the development of technologies (66-73). In this double influence there are some core elements that justify the adoption of such a term. Giddings and Kennedy acknowledge that digital games are a 'paradigmatic new medium in that they offer experiences and pleasures based in the interactive and immersive possibilities of computer technologies' (2006: 129). They acknowledge that the

technological imaginary is linked to this notion of newness, although they maintain that this should not lead to 'over-simplistic versions of technological determinism' (131). The technological imaginary, while playing an essential role in establishing what the key issues around game culture are, can also be seen as hiding certain practices and other social or economic factors.

The study of game culture should, according to Dovey and Kennedy (2006), develop a practice of critical play, where the very same rules of the game (in the broad sense of digital texts and the cultural discourses and practices about them) are critiqued (143). For example, Dovey and Kennedy suggest that game art is a form of rebellion against the dominant technicities, or a way to 'play critically'. In game art the role of the artist is problematised in terms of its relation to gamer culture; a game artist is no longer a mere player, he or she is neither a fanatic nor a hacker. This sort of problematic relation is seen by the authors as outlining a potentially new approach to the study of game culture, which originates from a non-complacent view of the political, economic, technological and social issues involved.

The hypothesis that can be drawn from here is that the relation between gamers and games comes to be described by industry experts, specialist press, gamers and game scholars as part of a dominant technicity or imaginary. This results in the production of symbolic texts, as Dovey and Kennedy would put it, which might alter, in their own turn, existing economic and technological conditions. The descriptions of what gamers do with games can bring about new models and paradigms for understanding the relation between the two, and in some cases even alter the strategies of game publishers, as in the 'casual revolution' analysed by Juul (2009).

At the same time, however, counter-narratives can equally emerge and propose to reconsider the economic and political implications of the new trends of participatory consumption and the openness or democratisation of game development. Sotamaa (2009) and Kücklich (2005) provide pertinent perspectives in this regard when they discuss the implications of the recent trends in favouring players' productions. Both are concerned with the political implication of players' labour as a form of unpaid exploitation, which should raise awareness among game designers, gamers and scholars in game studies.

This perspective is partly discussed by Taylor (2006) but it is further developed in these two studies. Kücklich (2005), in particular, defines the emergence of content produced by players as a form of 'playbour', where playing and labour mix together. Kücklich writes: 'While the commercialisation of leisure is hardly a new phenomenon [...] it seems a radical departure from the established business models of the leisure industries that the games industry not only sells entertainment products, but also capitalises on the products of the leisure derived from them' (2005: online). Kücklich looks at the issue of players' production from a political economic perspective while describing modding, which is the trend of modifying video game software in order to make new games.

Sotamaa (2009) discusses similar concerns while debating the same phenomenon. They both acknowledge that modding, just one among a large variety of activities performed by video game consumers, is shaped by specific industrial operations and needs. Sotamaa writes:

> During the past decade the combination of players' increased skills and developers' supportive strategies have taken player production from the shadow of cultural economy to the spotlight. The increased access to the means of media production does, however, not necessarily equate to increased freedom. In one sense facilitating players with productive tools has only underlined the centrality of distribution that is traditionally strictly controlled by the industry bodies. (2009: 99)

In a similar vein to the literature discussed earlier, both Kücklich and Sotamaa take a position in judging the characters of this story. The modding community emerges 'from the shadow of cultural economy to the spotlight', as Sotamaa argues, assuming the development of a collective character in a time period ('the past decade'). Kücklich sympathises with the modders because an opposing figure (the 'leisure industries') is capitalising on their work. Nonetheless, both Sotamaa and Kücklich have to acknowledge that the phenomenon they are describing is extremely variegated and displays the most diverse interests on the players' side. The majority of modders might not care about this exploitation, which is regulated quite clearly in the end-user licence agreement (EULA) the player has to accept before playing the game. Sotamaa, just before making the aforementioned statement, acknowledges that:

> [w]hile many players are happy to hand over the productive control to the industry, some are keen to follow their productive inclinations that result in bending and transforming the products of the game industry into potentially new directions. Some players choose to adjust the challenges, create completely new self-defined side games and test the limits of the game world. In other words, they move from playing the game to playing with the game. (Sotamaa 2009: 99)

Sotamaa reiterates this view in 'Play, Create, Share? Console Gaming, Player Production and Agency' (2010). Here Sotamaa describes the evolution of game *mods* (modifications) for console gaming, a phenomenon usually limited by strict production licences and now progressively more open to user customisation and production of content (as exemplified by Sony Computer Entertainment's game series *Little Big Planet*, 2008). Recreation and sharing of content are seen as entirely new phenomena in the console market – although similar activities occurred before, they were not encouraged by developers. Two excerpts from Microsoft and Nintendo press releases from the same period help clarify this narrative. The first cited by Sotamaa is taken from a press release dated 13 August 2006 entitled 'Microsoft Invites the World to Create Its Own XBox360 Console Games for the First Time'.[16] In this context Microsoft was presenting the XNA Game Studio, a set of tools to facilitate game production, later released in December 2007 and whose development ceased in January 2013.

> In the 30 years of video game development, the art of making console games has been reserved for those with big projects, big budgets and the backing of big game labels. […] XNA Game Studio Express will democratize game development by delivering the necessary tools to hobbyists, students, indie developers and studios alike to help them bring their creative game ideas to life while nurturing game development talent, collaboration and sharing that will benefit the entire industry. (2006: online)

Sotamaa shows the similarities with Nintendo's press release (12 May 2008) entitled 'Nintendo Launches WiiWare: An Open Playground for Creativity': 'by reducing the barriers that make console game development prohibitively expensive, WiiWare showcases original ideas in the most democratic

[16] Microsoft (2006) 'Microsoft Invites the World to Create Its Own Xbox 360 Console Games for the First Time', *Microsoft News Center*, http://www.microsoft.com/presspass/press/2006/aug06/08-13XNAGameStudioPR.mspx [Last accessed 7/11/2014]

environment in industry history, connecting the people who make games more directly with the people who play them' (cited in Sotamaa 2010: online).

Sotamaa is concerned with the historical evolution of the process of openness, and with how this influences the availability of the means of production. My main interest in this dissertation is less in the real or supposed availability of new technologies and more in the discursive processes that use this same notion of availability, as well as the notion of openness and of the democratisation of the means of production. However, I share with Sotamaa a focus on the performative aspects of such discourses, and on how the relation between the development of new and allegedly open technologies entangles with the descriptions, justifications and analyses of those tools. I will soon debate how the study of the medium of the video game has often insisted on finding a sort of specificity of the medium itself, outlining a technical configuration that should be responsible for the specific ways in which video games are made, played and interpreted. These theoretical views, I claim, share a similar determinism with the discourses that propose a supposedly unprecedented emergence of participative forms of production in video game culture. As argued in the introduction, it is the notion of newness that permeates these perspectives and creates the idea that video games need to be studied in their uniqueness and essential irreducibility to other forms of expression.

Procedurality and algorithmic culture: game ontologies and their implications

Many of the accounts of the culture and production of video games tend to treat technology as a potential carrier of specific meanings. In this perspective video games are seen as constituted by a unique kind of technology that has inner properties and qualities that are responsible for the ways in which games are made, played and interpreted by players. I will argue in this section that in this perspective there is a tendency to produce ontologies of games by explaining what they are, how they are made and linking these descriptions of their properties to an analysis of what digital games should make possible. I argue that

this view implies a supposed distance from the object of analysis. Such distance and non-involvement is also present, as I will debate, in the critiques to these approaches that have been trying to focus instead on the practices of play as the source of different and unpredicted uses and definitions of the medium of the video game.

The most relevant and influential approach that has been trying to analyse games in their uniqueness is known as procedurality, a term originally conceived by Janet Murray (1997) in relation to digital technologies and now adopted by several game scholars and game designers. The concept of procedurality can, I believe, be looked at as an attempt to find a unique and specific way to interpret software and digital games. The most notorious proponent of procedurality, in the context of the study of video games, is Ian Bogost, who has been elaborating this method to understand, critique and make digital games. In his book *Unit Operations: An Approach to Videogame Criticism* (2006) Bogost introduces the notion of 'unit operations', a 'general conceptual frame for discrete, compressed elements of fungible meaning' (xiii). Bogost argues that 'unit operations strive to articulate both the members of a particular situation and the specific functional relationship between them' (14). He draws on Janet Murray's *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (1997), which proposed four essential properties for digital 'environments': these are procedurality, participation, spatiality and encyclopaedic capacity.[17] Procedurality, considered by Bogost to be the most important of the four, is the computer's 'defining ability to execute a series of rules' (Murray 1997: 71) or the 'practice of encapsulating specific real-world behaviors into programmatic representations' (Bogost 2006: 13).

Units, and unit operations, are a crucial element of Bogost's theory and of the idea of procedurality. His attempt is to provide a form of criticism that could eliminate deterministic boundaries and connect the humanities with computer science, or even potentially inspire 'a unit-operational university […]: a series of constantly changing relations between highly disparate groups, ideas and

[17] These properties are defined by Murray as such: being composed of executable rules (procedurality), inviting manipulation and human actions (participation), being able to organise spatial environment where information is made usable (spatiality) and finally the possibility of storing high volumes of information in various formats (encyclopaedic).

resources' in which 'intellectual projects would structure themselves more like software: units of encapsulated production with structured ties to multiple potential applications' (2006: 173-174). Bogost stresses that 'unit operations give us a lever for understanding any form of human production as potentially procedural' and 'unit analysis can help the critic uncover the discrete meaning-making in texts of all kinds' (15). Bogost shows how the analysis of units could work in reading the movie *The Terminal* by Steven Spielberg (2005). Critics have negatively received the movie, Bogost acknowledges, mostly because of its incoherent plot. However, Bogost argues that a unit analysis of the movie uncovers a series of 'discrete components of meanings' organised around the theme of 'uncorroborated waiting', as many characters in the movie are involved in more or less stressful forms of waiting (sometimes self-inflicted). If unit operations might be seen as crossing different media, Bogost concludes, we could look at the movie as a piece of software and unveil the 'units of meaning' and a 'framework of general figures of waiting' (15-19). Towards the end of his text, Bogost also looks at the video game series *Grand Theft Auto* (1997-2014). In this series of games, the non-playing characters the player interacts with caught the attention of many critics for their over-simplistic representation of human behaviour. These are in fact very predictable and reduced to a few figures that lack any traits of humanity (they do not speak and they react in a limited number of ways to the player's moves). It is this dehumanisation that many critics have argued causes the game to incite violence, as the player faces no visual consequences for beating or abusing the non-playing characters. Bogost affirms that this design choice can be seen as an 'implicit declaration of the game's endorsement of sociopathic behavior' or as 'the game's primary strategy for alienating the player from productive social interactions, a unit operation for sociopathy' (168).

Bogost's method for looking at and creating video games is further elaborated in *Persuasive Games: The Expressive Power of Videogames* (2007). In this text he argues that games, also in their non-digital form, allow a specific kind of rhetoric different from other forms of literature or visual representation. Video games, Bogost notices, are executed by computers that are essentially rule-based. Therefore representations and interactions in video games are rule-based, and

this brings a new and rather unique form of rhetoric, which he calls again procedural. It should be through and thanks to procedural rhetoric that video games can become persuasive and be used for political propaganda, social change or artistic expression. However, Bogost argues that, as long as video games are studied and made as if they were part of literature or cinema, that is, as long as their procedural properties are forgotten, the effects of their message will be undermined.

Studies on procedurality appear to focus on these alleged unique properties that games have, and on the effects of these on players. However, this process of affecting players happens in an abstract and separated context, from where the act of telling and discussing these effects is not itself affected. From this privileged position it becomes possible to 'find meanings', as proposed in two collective papers by Mike Treanor, Bobby Schweizer, Ian Bogost and Micheal Mateas ('Proceduralist Readings: How To Find Meanings in Games with graphical logics', 2011, and 'The Micro-Rhetorics of *Game-O-Matic*', 2012) that further articulate the concepts of procedurality and unit operations. The concepts are here understood as tools for video game criticism as well as for their design. The first paper states in its abstract:

> Newsgames and artgames, two genres in which designers wish to communicate messages to players, often deploy procedural representation. Understanding these proceduralist games requires special attention to a game's processes as well as how these interact with its theme and aesthetics. In this paper we present a method for proceduralist readings of arcade-like 2D games so that players can determine their range of intended and unintended meanings, critics can assess the strengths and weaknesses of the presented arguments, and so that designers can identify ways to refine their rhetorical strategies. (Treanor et al. 2011: 1)

The second paper similarly offers a method for designing simple games to 'express ideas' through 'representational units of meanings' (Treanor et al. 2012).

The notion of procedurality has been welcomed by many, particularly in the field of game design, as a novel method for understanding and making games. However, it has also received severe criticism. Miguel Sicart, in 'Against procedurality' (2011), argues that:

> The proceduralists take their starting point in Murray's statement that digital games are unique, among other things, because of their procedural nature (Murray 1998), that is, because they are processes that operate in a way that is akin to how computers operate. The argument, of course, did not stop there: procedurality is understood not just as an ontological marker of computer games, but as the *specific* way in which computer games build discourses of ethical, political, social and aesthetic value. (Sicart 2011: online)

Bogost has in fact countered the accusation of producing ontology of games by differentiating his work with Espen Aarseth's *Cybertexts* (1997), seen instead as an example of a work mostly concerned with establishing ontologies. According to Bogost, Aarseth's idea of the cybertext,[18] which could otherwise appear similar to Bogost's unit operation, aims at an 'ontological domain that includes and excludes certain works by virtue of their overall function' (2006: 14). Bogost instead is proposing a critical tool, and unit operations are an instrument to be used for understanding 'any artefact, or any portion of any artefact, rather arbitrarily' (14). However, Sicart can rightly argue that procedurality can be easily critiqued of reducing the act of playing as an "activation" of the meanings of the game. This is particularly evident in the papers earlier introduced, where the notion is presented as a useful tool for game design, and assumes that operations within a video game can trigger exact meanings. Sicart argues against this view of the design of games and in favour of the practice of play as the source of unpredictable events:

> Play is the unknown and the uncontrollable, and by building an ontology based on designer-centric reason, the proceduralists eliminate the myth and the ritual from play, and encourage an instrumental approach to games that is exclusively guided by the rules, norms and processes embedded in the game system. […] Play is the experience of a game by a player, and play is a creative, appropriative process of understanding and engaging in a dialectic relationship with the game system and with other players (DeKoven 2002). Play is appropriation, creation, expression, and to a certain extent submission to the rules of a game. Play is everything about a player engaged in a game, and less about the rules of such game. (Sicart 2011: online)

[18] In Aarseth's words, '[c]ybertext […] is the wide range (or perspective) of possible textualities seen as a typology of machines, as various kinds of literary communication systems where the functional differences among the mechanical parts play a defining role in determining the aesthetic process. […] As a theoretical perspective, cybertext shifts the focus from the traditional threesome of author/sender, text/message, and reader/receiver to the cybernetic intercourse between the various part(icipant)s in the textual machine' (Aarseth 1997: 22).

Mark J. Nelson (2012) has attempted to summarise the debate and also argue in defence of procedurality (and directly *against* 'Against Procedurality' by Sicart). Nelson sums up Sicart's position noticing an opposition, implied in his work, between 'rhetoric, propaganda, encoding an opinion [and on the other hand] intervention, […] setting up situations, with meaning not conveyed, but jointly produced from the design and the players' interaction with the design' (Nelson 2012: online). Nelson then proposes a 'possible solution':

> ['M]eaningful games' should not be modeled on rhetorical theory but on performance-art theory. Rather than attempting to convey meaning or persuade via representation of arguments in processes, one ought rather to design games aimed at setting up meaningful situations or effecting interventions. (2012: online)

The debate on procedurality, from Bogost to Sicart and including Nelson's response to Sicart, is problematic as it keeps reiterating the separation between gamers and games as a given and as a founding principle for the possibility of talking about the video game as a medium. In the positions taken so far by different game scholars, the debate has been circulating around the idea that the meanings of digital games can somehow be located. The location can supposedly be found in the units and unit operations Bogost argues about, or in the act of playing defended by Sicart. Nelson's summary is particularly evident of the problem at stake here, as his conclusion is that games can be designed in a way that affects players' interventions. In other words, Nelson summarises Bogost and Sicart's perspectives by confirming them both in their rather unquestioning acceptance that games and gamers are separated from each other and "activating" each other. Procedurality, as a form of criticism that comprehends all texts that are composed of executable rules, takes for granted a separation between, on the one hand, the subject or instance that interprets unit operations and, on the other, the object of analysis. It is an analytic and positivist method and it has the limits of such an approach, being a theory which offers to unpack the processes of procedural systems from a distant and uninvolved perspective.

However, Bogost is not alone in his endeavour as similar methodologies have been discussed in the study of video games on many other occasions. In what I believe is a similar fashion, Alexander Galloway (2006) has investigated

the properties of video games, which in his view largely depend on the algorithmic organisation of both games and of the culture that surrounds them. In Galloway's view, games 'are actions' that 'exist when enacted' by their players and when 'software is executed' (2). Galloway proposes to distinguish between the actions of the operator and those of the machine, and then again between diegetic and non-diegetic actions (expressions permuted from film studies that generally refer to what belongs to or is external to the narrative environment represented in the game). Galloway seems to be following in the footsteps of early scholars such as Espen Aarseth (1997), already discussed as an important reference for Bogost. Aarseth included video games in the category of ergodic literature, which he defined as the kind of literature that requires the reader to actually perform an action and to risk being rejected by the text. In a video game, a typical example would be the phrase "game over", where the text rejects the player when he or she is unable to perform an action. In this way, video games are a part of ergodic literature, according to both Aarseth and Galloway.

What ties Aarseth, Bogost and Galloway together, I believe, is more than just a focus on the actions required to enact a cybertext or ergodic piece of literature, or on the operations that frame the meanings of a text. There is in fact a common ground in the sort of questions these authors pose. They are all equally interested in understanding what video games, or possibly all texts elaborated around an algorithmic culture, are and how we should read them. This is particularly evident when Galloway debates, in the concluding chapter of his book, the concept of countergaming.

Countergaming includes practices of modding, game art and modifications of game software for political purposes. According to Galloway, a video game can be modified at the level of its visual design, its rules and its software technology. He describes how the modifications have often been encouraged by the game industries, and how the countergaming movement is similar to the avant-garde cinema of the 60s in terms of its experimentation with the language of art. His conclusions are that, despite a lively artistic scene, countergaming does not interrogate the qualities that make video games different from other media. As a result, it 'serves to hinder gameplay, not advance it. It eclipses the game as a game and rewrites it as a sort of primitive animation lacking any of the virtues of

game design' (Galloway 2006: 125). Countergaming is seen by Galloway as being outside, or on the margin of, video gaming, as the absence of interaction classifies it as an experiment but not as gaming.

According to Galloway one of the 'virtues of game design' is the opportunities it affords players to take part in the construction of the text. Nonetheless, I would like to argue that countergaming, as it is presented by Galloway, seems to be a comment on video game culture as a whole, and as such it also significantly contributes to its shaping. Countergaming changes video games. It adds lines to a bigger and longer narrative and thus changes the issues at stake in video game culture. As such, even if countergaming takes the form of something that is not clearly definable as a video game, it contributes to the shaping of video games as cultural objects. From this perspective, when Galloway asks for 'new grammars of action, not simply new grammars of visuality' (2006: 125), he clearly points to a lack of interest on the part of artists in critiquing the conventional rules of video gaming, something that movie director Jean-Luc Godard did in the 1960s with cinema conventions (which is one of the examples Galloway uses as a comparison). Nonetheless, Galloway criticises countergaming for something it never aimed to do.

For example, the artist duo JODI (Joan Heemskerk and Dirk Paesmans) is considered by Galloway to be apolitical because it does not focus on the rules of game design. In its work, JODI brings part of the game's software to the foreground, altering it and modifying it until it becomes something completely different. In the work *SOD* (1999), JODI modifies the video game *Wolfenstein 3D* (id Software 1992) until it becomes impossible to play. The result is a disturbing series of black and white images that only marginally resemble the original game. JODI's *untitled game* (1996-2001) almost completely covers over any figurative image in favour of pure lines of data. *JET SET WILLY @ 1984*, a modification of the popular 80s video game *Jet Set Willy*, is similar in its strategies [See Appendix: images 12 and 13]. In a text accompanying an art exhibition, curator Tilman Baumgärtel describes *JET SET WILLY @ 1984* as follows:

> 'Jet set willy' consists of (10) ten variations on the computer game 'Jet Set Willy' that was launched in the eighties for one of the first home computers, the Sinclair ZX Spectrum. The code has been modified in such a way that although

> the basic functions of the game are the same, the on-screen graphics are redesigned. The work is written in BASIC, a programming language now in danger of becoming extinct. 'Jet Set Willy' is also JODI's homage to the culture of hobby game programmers in the eighties, when it was mainly teenagers developing games, including all the music and graphics, single-handedly on the first home computers, a development that is one of the best examples of the libertarian do-it-yourself ethic of the early computer subculture, a mainstay of JODI's work. (Baumgärtel 2003)

JODI intervenes in the narrative of game culture, investigating the core elements of the aesthetic of video games and the main issues involved in defining a video game. In subverting the graphics of a video game, JODI aims to critique the aesthetics of a video game, hence also what a player expects to find in a video game. The excerpt from the interview about *JET SET WILLY @ 1984* shows that, according to its authors, at the centre of their intervention are the narratives of hobby game programming, DIY and the early computer subculture rather than the gameplay. While Galloway acknowledges this, he also argues that this kind of art intervention is not enough to provide a real critique of video games as a new medium.

The problem with Galloway's (and Aarseth's) perspective is representative of the problem with most video game literature produced so far. In an attempt to define video games (as Aarseth does), or in adopting a definition of video games (as Galloway does), these writers establish limitations on what can and cannot be called a video game. Methods for analysing games, such as the concept of procedurality as intended by Bogost, are ulterior modes of asking how video games *should* be read, and therefore what they *truly* are. Before Bogost and Galloway, the study of video games was already dominated by the so-called ludological model, proposed by Jesper Juul and other authors, which similarly asked 'what a game is' (Juul 2005).[19] In other words, these models are grounded in an ontological question, one that assumes video games to be definable through a set of limited properties. Definitions also serve, in these theories, an instrumental role, as a clear understanding of the limits and possibilities of the medium could probably allow better forms of criticism, play and design.

The reason the mode of thinking exemplified by artist duo JODI is relevant

[19] The ludological approach is an example of the theoretical trend of defining the medium of the video game as a mode of knowledge of its potentialities and interpretations. See Juul (2005) and also Juul's blog *The Ludologist* http://www.jesperjuul.net/ludologist/ [Last accessed 7/11/2014].

in the context of my dissertation is that it evades the ontological question of what games are and explores instead, through temporary and strategic readings, what games could be. The artistic interventions by JODI, while testing and contesting the narratives that underlie digital gaming, are aimed at investigating the social and cultural role of video games. Game artist Miltos Manetas reflects this view while elaborating what he means by game art:

> A videogame after-artist [*sic*], should not create anything himself but only extract the hidden notions of the game. He should do that, by examining carefully the parade of symbols that the game is offering. - An explosion should be captured and turned into a Turner-like landscape. - The relationship with a Monster should become romantic. - Instead of shooting monsters, we can start taking photos of them. A Painter doesn't eat a piece of bread but paints it. An artist after videogames doesn't play a videogame, but *relates to it*. (Manetas 2004: online, my italics)

The work of the artist, according to Manetas, is to copy and modify what the game is offering [See Appendix: images 13 and 14]. Manetas suggests that a significant piece of game art should focus on the symbols of video gaming, that is, on its cultural and social relevance. In a similar fashion, art critic Alessandro Ludovico, in an article entitled 'Video-Game Art: Changing Software Meanings' (2004), points out that:

> More and more artists are hacking into games' codes in order to deconstruct the entertainment paradigm by adding social values, decontextualizing lead characters and their actions, and subverting the usual rules of conflict. In this way, the meanings are definitively changed and the digital landscape is clearly manipulated. (Ludovico 2004: online)

Ludovico is vague in defining what he means by 'meanings' and 'digital landscapes'. However, his point is clear as he insists that, particularly in the light of the current artistic experimentations with video games, it is extremely difficult to map once and for all the value of video games. Game art is then a relevant contribution to the understanding of how gamers' games can be shaped, enforced and modified. It suggests, in fact, that the notions discussed around the medium of the video game, such as its effects and uses, are essentially linguistic performances, and as such participate in the linguistic performances used to 'relate to it', as Manetas puts it. Thus, 'relating to it' already entails a less positivist and analytic approach than the one proposed by the followers of

ludology, procedurality and other similar attempts to fix the medium and its study around particular definitions and explanations.

However, what is at stake in being inspired by the work of game artists in a theoretical understanding of games? Is the countergaming Galloway talks about merely a form of unofficial use of digital games for unexpected purposes, as seen in other forms of active media reception? Or can it become a way of looking at games and at the ways in which we are involved in them? Is game art simply confirming Sicart's notion of 'play' as the 'unknown and uncontrollable', 'a creative appropriative process' (Sicart 2011: online)? Or can this notion be extended to the study of digital games? In the following section I will debate how a perspective on video games could be delineated from the contributions provided by game art, and not necessarily simply as a re-evaluation of the power of players to define the objects of their consumption. In other words, re-evaluating the work of game artists as a non-ontological inquiry into the medium of the video game is not just another way of saying that we should look less at what games are and more at the activities of gamers. It can become instead, as I will argue, a method for deconstructing the separation between gamers and games as well as the supposedly linear processes of production and consumption that are too often put at the centre of the study of video games.

From prosumers to parasites: intervention as interruption

Video games, particularly in the last decade, have progressively introduced and encouraged forms of prosumption, both in the design of the games and in their advertising. Thus, it could be argued that game art is probably less significant and radically different nowadays, when the original producers officially support the involvement of consumers. For example, in games such as *The Sims 2* (2004), Dovey and Kennedy see 'the ideal subject of Western technocapitalism at the start of the twenty-first century' (2006: 142). They come to this conclusion via the slogan used to advertise the game: 'How do you play?' In this slogan the consumer is summoned as a character that constructs itself through his or her own practice of consumption.

Many scholars have looked at the practices of production and consumption in their nuanced relation with each other, often with the purpose of trying to understand how an apparently top-down form of communication could also be seen as a bottom-up approach, where readers have the power to interpret and manipulate texts. Many of the studies of players' productions and video game culture draw from Michel De Certeau's seminal work *The Practice of Everyday Life* (1984). De Certeau acknowledges that each society has, by definition, some dominant practices that organise and shape its normative institutions, while other practices remain secondary to the dominant ones. These secondary practices include those of consumption. If production is rationalised, consumption instead has no clear, tangible products that can define it. Consumption is defined through a plurality of often contradictory practices. De Certeau states that these practices of consumption are molecular, minimal actions that conform to a majoritarian, large-scale practice of discipline. But this conformity is the solution through which it is possible to explore and imagine other practices, such as subversive ones. He introduces a distinction between the products, the consumers and the uses that consumers make of the products. This distinction assumes that the products are allowing, suggesting or (more often, in De Certeau's terms) forcing us to accept a specific use for them. It also assumes that consumers can resist and construct their own practices of use, thus personalising the products.

How do De Certeau's ideas fare in contemporary media theory? Relatively recent experiments, mostly coming from software engineering and web design, have included these practices of user resistance within a definition of the product itself. Web 2.0 and open-source software are based on the activity of the users, who are no longer resisting a forced use of the product but are invited to shape it through their contributions. More radical examples of this trend, such as social networks, are designed to be entirely based on the content produced and uploaded by the users. As already discussed in the introduction, in 1980 Alvin Toffler proposed in his text *The Third Wave* the concept of the prosumer as a key figure of the coming information age. The prosumer includes the two figures of the producer and the consumer. Media and technologies of the information age, according to Toffler, are tailored to the prosumer as the imagined recipient. In

such an environment practices of interaction are no longer hidden, illegitimate or unforeseen. Instead, they are exposed and define the experience of digital media. As a consequence the processes of personalisation and the plurality of practices of consumption are no longer necessarily subversive: they are actually encouraged, as the product is no longer rationalised and structured in a clearly defined way. In this context, De Certeau (1984) still provides inspiration for the study of consumers. His approach and underlying assessment of consumers' tactics is important because it has encouraged the ongoing fascination with the hacker, the counterculture and the DIY cultures, where consumers redefine the received products (and where a clear separation between production and consumption is assumed).

Critics of the concept of the prosumer have argued against the apparent newness of the concept itself and against the alleged democratisation of the practices of consumption. Derrida and Stiegler ('Ecographies of Television', 2002), in a conversation about television spectatorship, convincingly demonstrate that the relationship between sender and receiver is never going to be one between equals. In their discussion they review the development of the concepts of receivers and users in a variety of media. While Stiegler claims that new technologies may allow the consumers to be writers rather than just readers, Derrida notices that reception has never been purely passive. Even if the receiver does not know how the technology works, he or she may know how to use it (a car driver knows how to use it but may not be familiar with its engine and mechanical parts). Nonetheless, Derrida acknowledges that a perfect reciprocity or symmetry between producer and receiver is a 'mirage' and a 'fantasy' (2002: 58). What Derrida proposes instead is a community of sharers, where consumers identify themselves as part of a collective while still maintaining their singularities and individual interpretations.

Writing and reading are also used as general metaphors for production and consumption by Roland Barthes in his text *S/Z* (1975). Barthes introduces a distinction between a 'readerly' and a 'writerly' interpretation of a text: a 'readerly' text is one where 'everything holds together' (156), that is, one where the reader takes a passive stance and is supposed to 'find' meanings and 'keep them safe'. Barthes suggests that some texts, such as classic literary books,

encourage this kind of stance. The 'writerly' approach is applied when reading becomes 'a labor of language' (11). Barthes argues that 'reading is not a parasitical act, the reactive complement of a writing which we endow with all the glamour of creation and anteriority. It is a form of work' (10). Barthes' focus here suggests that the activity of the reader is not to be discussed in general terms, as a more or less essential condition of the practices of consumption, but as an activity that is grounded in the interpretative strategies suggested by the text itself.

However, the way in which Barthes discusses this topic is still mostly based on a dichotomy between passivity and activity. For instance, he notes how reading is not 'parasitical', meaning that it does not equate to passively receiving information. But on a different note, Michel Serres in *The Parasite* (1982) argues that the figure of the parasite, as well as the *hôte* (which means, in French, both host and guest), has both a social and a biological function that cannot be reduced to mere passivity. According to Serres, it is the parasite, an element of interruption external to the system but at the same time part of it, that makes communication possible. Any system, Serres argues, tends to be corrupted or interrupted by external factors. There is no chance that in the long term it can be kept closed and preserved as it is. In a communication exchange, it is interruption or disturbance that becomes, in the long run, the defining characteristic of transmission. This disturbance then breeds further disturbance, allowing further waves of noise to again modify the transmission of the message. According to Serres, the alleged linearity of the communication process is not only inadequate but also subverts the more correct hierarchy where noise and parasites are the defining factors of communication.

The reason I turn to Serres in this debate about active consumption is that I believe his notion of the parasite introduces a novel view on the alleged passivity or activity of production and consumption. Through the parasite it is possible to think about the practices of production and consumption of video games in a non-linear and non-binary perspective. The emergence of active consumers has often been discussed either as a reverse process (passive consumers becoming active participants) or by looking at how consumption could be seen as an inherently productive practice. However, the debate is still

organised around a dualism. Serres instead introduces a third element, the parasite, which is not merely an addition to the existing duality but is in fact an external factor that also makes the system itself possible. In Serres' theory, the parasite is not just an 'other' but is that which enables a relation within the system. It is a thermal exciter, a disturbance, but also the change in an existing relation. Serres explains the role played by the parasite by turning to the image of the *hôte*. The *hôte*, in French, is at the same time a guest and a host. An *hôte* receives and consumes, 'gives and receives, offers and accepts, invites and is invited, master and passer-by' (1982: 15). This relation is always going to be unsettled by noise, by the arrival of a parasite (whether rats, insects or other animals mentioned in Serres' stories). The parasite is that which introduces complexity and expels the *hôte*, introducing a new relation. The parasitical series of ongoing relations is seen by Serres as a chain, an arrow pointing in one direction, or a flow that can only temporarily be ordered through the establishment of a system.

The system then becomes, in Serres' view, the object of study of ontology. The system is a result of the narrowing down of a series of parasitic relations, and of the momentary freezing of an existing condition. It can be seen here how Serres' contribution directly addresses the issues raised in the introduction about the narratives of technological development and the deterministic views on the newness of technological products. Serres talks explicitly about the 'black box' as the intellectual gesture that denies transformation, thus hindering knowledge:

> When we do not understand, when we defer our knowledge to a later date, when the thing is too complex for the means at hand, when we put everything in a temporary black box, we prejudge the existence of a system. When we can finally open the box, we see that it works like a space of transformation. The only systems, instances, and substances come from our lack of knowledge. The system is nonknoweldge [*sic*]. The other side of nonknowledge. One side of nonknowledge is chaos; the other, system. Knowledge forms a bridge between the two banks. Knowledge as such is a space for transformation. (Serres 1982: 73)

What sorts of transformations could we then achieve through this different notion of knowledge? Serres proposes that it is the observer itself that should be

called into question when looking at the supposed linearity of communication. He shows how knowledge implies transformation and the unboxing of the relations we tend to establish. He also debates how disturbance and interruption persist in those relations, including the relation between the subject and the object of knowledge. For these reasons, I believe, Serres' conclusive proposal is to reconsider the performative side of theory, its essential participation in the relations it describes and thus constitutes. This is the transformation that theory introduces in its activity. As if it were a host/guest, theory can prepare the table and also consume, serve and exploit the existing dualities in a system (of which the producer-consumer binary could be an example). But theory can also participate at the meal and become a parasite and thermal exciter, or the noise that disturbs the duality. In other words, theory can introduce and account for performative narratives.

Becoming parasites probably means thinking of theory less as a meta-language, and more as a further narrative that parasites the existing ones. I see this project offered by Serres as much more similar to the work of game artists such as Miltos Manetas and JODI, and distant from the constitution of ontologies, such as those delineated by Aarseth, Juul, Galloway and many others, or the study of units and their functional operations outlined by Bogost. I will, in the following section, explain the notions of performativity and the role narratives can play in the understanding of gamers' games. I will also discuss how theory can participate in and be responsible for the relations it describes.

Narratives of gamers' games

Caroline Bassett, in *The Arc and the Machine* (2007), proposes that we consider narrative as productive of information technology and of the concepts relating to digital media. Bassett argues that there was a denigration of the concept of narrative during the 80s, which culminated in the emergence of postmodernism. The splitting of perspectives and the eclipse of meaning, which distinguish the postmodern age, eliminate critical distance, fracturing distinctions, texts and truth. In such a scenario, narratives disappear or lose their crucial role helping to

make sense of reality (2007: 7). Bassett argues that narratives are a form of resistance against the discontinuity of information. In fact, we make sense of our experiences through narrative, particularly within the multi-layered and complex systems of information (databases, archives, algorithms and so on) we nowadays inhabit.

In this work I would like to further articulate Bassett's contribution. As I have already outlined, the example of the prosumer shows how a certain 'narrative', as Hall also puts it (2008), can be extremely effective in bringing about what it describes, despite the contradictions it may hide. The 'third wave' proposed by Toffler (1980) similarly shows the power of historical narratives. However, the idea of a third wave can still be seen as a form of resistance against the discontinuity caused by the emergence of complex forms of production and consumption, and also as quite effective in inspiring the development of technologies.

Bassett explicitly writes that narrative can 'bring information into being *as* a material cultural form. Or, if we switch this around, we can say that narratives can produce information's and information technology's *concept*' (2007: 3). She argues that we use 'narrative to produce digital media's concept' (47). Narrative works to solve contradictions and shape the real – it influences us. As such, it should not 'be explored in terms of representation but in terms of how it performs, acts upon us, or materially produces an effect' (23). She suggests we look back at structuralist approaches as they inspired later theories about narratives and still work well in describing some of the ways we make sense of and establish oppositions, contradictions and their resolutions. In this context, Bassett draws on Roland Barthes, who argued that the narrative code is the final level attainable in an analysis – something we cannot 'step outside' (14).

Barthes, in his essay 'Introduction to the Structural Analysis of Narrative' (1966), argues that narratives, thanks to their structure, can be translated and summarised while still preserving the individuality of the message. The translatable part can be looked at in terms of its structures and these should also finally allow us to move the same narrative from literature to cinema, for example, or from comics to television programmes (291-292). The deep, essential level Barthes finds in his 'structural' analysis can be seen again to be

presented as a narrative. The movement towards the depth level of meaning looks more like a continuous production of further narratives, whose meanings (plural and uncountable) will be made and unmade in the process of reading.

Such focus on the plurality of meanings might recall Lyotard's argument in favour of micro-narratives as the defining element of postmodernism, also a major reference in the work of Bassett. In his text *The Postmodern Condition: A Report on Knowledge* (1984), Lyotard argues that the age of grand political narratives such as Marxism and the Enlightenment, capable of involving the entirety of humanity towards a unique goal, is now in decline. These worked as meta-narratives, which offered to define and interpret any practice and event through a political framework. According to Lyotard, an emerging feeling of incredulity towards meta-narratives, which, among other reasons, results from the success of non-traditional studies in science (such as chaos and catastrophe theory), as well as from the changing relations of individual political subjects to the global political milieu, has favoured the emergence of micro-narratives. These are based on visions of reality that are partial and do not aim to prescribe all possible outcomes. The revolution in knowledge claimed by Lyotard involves the humanities as well as the social sciences. This change is based on a renewed interest in paradoxes and anomalies, stories that do not represent a grand narrative but are instead singular cases and examples of a fragmented vision of the world.[20]

Barthes acknowledges that texts are always liable to a plurality of interpretations, and Lyotard argues that the acceptance of this has led to a cultural shift in postmodern society. I would like to maintain these two views and articulate both in light of the notion of performativity. Narratives, even if the result of a plurality of interpretations and even if aware of their partiality, are still a powerful tool in framing discourses.

As Katherine Hayles has argued while debating the role played by

[20] In this work I do not explore much further the writings of Lyotard, although his reading of Wittgenstein's language games, in relation to micro-narratives and the performativity of language, could play a more important role in my dissertation. The statements produced in the discourses surrounding gamers' games could be seen as moves within language games, as forms of play within micro-narratives. However, in the rest of this work I will mostly focus on performativity through other authors such as Foucault, Butler, Laclau and Mouffe who, I believe, are more useful in the context of my research project when looking at the political, ethical and cultural implications of the notion of performativity.

narratives in framing research into artificial life ('Narratives of Artificial Life' 1996), analogies between computer code and biology do more than merely help in the constitution of metaphors to make sense of research practices. These metaphors are also in their turn generative of further practices and discourses:

> [Narrative] works to encode premises, authenticate inquiry, and interpolate scientific research programmes with larger cultural narratives. My argument is aimed specifically against those who maintain that scientific inquiry transcends culture, that it does not matter where or by whom it is carried out or in what cultural contexts it is embedded. Even positing this view of transcendent science requires that one tells a story about how science tells truth and about how truth is the same no matter who says it. (Hayles 1996: 162)

The problem we would be left with, at this stage, is how to make sense of narratives, and how this can help us to understand what is at stake with gamers' games. I propose that a possible answer to these questions is to look at how narratives emerge through discourse. How are they enacted and performed by the statements produced within video game culture? How can we look at these statements, and how can we argue for the social and political implications of their appearance?

Circling the semiotic square: narratives, structuralism and post-structuralism

In order to discuss the emerging narratives surrounding gamers' games, I will draw on and, at the same time, critique the perspectives of studies in narrative, semiotics and discourse theory. I will discuss the methodological implications of what I believe is the role played by narratives in the processes of understanding gamers' games. According to a typically structuralist perspective, narratives can be understood as being organised around structures and levels of depth of meaning. However, these same structures leave themselves open to being deconstructed, as suggested by Derrida. Moreover, narratives of gamers' games are not explicitly written in a linear form. They are mostly pronounced and enacted in partial forms by a variety of actors, including specialised journalists, industry experts and game consumers. I propose we consider discourse theory,

mostly as theorised by Laclau and Mouffe among many others, as a useful methodological tool for understanding how the statements produced by the actors involved in video game culture replicate specific narratives. In doing so, the same actors replicate and constitute ideas around the social and political perspectives on the uses and interpretations of digital technologies. While reinforcing the existing narratives, each discursive performance can also be seen for what it relates to or excludes from a certain idea of gamers and games. Discourses can be seen in their structuring but also in their constant and necessary failure.

How can we make sense of narratives, and in what sense can they contribute to the understanding of social phenomena? Andrew Bennett and Nicholas Royle point out, in *An Introduction to Literature, Criticism and Theory* (2009), that:

> 1. Stories are everywhere. 2. Not only do we tell stories, but stories tell us: if stories are everywhere, we are also in stories. 3. The telling of a story is always bound up with power, with questions of authority, property and domination. 4. Stories are multiple: there is always more than one story. 5. Stories always have something to tell us about stories themselves: they always involve self-reflexive and metafictional dimensions. (Bennett and Royle 2009: 54)

Bennett and Royle do not distinguish between stories and narratives. The two terms are used interchangeably to name a representation of a series of events temporally ordered and involving a status of equilibrium and a disturbance of its stability (which ends in a new equilibrium). Bennett and Royle also claim that 'academic, "objective" or "scientific" discourses are constructed as stories' (55). Although always present, stories are not always the same. As such, an analysis of stories can say something significant about an object of study, as the way they are structured (and un-structure themselves at every reading) can suggest different interpretations. If there is such a thing as a structure of stories and narratives, how is it possible to say something about it?

Greimas has proposed a series of methodological tools to understand the underlying structures of narratives, the most famous of which is the notorious concept of the semiotic square. Greimas, and particularly Greimas and Courtes (1982), acknowledges that narratives are part of the 'generative trajectory' of

sense-making. Greimas, in his writings on generative trajectory, argues that narratives play a role in structuring meanings and processes of understanding. He argues that there are deep levels and superficial levels in the foundation of meanings. At the deepest level, basic semantic oppositions are delineated. Closer to the surface, general characters and scripts are evoked, values are attributed and, on the very last level, space, time and human (or anthropomorphic) characters are delineated. Indeed, this very schematic process is meant to serve as a model for understanding the way we make sense of the world and is not proposed as a step-by-step guide for the invention of stories. In actuality, the most superficial level in Greimas' process of meaning production is the first one to appear and the one we immediately come into contact with. The deeper structures come into play in a further moment of interpretation. These structures can be represented, according to this perspective, through basic oppositions and contradictions, such as those articulated by Greimas and Courtes on the semiotic square (309).

Greimas and Courtes define the semiotic square as 'the visual representation of the logical articulation of any semantic category' (308). A common criticism of this model is that it explains a way of thinking but does not really describe its logical implications.[21] The semiotic square tries to apply logical implications to semantic oppositions that are not logically regulated. It thus also reveals rather visibly the shortcomings of a structuralist approach. The main flaw of such an approach is the assumption that structures have a centre, an origin or an essential part. Indeed, we can make sense of narratives by understanding the underlying meanings articulated on a discursive level, but this would be just one of innumerable possible readings and, more importantly, it would not contribute to understanding the role played by the interpreter in shaping and closing the structure. Also, as I will show through the work of Foucault, a purely structuralist approach cannot tell us how a specific *episteme*, a unifying principle, emerges through a more extended discursive formation. I will now discuss how

[21] Umberto Eco (1985) critiques thoroughly this methodological weakness while outlining the genealogy of the Porphyry's tree in his essay 'L'Antiporfirio'. Although he doesn't mention Greimas' adaptation of the square of oppositions, he critiques its logical assumptions through a historical perspective. The same argument is developed by Terence Parsons (1997) who discusses thoroughly the pitfalls of the logic of assumption from its origins in Aristotle's *De Interpretatione*.

contributions from post-structuralism and discourse theory can aid us in moving around these obstacles.

Derrida made his position on structuralism clear in a well-known lecture given at Johns Hopkins University in 1966 and later published as an essay entitled 'Structure, Sign, and Play in the Discourse of the Human Sciences' (1980). According to Derrida, a structure implies a centre, a source, an origin or a subject. But in the history of the concept of structure an event or 'rupture' occurred. When the 'structurality of structure' began to be thought of, the centre of the structure appeared to be vacant. This allowed a form of free play, which is what distinguishes Levi-Strauss' methodology. In Levi-Strauss' work, as interpreted by Derrida, the analysis of myths does not lead to the discovery of an original source. Instead, it denies the existence of a final truth to be unveiled or a possible completion of the process of knowledge. Levi-Strauss is well aware that there is no centre in the structures he is describing. Moreover, he claims that signifiers far exceed the signified. This abundance makes the dream of a total description useless, and he does not even pretend to achieve such an impossible task. He aims instead to write a new syntax of myths. As such, as Levi-Strauss states in *The Raw and the Cooked* (1964), his work does not pretend to include the totality of myths developed within a specific culture. Moreover, he considers his own work to be part of the discourse and to be a myth itself. Syntax does not need, Levi-Strauss claims, to record any possible utterance of the analysed language. It does not need a centre to outline a structure, and is used as it is in its constant incompleteness. Levi-Strauss' seminal work is considered by Derrida to be exemplary of the historical rupture that appeared in the concept of structure.

Derrida claims further that two approaches are now coexistent in the human sciences. On the one hand, there is the approach inspired by Rousseau's nostalgia, which aims to look for an origin or stable point beyond free play. On the other hand, Nietzsche affirms the idea of free play and tries to move beyond any reassuring foundation. However, grasping some sort of totality of these discourses is elusive, although it is possible to provide partial elaborations, which are necessarily going to appear as further discourses in the free play generated by the vacancy of the original source. For the same reason distinctions articulated on a semantic square untie and undo themselves. The oppositions

articulated on a semantic square can therefore be seen as partial and temporary readings, as they assume the presence of a semantic centre and establish a structure within it. Narratives are arranged on a frame that is undermined, at its very basis, by its inherent, or foundational, incoherence. The reasons why certain values were established instead of others is interesting from the point of view of cultural study, although this enquiry might easily fall into the same trap that looking for an original, singular source of these values does.

How can narratives be studied and understood in their structures and in the process of their un-structuring, taking into account the 'ruptures' that occur in the actual study of discourses? I will answer this question by turning to the theory of Laclau and Mouffe (1985), precisely because it questions the possibility and modality of this kind intervention within a post-structuralist study of discourse. Studying gamers' games through the narratives that provide an account of their own emergence becomes mostly a study of language and of the ways in which language is used to describe and frame social and cultural phenomena. Laclau and Mouffe's theory, coupled with Foucault's notion of archaeology and the concept of the performativity of language, can complement a reading of the narratives of gamers' games with methodological perspectives grounded in a study of language.

Discourse theory: conflict and identity

Caroline Bassett (2007) has argued that a re-evaluation of narratives leads us to reconsider the structuralist approach and its focus on narratives as the ultimate level of analysis. However, this re-evaluation has itself to be confronted with the flaws of the structuralist approach that I have just outlined. Structuralist narratives can also be seen to undo themselves, as Derrida would put it. The reason I turn to Laclau and Mouffe's discourse theory is precisely because it attempts to understand the structures of discourse in their undoing. Both authors are interested in the conflicts and processes of antagonism that are undertaken through discourse, and in particular through what they name the 'floating signifiers' (Laclau 1990: 28, 1993a: 287).

Floating signifiers are not limited to words and utterances but can also be non-linguistic. They do not have a specific meaning by themselves but acquire meaning once put in a chain of signifiers. Jørgensen and Phillips, in their overview of Laclau and Mouffe's discourse theory, bring the examples of 'the West', 'democracy' and 'man' to argue that these signifiers are meaningful only when inserted into a series of other signifiers. 'The West' acquires a specific meaning only when seen in connection with other floating signifiers such as 'civilisation', 'Christian Church', 'white people' and 'liberal democracy'. It also receives meaning in opposition to other signifiers, such as 'barbarism' and 'the East' (Jørgensen and Phillips 2002: 24-57).

The theory Laclau and Mouffe delineate could be seen up until this point as being perfectly coherent with a structuralist perspective, one where meaning is the result of difference from the other signs within a given structure. However, the theory of discourse the authors propose is revealed to be more complex as it investigates the areas in which differences and oppositions collapse or overlap with each other. For instance, Laclau and Mouffe focus their attention on the moments in which barbarism or the East are said to also belong within the West, when the other appears to be merged with us. Discourse theory is mostly a theory of the linguistic and non-linguistic borders created through discourse, and their constant negotiation. As Jørgensen and Phillips put it:

> Generally speaking Laclau and Mouffe's theoretical point that discourses are never completely stable and uncontested can be turned into methodological guidelines concerning the location of the lines of conflict in one's empirical material. What different understandings of reality are at stake, where are they in antagonistic opposition to one another? And what are the social consequences if the one or the other wins out and hegemonically pins down the meaning of the floating signifier? (Jørgensen and Phillips 2002: 51)

The theory of floating signifiers allows a study of discourse seen in its becoming rather than through its fixities. Moreover, it is a study of how identities are created through discourse. The questions of discourse theory are oriented towards, first, the political dimension of discourse as a conflicting territory and, second, the framing of identities around signifiers that are subject to contestation.

In chapter four of this dissertation I will further explore Laclau and

Mouffe's theory while looking at the emergence of independent forms of video game production. In my reading of this phenomenon, discourse theory allows for a shift of focus from an attempt to define what independence means in the context of digital games (often the main question of the studies provided so far) towards a study of how independence tends to be fixated through discourse, and what forms of antagonism this fixation creates. Independence will be seen as a floating signifier, one through which individual game designers define themselves by shifting the borders of its meaning, by including themselves and/or excluding others in this category. In chapter three I will also look at a story of conflict, one between Sony and the hackers of the PlayStation Network. In this case the debate that followed through disparate contexts will be seen as a process of identity formation. The identity of the hackers, who opposed Sony's decision to alter one of the features of the PlayStation3 console, came to be negotiated through various discursive performances (a series of trials between Sony and the hackers, the suing of Sony by the consumers' association, several articles in the mainstream press, debates in gamers' online communities, and so on). However, it also rapidly became assimilated by a libertarian ideology of ownership and freedom, one not too dissimilar from the ideology Sony was equally replicating. Seen from the perspective of discourse theory, and the forms of conflict the case generated, the story of the hacking of PlayStation Network appears to be a rather conservative revolution, one where the claims of freedom on the part of Sony, who claimed the power to alter the definition of what PlayStation3 is, have been repurposed to extend the same possibility to the hackers.

Discourse theory as a theory of conflict and identity is already much more intriguing, I believe, than a purely descriptive endeavour in which the meanings and structures of discourse are allegedly unveiled. In fact, discourse theory opens up to at least two perspectives. First, there is the problem of how to take into account the performativity of language. If discourse is that around which identity is negotiated, then we must take account of its performative capacity and the possibilities it has to bring about specific realities. Second, if identity emerges through discourse and as a territory of conflict and negotiation within the 'other', then discourse theory also becomes a theory of ethics. It becomes a way of

looking at how that which is excluded can possibly become the object of further forms of negotiation. A study of games and gamers, seen through these two perspectives, becomes a study of how the two signifiers come to be fixated in their meanings through discourse. But it is also, and necessarily, a study of how that which is excluded in this process of fixation re-emerges, folds and parasitises (as Serres would put it) any interpretation. It is a study of the formation of subjectivities and their constant undoing when confronted with that same otherness that originally turned them into being.

I will discuss in further detail the possibilities offered by discourse theory as a means of understanding cultural phenomena. Moreover, I will look at the implications of the performativity of language and how this concerns the understanding of the practices of production and consumption in video game culture. I will do this through the work of Michel Foucault, and in particular the concept of archaeology. In fact, it is through the concept of archaeology, as delineated by Foucault, that I will take account of the ways in which meanings become hegemonic and an idea of truth comes to exclude others in a specific period and culture.

How can truth be told? The archaeology of knowledge and the performativity of language

I have provided a brief outline of discourse theory above in order to understand how narratives of production and consumption in video game culture come to be constituted and replicated. However, for this understanding to be possible there needs to be a principle of coherence in discourses and narratives, one that allows us to find regularities within them. How can discourses be seen as organised around a coherent whole? How do signifiers receive a fixed meaning, and what is it that makes that meaning accepted and shared on a social level?

I will address these questions through the work of Michel Foucault. In *The Archaeology of Knowledge* (1972) Foucault puts the search for a unity of discourse at the centre of his argument. He is mainly concerned with developing a method for understanding the emergence of scientific and official knowledge.

Foucault provides a method for studying culture based on the statements produced as part of discursive practices. In my research I will look at video game culture from a similar perspective. The presence of recurring narratives will be seen as it is replicated by the statements produced by the actors involved in video game culture. However, these discursive formations bring to light more than one methodological problem: How can we make sense of their emergence? How can they be untangled and studied in their unique occurrences? And how can they be generative of further practices and discourses? Foucault explains his position on these questions by turning to the notion of the unities of discourse:

> I shall start from given unities, but I will not place myself inside these dubious unities in order to study their contradictions or internal configurations. I will ask myself what unities they form. I shall accept the groupings that history suggests only to subject them at once to interrogation; to break them up and then to see whether they can be legitimately reformed; or whether other groupings should be made. (Foucault 1972: 29)

Such an approach might suggest a structuralist perspective, which attempts to replace existing structures with a new one. However, Ernesto Laclau explains how Foucault's method is unique and different from most formalist approaches:

> While both structuralism and post-structuralism start from the logic of the sign and its subversion once the conditions of total closure do not obtain, Foucault's starting point is a second-level phenomenology trying to isolate the totalities within which any production of meaning takes place. (Laclau 1993b: 434)

Laclau (1993b) further argues that discourse theory, in the most typical structuralist approach, is meant to analyse the regularities that govern the production of meaning in a specific culture. This approach is based on the idea that these regularities can be framed as a complete and self-sufficient construction:

> Classical phenomenology had focused on the meaning of statements by bracketing their reference to any external reality. Foucault proceeds to a second bracketing by showing that meaning itself pre-supposes conditions of production which are not themselves reducible to meaning. (Laclau 1993b: 434)

Such a process of bracketing implies the presence of an external figure that closes

the structure and therefore determines its existence. As I have discussed in relation to Derrida's comments on Levi-Strauss, reflecting on such an external figure provides the foundation for an approach oriented towards the provision of multiple readings of a text. This argument is supported by Roland Barthes who, claiming the 'death of the author' (1977), presented readers as the only sources of interpretation. However, the distinction between structuralism and the contributions of authors such as Foucault, Derrida and Barthes should not be reduced to an opposition between the tendency to frame singular interpretations and a fascination with the multiplicity of meaning. Foucault draws on these theoretical concerns in order to discuss cultural and social phenomena and the conditions of their production, thus addressing the political potential of the analysis of the structures of language in their constant undoing and un-structuring.

Laclau argues that Foucault represents a move from the theoretical positions of structuralism, particularly from his interest in discourses rather than signs. Foucault, as reported in the re-examination of his work provided by Laclau, argues that meaning is produced under specific conditions, and these are not to be found externally, in a further external structure, but within a specific system of phenomena, which he calls discourse.[22] Thus, Foucault focuses less on the sign, as the key concept in the production of meaning and in the emergence or subversion of existing structures, and more on the analysis of discourse.

Foucault finds in the statement the smallest unit of discourse. A statement is neither an utterance nor a proposition. It creates content and has an effect; a statement constrains and facilitates what we can do but it also has an authority, as in the words said by a doctor to a patient. Also, a statement might have no content as long as it creates effects. Statements can be rephrased in different ways (they are not the same as an utterance). They are neither true nor false, as propositions would be, instead they are considered for their effects, regardless of their conditions of truth. A statement is a speech-act with a certain scientific,

[22] There are indeed differences between Foucault and Laclau's theories of discourse. As outlined by Jørgensen and Phillips (2002: 18-21), Laclau, particularly in the developments of his theory elaborated with Chantal Mouffe, considers discourse to be constitutive of social practices. Foucault instead allows forms of negotiation where discourse is at the same time constitutive and constituted (although power and knowledge, in Foucault's theory, are necessarily represented within discourse).

normative, disciplinary validity. Drawing on J.L. Austin (1962), Laclau suggests that the statement is, in Foucault's theory, a serious speech-act. The question then shifts to the understanding of how a statement receives such a disciplinary function and how it can create a certain cultural influence. From an original question on the structure of discourse and its coherence, the problem now turns towards the performativity of language.

This question is radically different from the more linguistic and semiotic perspectives introduced before in this chapter with regard to the concept of discourse. In fact, it involves two key issues: first, the performativity of language as it affects the emergence of practices and further discourses in a practical manner; and second, that the study of discourse, on the basis of its performative potential, acquires a political relevance. The understanding of the ways in which specific discursive formations came into being entails the analysis of the forms of power that made these formations possible.

Foucault's main methodological question, as summarised by McHoul and Grace in *A Foucault Primer: Discourse, Power and the Subject*, is 'how can truth be told?' (2002: 25). In this question, the stress is on the 'how'. What are the techniques, the regularities and the conditions for saying something that can count as the truth? The question involves a study of the relations of power, investigated thoroughly by Foucault. In this approach Foucault shifts the focus of his study of discourses to their role in shaping the very objects they describe. He further questions how it might be possible to provide an account of discourse and reach significant conclusions from it.

With these questions in mind, he proposes that we look at discourses as a means of investigating the *episteme* of a specific age, as the unifying principle of a discursive field and of the scientific and intellectual production of a specific age of human history. The study of the *episteme* is termed the 'archaeology of knowledge' (1972). According to Foucault, this form of archaeology aims to describe practices of language. It looks at discourses in terms of their characteristics and does not concern itself with questions of specificity. Instead, it tries to describe the rules that govern discourses and explain why they are constructed in one way rather than another. Foucault explains:

> Archaeology describes a level of enunciative homogeneity that has its own temporal articulations, and which does not carry with it all the other forms of identity and difference that are to be found in language; and at this level, it establishes an order, hierarchies, a whole burgeoning that excludes a massive, amorphous synchrony, given totally once and for all. (Foucault 1972: 165)

Archaeology will be reconsidered by Foucault in his later work and the focus of his research will move from the study of the constant reappearance of concepts to the 'regularity of dispersion': what is regularly excluded by the structuring principle of a specific age. The foundation of this method still lies in the analysis of statements as speech-acts that enable and constrain what we can know. Both the archaeological method and the later developments – named by Foucault, drawing on Nietzsche, the genealogical approach – acknowledge that truth is not regular and coherent, and nor is it represented exhaustively in a linear argument. However, such a linear order appears to be claimed through discursive performances in the serious speech-acts that constitute the field of what is legitimate and official knowledge.

Infelicitous acts: performativity and the subject of discourse

The claim that knowledge becomes official through and thanks to the performative agency of statements can be seen as a form of cultural constructionism: if reality is determined by discourses then these should play a defining role, and it would not be clear how cultures vary in time rather than being merely reflective of changing discursive practices. However, Judith Butler (2010) draws on Austin and Derrida to argue that performativity should not be understood as the power to bring about certain realities through discourse and should instead be seen as inherently based on failure, this being the defining characteristic of all speech-acts. She summarises the notion of performativity as follows:

> […] it seems possible to conclude first, that performativity seeks to counter a certain kind of positivism according to which we might begin with already delimited understandings of what gender, the state, and the economy are. Secondly, performativity works, when it works, to counter a certain metaphysical presumption about culturally constructed categories and to draw

> our attention to the diverse mechanisms of that construction. Thirdly, performativity starts to describe a set of processes that produce ontological effects, that is, that work to bring into being certain kinds of realities or, fourthly, that lead to certain kinds of socially binding consequences. (Butler 2010: 147)

Butler then reminds us that Austin distinguished between illocutionary and perlocutionary performatives, the latter of which have an effect only if certain other conditions are met. Perlocutionary utterances thus imply the possibility of failure: 'if we want to say that the theory *tends* to produce the phenomenon, but that it can sometimes *fail* to produce what it anticipates, then it seems we have opened up the possibility of "misfire" at the basis of performativity itself' (2010: 152). In a similar fashion, Derrida (1988) argued that performatives, as introduced by Austin, are based on the context where the utterance is produced and also on the intentions of the speaker. Derrida claims that these are very fragile grounds. If the context becomes the defining element, then the sign loses its iterability, that is, the possibility of being repeated or cited while preserving its meaning. For example, an order pronounced on the stage by an actor to another actor does not have a performative effect on the audience, as already argued by Austin. Iterability should be considered an essential characteristic of writing, according to Derrida, as it guarantees its understanding in the absence of the author. However, this means that performatives rely entirely for their felicity on the context within which they are produced and received. Therefore Austin's theory of performatives tends to consider performativity as a reflection of the speaker's intentions, which should be unique for that specific utterance and related to the context.[23]

This idea of intention, however, is not a consideration in Foucault's

[23] Austin's concept of performative utterances has been re-evaluated by game studies in recent times. However, it has been applied to describe so-called serious, political games, which attempt to convey a political statement through video games. A text such as *How to Do Things with Videogames* by Ian Bogost (2011) goes in the direction of outlining suggestions for the design of games aimed at persuading, or affecting in any way, the players. In my dissertation I draw on Austin for different reasons. In fact, in my research project I am more interested, as I hope it is clear in this chapter, in looking at the statements produced within game culture, and how they shape game culture itself. Such an analysis is not limited to video game texts, and is definitely not interested in providing a better model for the design of video games, but is concerned with the possibilities we have to pose better questions (more politically relevant, more self-critical) about video game culture. For this reason I believe Austin's theory of performativity needs to be seen in relation to the critiques posed by later authors (in particular, Derrida 1980), who have critiqued the use of the notion of context in the determination of the felicity of an utterance.

argument. Foucault's statements are not utterances in the Austinian sense, and have no relation to authorial intention. In Foucault's perspective, the relations of power are non-subjective and do not involve a conscious and deliberate choice. To argue for the individual psychology of the speaker would involve another level of discourse. A political analysis of discourse would instead investigate the conditions for its very production. According to Foucault, we should not interest ourselves in the conditions of the original speaker but rather concern ourselves with the 'subject' of the statement:

> The subject of the statement should not be regarded as identical with the author of the formulation – either in substance, or in function. He is not in fact the cause, origin, or starting-point of the phenomenon of the written or spoken articulation of a sentence; nor is it that meaningful intention which, silently anticipating words, orders them like the visible body of this intuition […] It is a particular, vacant place that may in fact be filled by different individuals […] If a proposition, a sentence, a group of signs can be called 'statement', it is not because, one day, someone happened to speak them or put them into some concrete form of writing; it is because the position of the subject can be assigned. (Foucault 1972: 107)

Individuals come to occupy the positions of subjects established by the statements. The subject therefore appears to be the effect of the statement. Laclau's notion of identity can also be seen as parallel to Foucault's interest in the subject. In Laclau's theory, the performativity of language also delineates the subject of discourse in relation to a form of otherness, implied by the very presence of a position for the subject.

The relation between subject and identity can be further articulated through the work of Judith Butler. The generation of subjectivities is investigated by Butler, more specifically in relation to gender, in *Gender Trouble* (1990). In this text Butler considers gendered gestures and roles as performative iterations that contribute towards the constitution of the identity of the subject. The iterability of these performatives is crucial, as it is a regularised repetition that recreates normative values and identities. By developing this approach to discourse in her work, Butler argues that we can come to understand social practice through the analysis of statements. Butler also offers a means of combating hegemonic descriptions of gender by proposing the existence of a proliferation of gender*s* and identities – which means, from her perspective, a multiplicity of

performative acts.

As part of my inquiry into gamers' games I will look at the statements arising as part of video game culture, and look at what sorts of subjectivities are produced through discourse. For example, the figure of the active video game consumer is considered in this research project as enacted by discursive practices. Such reading also involves an investigation into the political assumptions of the statements produced within contemporary video game culture. The framing of subjectivities is in fact a process where specific models and visions of the world are enacted. This, in the final analysis, is the concern of many of the aforementioned authors, including Butler and Foucault: to attempt to say something about the present condition in which we live, and how we might intervene, if we can, in the framing of different subjectivities.

Conclusions: a cultural study of video games

The political implications that I will consider as part of my research will then constitute a further narrative of video game culture. However, the arguments brought forward by Butler (2010) against the analysis of the performativity of language as a form of social constructivism, but also the impossibility of describing the totality of myths as argued by Levi-Strauss (1964), will inform my account to the extent that these theories will mitigate against the risk of providing essentialist and totalitarian narratives. My reading will neither look at all the possible statements produced within video game culture nor assume that reality is entirely shaped by these discourses.

As noted by Jeremy Gilbert in *Anticapitalism and Culture: Radical Theory and Popular Politics* (2008), cultural studies often has to combat essentialist perspectives that assume that the ultimate goal of analysis should be the discovery of the fundamental quality of a cultural phenomenon. At the same time, discourse theory and post-structuralism should not be viewed simply as a means of denying the existence of a single truth or reality. Ernesto Laclau, as noted by Gilbert (2008: 148-160), has argued for a study of culture that denies essentialism and proposes instead a complication of our understanding of social

relations, eschewing the idea of a knowable totality. Gilbert explains that, according to Laclau, 'every form of universality is always contaminated by some particularity from which it derives and that the elevation of one particularism into a universal is one of the fundamental hegemonic manoeuvres' (158).

In providing my own narrative of video game culture I aim to address, throughout my dissertation, the implications of this struggle for anti-essentialism. As fossilisations of discursive formations, narratives might tend to present themselves as totalitarian and exclusionary, elevating the particular to the level of the universal. Counter-narratives also share the same risk, as will be noted in my analysis of the narratives of opposition and emancipation in video game culture in the following chapters. Counter-narratives tend to structure themselves on the basis of independence from hegemonic narratives but are necessarily predicated on the very same opposition they try to dismiss. For this reason, my reading of video game culture will attempt to avoid naïve forms of radicalism and will look instead, first, at how such radical postures emerge from discourse and, second, at how we might imagine different subjectivities. How can we increase the diversity of the subjects of statements produced within contemporary video game culture?

From this perspective, the study of gamers' games that I am delineating here also demands an ethical take. This is a consequence, I believe, of an approach that is anti-essentialist, or anti-ontological as argued at the beginning of this chapter, as it avoids determinism, constructivism and other ideological perspectives that aim to understand what technologies "really are". The very notion of being is undermined by a post-structuralist perspective, where the centre of the structure is being constantly destabilised. Reading, as a process of undoing, involves the reader in the (dis)formation of structures. At stake in gamers' games, as delineated in the research questions of my research project, is the position of the researcher itself, who needs to question his or her involvement in the understanding of phenomena where the boundaries between gamers and games blur and fold on each other. This form of involvement is precisely the ethical aspect I want to introduce in my project and in the study of digital games more generally.

The involvement I am proposing is a form of contamination with the other

as it questions our identity as scholars, gamers and human beings. I do not see a similar tendency towards contamination in the theories on ergodic literature, ludology and procedurality that have so far attempted to fix the meaning of what video games are and do. I see instead a much more compelling involvement in the project of a cultural study of video games, towards which I ultimately turn in my dissertation. Cultural studies is different from the aforementioned approaches because, as Joanna Zylinska puts it (through Derrida), it 'renounces the desire to know, to close off the dissensus, to erase incalculable alterity, but [...] does not at the same time sidestep its political commitment', and therefore it 'presents itself as both an ethical possibility and a responsibility' (2005: 39).

In the next chapter I will attempt to set out how my project for an ethical theory could contribute to understanding gamers' games. In this chapter I have outlined the theoretical debates that frame my way of looking at the discourses surrounding contemporary video game culture. I have discussed how to approach a study of gamers' games, that is, of *the relation between gamers and games* (rather than of these two objects considered separately). I have argued that this relation is often described through narratives where the practices of production and consumption are seen as evolving and changing according to a coherent project. However, these narratives are seen in my research project not only as partial and strategic descriptions of reality but also as being constitutive of it. Narratives frame the structures according to which reality is understood and debated. As such, they are often conservative with regard to the existing notions and dualities that have framed the earlier forms of knowledge. For this reason, I have discussed how narratives of gamers' games have mostly reinforced the notions around which both games and gamers have been studied so far. The procedurality and anti-procedurality debate is a significant example of this impasse. In this case the theoretical understanding of the medium of the video game should allegedly be based either on a study of games or of the practices of play. In this research project I attempt to destabilise this duality and look instead at how a study of gamers and games could become a study of relations rather than objects.

Thus, I have turned away from the ontological questions, often replicated in game studies, where the medium of the video game is analysed for its apparent

properties and effects, and have proposed instead a participative theory, one that takes account of the performative value of theory in shaping the very properties and effects it aims to analyse. A study of gamers' games that parasitically joins in the constitution of relations between the two terms becomes, I suggest, a study of discourse, of its capacity to undo existing structures and ultimately pose new questions.

But what sort of questions should this approach lead us to ask? Why should these questions be *better* than the existing ones, and why should the study of games attempt to be contaminated by the discourses it generates and reads? I have already proposed, in this chapter, that similar questions could lead us to look at game studies as a form of cultural study, where the ethics of academic research are put at the centre, as the foundation of *any* theory (and of academia itself, it could be argued).

In the following chapter I will investigate how patronising, possessive and mostly unethical questions have been posed so far, in many circumstances, around the topic of the historical emergence of the figure of the gamer, the game product and the active gamer more specifically. Historiographies of the medium have been fixating the past around contemporary questions, terminologies and concerns. Often, historical overviews have been presented as archaeological studies of media technologies and their forms of use. In these projects the aim was mostly to discover how gamers and games have allegedly been evolving. I will debate how the notion of materiality of game technologies and the alleged authority of historical documents have been used as evidences for saying the truth about the history of gamers and games. In the following chapter I will argue instead, in a way more closely aligned to the archaeology of knowledge originally proposed by Foucault, how we could be better archaeologists, that is, how we could become responsible for our own participation in the formation of non-hegemonic truths.

Chapter 2
A history of boxes: archaeologies of gamers' games

As I have discussed in the introduction, the debates around gamers and games, both in academic and mainstream discourses, often involve a teleological perspective, one where the contemporary relevance of the medium and its users are seen through a continuous historical evolution. The story we are often told through the mainstream and specialised press is that video games have evolved from their primordial stages and now constitute an industry that plays an essential role in the economies of the countries in which it developed. A crucial role is also played by the emancipation of gamers as a category of consumers who are now allegedly becoming actors in the global creative economy. Moreover, the possibility of using games for social and political purposes or for conveying artistic content has allegedly contributed to the emancipation of the medium. Barack Obama's speeches, HSBC's advertisement and Sony's Gaming 3.0 concept could be seen as examples of this trend. In each of these examples the focus on the newness and on the potentialities of the medium is seen through a historical perspective, or by glorifying the contemporary scenario as it allows allegedly unprecedented opportunities.

In this chapter I will provide a critical overview of the implications of the historical perspectives on gamers, games and their mutual relation. I will do this by going along with the focus on the history of the medium that so often appears in the accounts of the contemporary status of the video game industry. This is particularly evident in the work of authors such as Jussi Parikka and Errki Huhtamo, who have been trying to apply an archaeological study of media to video games. Archaeology in these works refers to Michel Foucault and his *Archaeology of Knowledge* (1972). However, my history of gamers' games will attempt to revisit these historical approaches, also in light of a different reading of the original work of Foucault. My history of gamers' games will be mostly a

history of the present, that is, a reading of the ways in which the historical progression that has led us to the current framing of the industry has been discussed in the contemporary accounts of the history of the medium, and of how it could be told otherwise. The focus, in my reading, will be mostly on the present rather than the past, and on the ways in which the past is and could be narrated. Foucault will be seen in this reading mostly for his interest in the performativity of language, a notion I refer to in order to reflect on the involvement of the subject in the production of discourses (including the historical, or archaeological, accounts). The involvement of the subject is what brings to the fore the question of the present, of the relevance of the historical narrative for the teller of that same history. Historiographies on the medium of the video game will be seen as the result of a performance, in which the subject who narrates history shapes him or herself in relation to the historical narrative.

Archaeological discourse is often formulated as a form of truth precisely, I believe, because it rarely considers the question of the present and of the involvement of the subject in the historical narrative. I find the game archaeologies proposed so far to be too often obsessed with the discovery of a real, accurate, documented history. The current direction taken by game archaeology consists in finding documents and sources from the past and looking at allegedly true, or more accurate origins of specific forms of production and consumption. The problem I see in this approach, as I will debate, is that it assumes a separation between language and materiality, in which the former serves to describe the latter. Materiality in these accounts takes a privileged position as the proof or documentation of the accuracy of a historical reconstruction. Also, as will be seen in many of the accounts that I will discuss in this chapter, video game archaeologies tend to look for the same notions and concepts surrounding contemporary video game culture and see how these emerged by tracing their historical evolution. The impression given by these historical accounts is that the present notions always existed but were only less evident or appeared in different forms. Examples of this trend are manifold, and I will critique some of them throughout this chapter.

Most notably, the history of the medium has been seen so far, almost exclusively, as the history of an industry, its products and consumers. Gamers and

games are too often posed as the duality around which to organise a reconstruction of the alleged evolution of the medium towards its contemporary configuration and cultural relevance. In tracing the historical developments of game types, game technologies and forms of consumption, the present is implicitly taken as the last known stage of an ongoing evolution.

Conversely, what if the focus is no longer on the past but on the discourses that have been narrating the past? What sorts of questions could be posed if the focus is moved towards the discourses that are currently framing the historiographies of the medium? Would it be possible to imagine another archaeology, which looks at us and at the ways we now look at the technologies, consumers, producers or players from the past?

I will answer these questions by looking at the literature that has so far attempted to make sense of the origins of the video game industry. I will particularly focus on the aforementioned authors who have named this look at the past "archaeological". The questions posed in this specific kind of research tend to rely, as I will argue, on an intellectual confidence, that is, on the reassuring notion that the present is the implicit point of destination of their historical narratives. The present appears as a fixed set of objects and practices to be explained by tracing their lineages. Indeed, interruptions and dead ends might appear in these reconstructions; both failures and successes might constitute the history of a technology, a product or a form of consumption or production. Nonetheless, what persists is a certain confidence that these stories can be told objectively. What might appear as an overtly modernist approach to history is overlaid with metaphors from the semantic field of the archaeological exploration, which serves to give to the proposed narratives the aura of a discovery.

In this chapter I will particularly focus on the stories surrounding the so-called first video game ever, and how these stories have been narrated by attempting to trace the origins of video game products. The case of *Spacewar* will be taken as a key example: a series of experimentations with the PDP-1, an early mainframe used in academic laboratories in the 50s, came to be identified decades later as the first video game ever made. However, I will argue that the lack of an identifiable unity, a packaged and closed product, has been a

problematic notion for the stories surrounding the emergence of *Spacewar*. In other words, the multiple and uncountable forms of *Spacewar* could not be taken into account by a historical endeavour about the origins of the video game as an industry, taking the existence of an industry as paramount for the formulation of a historical project.

By framing the history of video games as an industry, retrospective studies have tended to look for those unities and products that the industry itself was producing. In so doing, the history of video games has often been a history of boxes. I use this metaphor to problematise the reassuring visions that game histories and game archaeologies have replicated so far. Boxes have been seen, and found, even when these could not possibly exist, as in the case of *Spacewar*. In those cases other metaphors have been introduced to account for the incomplete and open development of the alleged video game products: toolboxes, sandboxes, open engines and other expressions have been used to identify the non-box, which could otherwise undo the structure that underpins the historical narrative. In the archaeological researches, boxes have been the objects to be excavated and found in order to confirm and replicate the contemporary stories proposed by the game industry.

Moreover, excavations and findings of this sort are often supported by evoking the notion of materiality. In this view, technologies of the past can be explained by looking at tangible documents that explain how these games were made and discussed in their time. Materiality also serves to support the apparent transparency of the historical narrative, offering a dominance of facts over opinions and ideas. Materiality is used in the archaeological discourses to provide a safe point of arrival, a tangible presence that can confirm or show how the narrative of technological development has been unfolding. Instead, I will refer to the materiality of discourse as theorised in the work of Foucault and as a destabilising notion, one where discourse is not separated from the real or the material, and 'is not annulled in its reality and put at the disposal of the signifier' (Foucault 1981: 66).

In the final part of this chapter I will look at the story of *E.T. The Extra-Terrestrial*, a video game by Atari published in 1982 and responsible for the economic failure of the company. In recent times, the cartridges of the video

game have been searched for and found in the desert of New Mexico where, according to urban legend, Atari buried them to save on storage costs. The history of *E.T.* will be seen as being narrated quite literally as a history of the boxes the video game was made of. Yet the supposed materiality of those cartridges, which has been used as testimony for the truthfulness of the urban legend surrounding the game, re-evaluates, I believe, the performative capacity of narratives in making materiality relevant in the first place as a rhetorical artifice. In the conclusions I will debate how a different notion of discourse *as* material can be crucial in a re-evaluation of discourse, seen as a performative mode of knowledge that takes responsibility for its own questions (and tentative answers), and de-stabilises the present and our ideas about it.

The problem with media archaeology

As argued by Erkki Huhtamo and Jussi Parikka in *Media Archaeology: Approaches, Applications and Implications* (2011), the field of media archaeology has been based on two different readings of Foucault's understanding of the term archaeology. On the one hand, one reading has been inspired by Marshall McLuhan and has moved in the direction applied by Friedrich Kittler. This perspective emphasises the role of technology in the production of knowledge. On the other hand, the Anglo-American tradition tends to assume that technologies are introduced in a pre-existing discursive context, which frames the uses and interpretations of the technology (Huhtamo and Parikka 2011: 8-15). In many cases, as in those presented in the collection of essays edited by Huhtamo and Parikka, it is the interplay between technologies and discourses that is put at the centre of the analysis.

However, I argue that what consistently appears in those archaeological accounts, whichever reading of Foucault is applied, is the possibility of explaining how certain phenomena happened, how they transformed themselves, and under which rules these changes occurred. Technologies and discourses are seen as mutating through a series of conditions that have to be discovered. Media archaeology abounds with metaphors that evoke a physical excavation, a process

of revelation that is made possible by digging, vertically, deep in the historical documents. Erkki Huhtamo, one of the most prolific media archaeologists to also look at the medium of the video game, describes this approach towards the past in quite explicit terms. In 'Slots of Fun, Slots of Trouble: An Archaeology of Arcade Gaming' (2005) Huhtamo argues that 'electronic games did not appear out of nowhere; they have a cultural background that needs to be excavated' (4). In the same text, the appearance of early video games in public spaces (arcade gaming) is described in relation to similar interfaces where touching and the motion of fingers were also used for entertainment purposes. Huhtamo affirms that these 'devices provided the ground for future applications such as electronic arcade games', however, 'how, why, when and where this happened is a challenge for scholars', therefore 'what is needed is an "archaeology of gaming"' (4).

However, there is no further argument for the need for such archaeology. I propose that the need is mostly motivated by the wish to explain how, why, when and where something happened. It is an explanatory endeavour, one that believes in observation and analysis as objective approaches (although these are named excavations). In the conclusions to the same paper, Huhtamo maintains that 'excavating the past makes sense when trying to explain phenomena like arcade video gaming with seemingly very short histories' (15). According to Huhtamo the list of technologies to connect in order to explain the current scenario includes kinetoscopes and mutoscopes, slot machines and flippers, and all machines that require physical actions to be activated and to play with. The excavation appears to be a detailed narrative of historical progression, which has 'continuity and rupture, similarity and difference, tradition and innovation' (5) but still allows us to trace one evident and single narrative out of the many marginal ones.

Jussi Parikka and Jaakko Suominen, in 'Victorian Snakes? Towards a Cultural History of Mobile Games and the Experience of Movement' (2006), debate the origins of mobile gaming through a similarly defined archaeological approach. The aim of the paper is to draw on media archaeology and history to explain the emergence of the use of mobile devices for digital play. The authors argue that while historiographies of video games have been looking too closely and exclusively at the events surrounding the game industry, their paper

attempts instead to broaden the perspective to include documents, events, and technologies from other areas that could have contributed to contemporary mobile gaming. The history of the forms of entertainment used while travelling and commuting, from printed books to Sony's Walkman, puts mobile gaming next to a more varied series of commodities and considers it dependent on changes of social habits and work conditions in which frequent use of means of transportation is involved.

The title of the paper ('Victorian Snakes') refers to the main question posed by the author. Inspired by the work of Tom Standage who, in *The Victorian Internet* (1999), compares the telegraph to a contemporary Internet of the Victorian age, the authors aim to find a Victorian *Snake* (a hugely popular mobile video game by Nokia first introduced in the company's mobile phones in 1997). Parikka and Suominen propose to 'steer clear of such easily anachronistic comparisons between times and technologies' but still ask 'in which sense can we claim the existence of a Victorian equivalent of Snake or of other mobile games? That is, in what sense are mobile games part of a longer duration of modern experience and media consumption?' (2006: 7).

In the introduction to this dissertation I referred to the work of Derrida and his re-evaluation of the anxiety that results from being 'implicated in the game, of being caught by the game, of being as it were from the very beginning at stake in the game' (1980: 248). What Huhtamo, Parikka and Suominen are instead offering appears to be a very confident approach to the study of digital games, and media in general. Even if each of them acknowledges the possibility of different historical narratives to be narrated and the partiality of their own views, they maintain that looking at the past in a linear, teleological progression could contribute to the understanding of the present. However, what results from these narratives is the exclusion of the present as the moment in which the past is looked at, narrated, and in fact constructed. The present, from where the authors analyse and excavate the past, appears as a safe point of destination.

More recently, David Parisi, in 'Shocking Grasps: An Archaeology of Electrotactile Game Mechanics' (2013), has been excavating the past in search of traces of media that rely on tactile sensations, including pain, for entertainment purposes. In this study the term archaeology is used mostly in reference to

Huhtamo's work. However, it is not clear in Parisi's text how archaeology should be different from a historiography or a description of a series of more or less known game products from the past that resemble those of our contemporary period. Parisi considers the sense of touch essential in the evolution of technologies for gaming purposes, and his work constructs a persuasive narrative of how this sense has been involved in forms of entertainment for centuries, sometimes prevailing over vision or other senses. However, the explanation of why this research could be relevant for us, as gamers and scholars of the present, is not put at the centre of the historical reconstruction.

Game archaeology shares with media archaeology the confidence, as I have defined it earlier on, that results from accepting that the present can be explained through the past, even if explanations are to remain temporary and provisional. The explanation of the present through the past is also the main and only rationale for such archaeological studies. In *What is Media Archaeology?* (2012), Jussi Parikka explains that:

> […] a lot of media-archaeologically tuned research has been in writing counter-histories to the mainstream media history, and looking for an alternative way to understand how we came to the media cultural situation of our current digital world. It is for media archaeologists as it was for Foucault: all archaeological excavations into the past are meant to elaborate our current situation. (Parikka 2012: 6)

What the role played by 'our current situation' is constitutes the very problem I intend to bring into the discussions on media and game archaeology. Rephrasing Michel Foucault (1970), Parikka and Suominen propose that '(cultural) archaeology can be defined as the unconscious level of a culture that enables the actual perceived forms of everyday life. The archaeological level enables the objects, ideas, thoughts, experiences, etc. of a certain historical situation' (2006: 9).

My critique of game archaeology does not intend to question the accuracy of those descriptions but is mostly concerned with the stabilising effect that these have on the perception of the contemporary situation. Foucault's original project of archaeology of knowledge was not necessarily intended as an elaboration of the present through the past but as an inquiry on the fragility of

any system of thought, including our own, when confronted with its genealogy. The turn to genealogy in Foucault's work is quickly dismissed by Parikka in *What is Media Archaeology?*, where he acknowledges that in genealogy 'the emphasis was more on questions of "descent" and critique of origins as found in historical analysis of his time' (2012: 6) and was the foundation for Foucault's counter-histories. But genealogy was not, as Foucault puts it, about finding the origins of an event in order to restore its apparent unity. Genealogy aims instead to:

> [...] maintain passing events in their proper dispersion; it is to identify the accidents, the minute deviations-or conversely, the complete reversals-the errors, the false appraisals, and the faulty calculations that gave birth to those things that continue to exist and have value for us; it is to discover that truth or being does not lie at the root of what we know and what we are, but the exteriority of accidents. (Foucault 1991: 81)

In Foucault's *History of Sexuality*, the main problem is not simply tracing how differences and truths were said, in different periods of history, about sexuality. It is not about finding out the equivalent of sexuality in the Victorian age, as in Standage's search for a Victorian Internet or Parikka and Suominen's Victorian *Snake*. Foucault's question is about the present. It is about how, under which conditions, we can nowadays say the truth about sexuality in the Victorian age, or any other. That is, what are the conditions for differentiating between truth and falsehood in regards to a specific notion (of which sexuality could be an example)? And how does truth come to be constructed as such, and could it not be otherwise? Foucault does not attempt to colonise the past with the questions of the present but to challenge our own notion of the present time by tracing its genealogy.

In a paper on game designer Roberta Williams, Laine Nooney (2013) poses questions similar to those of Foucault and re-enables a more destabilising, anxious approach to archaeology. Nooney questions the 'practice of "adding women on"' (1) to the history of video games: reconstructions of the key figures of the industry tend to shape the image of a male-dominated context in which women appear only occasionally, as extra characters. Roberta Williams is a typical example. Williams was the co-founder, with her husband Ken Williams, of Sierra On-Line, and one of the most celebrated game designers of the 80s and 90s. However, she was neither a programmer nor a gamer. In an interview to

Williams, reported by Nooney, the game designer confesses: 'I don't program, and I'm not technical, and I'm not even a game player. So you know, everybody says, "Well what are you doing in this industry?" [*Laughter*]' (14). Acknowledging that 'history is not in what we talk about, but in *how we organize its meaning'* (3), Nooney asks the following questions: '"*why* is Roberta Williams [in game history] in the ways that she is?" What can Roberta Williams tell us *about* game history? How is it that she became an object *of* game history?' (4).

Nooney's focus is on how historiographies of video games have been written. Her questions regard the modalities for talking about the history of games and gamers. Roberta Williams is presented as a non-gamer in the historical reconstructions, a strange character who is, at the same time, influential and well known and yet difficult to categorise. Williams defines herself as a strange case, recognising the impossibility of fitting herself into the typical figure of the male, computer-savvy game designer. However, her discomfort (a feeling Nooney describes through documents of different kinds, including photos with other famous game designers in which Williams clearly stages excitement and appears out of context) does not simply derive from being a female character in a male-dominated context. In fact, Williams had been included as a female game designer even in the accounts of the game industry of her age. Williams fits into game histories only as an extra, a token for women and games. Yet Williams apparently did not know how to use a computer, had no experience of software tools and worked by herself, from home, while taking care of her children. Nooney imagines the kitchen table to be the space where Williams designed, with pen and paper, most of the games to be converted into digital format later by her assistants. The space of the kitchen is seen by Nooney not just as a collection of furniture, objects and allowances. The kitchen is not simply a different workstation. It is a gendered space from where Williams used to work in a manner that could not be understood by the histories of the video game industry. The presumption of these historical reconstructions was that game designers have to be gamers, that is, perfectly capable of using computers and even pushing the limits of those technologies. However, those discourses shaped the figure of the gamer as a subject to which Williams could not conform. As Nooney puts it:

> When we inquire into 'what counts' in game history, that question is beyond the immediately apparent: it is also about how history arrives. How do spaces, bodies and objects entangle to produce a historical subject – and why do we presume that this subject is a 'gamer'? (Nooney 2013: 10)

Understanding how 'history arrives' is a way of doing an archaeology of the present, as Foucault proposed in his work. This archaeology:

> […] does not try to restore what has been thought, its very identity. Archaeology, is nothing more than a rewriting: that is, in the preserved form of exteriority, a regulated transformation of what has already been written, it is not a return to the innermost secret of the origin; it is the systematic description of a discourse-object. (Foucault 1972: 156)

The process of transformation that archaeology operates is essential to understand the role played by the archaeologist in shaping, framing and in fact constructing the subjects of discourse. A study of this process of shaping is what I refer to when I outline, drawing on Foucault, an archaeology of the present.

The discourses I will look at call into question the historical emergence of gamers and games and their definition. I propose to look at how these two characters appeared in the histories of the medium, how they have been described and how those descriptions contributed to their shaping. Gamers and games are not only defined through verbal or written statements. As I will see, there is also a large production of games and technologies of different sorts that has been presented as oriented towards a new kind of gamer: home development kits, game production toolkits, and sandbox games in which the contribution of the gamer has been proposed as essential for the functioning of the game. The archaeology I intend to offer will be a rewriting of those histories in which gamers and games are seen in a new and original relationship with each other.

This rewriting is not just for the sake of providing a documentation of the history of gamers' games. My attempt is to lose the confidence of the historical-archaeological perspectives, as exemplified by Parikka, Huhtamo and others. I will look instead at how the stories, the technologies and the documents produced in regard to the relation between gamers and games bring about these two concepts. How is it, in other words, that gamers and games have been shaped in a particular way, so that discourses surrounding their historical emergence

could be formulated in one way rather than another? How is it that video games became identifiable unities, so that the question could be later formulated of how gamers could become part of the games they play? Through what sort of discourse did those boundaries between gamers and games come to be defined, so that these could also be blurred through the production of further discourses in which gamers and games are seen as mutually influencing or doing something to each other?

How to close a video game in a box

My proposal for a different game archaeology will dig horizontally rather than vertically: I will ask how certain truths about the past can be and have been told rather than finding confirmations of their validity (or lack thereof) in documents of the past. I intend to discuss how the historical emergence of gamers' games can be narrated less as a teleological development and more as a repurposing of visions and metaphors inspired by the contemporary scenario. This refashioning of the present for the purpose of reconstructing the past has contributed to reinforcing the idea that games and gamers are, respectively, products and consumers, particularly as the medium of the video game came to be defined and discussed, mostly, as an industry. The dispute about the first video game ever, as it appears in Levy (1984), Herz (1997), Kent (2000, 2001), Burnham (2001) and Poole (2000), is one of the main issues on which historiographies tend to disagree. However, these texts all agree that the question of which is the first video game ever can be posed and answered by finding specific evidence.

But how can any question about the first video game ever or the origins of digital gaming be posed? And how can we discuss the origins of the concept of gamers and of the ways in which gamers use, manipulate or produce games or are affected by games? The existence of the two, gamers and games, as separate and distinct, must first be put in place. However, this separation must also allow its own contradiction, which makes it possible to have active consumers and open games in which interventions, modifications and creation of content by users can happen.

In the following part I will take into account how the origins of gamers and games have been narrated as oscillating between closure and openness: closing a game amounts to limiting its possible uses, usually with the purpose of selling it to a wide audience, while opening a game invites forms of intervention. I propose to look at the histories of these two gestures through the metaphor of the box. Boxes have been used as a metaphor of the process of closing software, or an application, into a marketable product. Ralph H. Baer, an inventor known as the father of video games, described the concept of the first home console as a brown box in documents he wrote in 1966 to sell his idea of a video game as a marketable product. The process of boxing was not only metaphorical but literal. Baer constructed a brown case in which all processing units of the Odyssey game console were stored. The box was not supposed to be opened and it was marketable precisely because it was a box, a closed object that could be packaged and shipped to the stores, asking its buyers to simply connect it to a television device. However the box cannot account, as a metaphor, for all the other forms of digital gaming in which such closure does not properly exist. I will see how previous forms of video games, equally defined as the first ever in other historical reconstructions, came to be defined as open boxes, sandboxes or toolboxes. These other metaphors imagine a non-closed environment, an object that is supposed to be closed and instead allows forms of manipulation. Open boxes, toolboxes and sandboxes are games-as-tools, sets of instruments to play with. A similar metaphor could be the engine as a generator of multiple, sometimes uncountable, forms of games. A game engine is a metaphor often used in discourses surrounding the development of video games; it is an expression used to refer to the software that allows a game to function as expected. Nowadays, game engines, also known as middleware, are composed of the software tools to be used in the process of making a new game. An engine typically includes rules for the movement and collision of objects, and their animation and response to users' input. Engines can be very expensive products released only through licences. But they can also be more easily accessible and allow games to be quickly assembled by an amateur or an independent developer. The series *Little Big Planet* by Sony or the online game *Second Life* by Linden Lab, as previously discussed, incorporate simplified engines for users

who want to produce new content for the game (3D characters, levels, animations, sound and so on). These examples could also be defined, and have been defined by specialised press on numerous occasions, as toolboxes or sandboxes in order to identify their dual condition of not-closed products that allow new games to be produced while playing.

In the reading I want to propose, the metaphor of the box will be seen more broadly as an idea around which the very notions of gamers and games have been defined. More importantly, I argue that the notion of the box has been used to refer to identifiable unities, objects to be named, described and narrated in their development and release. The idea of boxing a video game only became possible much later than the period when the origins of the medium are usually identified. The impossibility was not only technical but mostly attributable to the discursive framing surrounding the earliest experiments. That is, it was a limitation not only of what could be done with the available technologies of the time but also of what could be said about them. Before the emergence of Ralph Baer's brown box the possibilities of closing video game software and hardware were not discursively enacted by the actors involved in computer engineering. I will analyse this point by introducing a reading of the game *Spacewar* (circa 1962) and reinterpret the accounts of the history of this video game provided so far [See Appendix: images 15 and 16]. In these stories I will see how *Spacewar* has been defined as a missed opportunity to transform an early video game into the first ever video game product, and as an open game that was continuously modified by its players. However, the discourses surrounding that experiment at the time of its production could not frame the possibility of boxing *Spacewar*, as later proposed by Ralph Baer with his brown box. What is noteworthy in this story, I believe, is how unities have been found by the historical reconstructions even where they could not possibly be.

From *Spacewar* to Odyssey

Reconstructions of the history of video games generally agree on designating 1958 as year one of digital gaming, when William Higinbotham, while working at

the Brookhaven National Laboratory in Upton, New York, used an oscilloscope to design a game called *Tennis for Two* with a view to entertaining students who were visiting the research centre. A few years later, in 1962, at the Massachusetts Institute of Technology (MIT), Stephen Russell (also known as Steve 'Slug' Russell in the hacking community) designed *Spacewar*. The game required two players and was a simulation of a fight between two spaceships. Higinbotham's *Tennis for Two* was addressed directly to students and visitors, and was not advertised anywhere other than the Brookhaven National Laboratory. *Spacewar* was conceived explicitly as software to be shared among researchers with access to one of the first computer models, the PDP-1 (Programmed Data Processor-1).

In 'The History of Spacewar!: The Best Waste of Time in the History of the Universe', an article published in 2009, Matt Barton and Bill Loguidice argue that, 'far from the secretive and highly competitive world of modern software development, Russell worked in what is now called an "open source" environment, where most code was freely shared and implemented without fear of copyright or patent infringement' (2009: online). Steven Poole acknowledges *Spacewar* to be the first video game ever made (2000: 15), as does John Anderson in an article published in *Creative Computing Video and Arcade Games* in spring 1983. J.C. Herz (1997), in one of the first texts to present video game culture to a wider audience, ignores *Tennis for Two* and places the beginning of the medium of the video game with the invention of *Spacewar*. Steven L. Kent (2001), while acknowledging *Tennis for Two* as the first video game, claims that it was an isolated case that did not influence either Stephen Russell or Ralph Baer, who should be regarded, according to Kent, as the real inventors of digital gaming (18).

Spacewar was modified by Russell's colleagues at MIT and in other research centres across the United States. It could be argued that there was no sense of progress towards a final, complete version; rather, the video game's imagined player was an academic researcher who could work at and expand the software. The idea that computers could be domestic tools was still remote and implausible, with *Spacewar* intended only for academic colleagues with extensive programming skills. Furthermore, the game itself was always open: at any time, it was possible to add or change parts of it. Indeed, it could be remarked that the

idea of making the code inaccessible would have been inconceivable at the time. The technologies used to run *Spacewar* were available only in a few research centres, and the playful use of the PDP-1 was impossible to reproduce as a product for a mass market. In a similar vein to Russell, Higinbotham would later comment on his own invention by saying that it looked so obvious to him that he had never thought about patenting it (Bittanti 1999: 50). For Russell and colleagues, as well as for Higinbotham, the playful reinterpretation of the technologies they were supposed to work with did not, and probably could not, suggest the invention of a marketable product.

What appeared natural for Higinbotham, Russell and their colleagues became less so for commentators and analysts who retrospectively, particularly from the late 1990s, attempted to reconstruct the history of the medium. In these accounts, Russell and Higinbotham have been seen as the initiators of the medium of the video game but also as technicians who were not fully aware of the potentialities of their inventions. It is my argument that *Spacewar*, *Tennis for Two* and their respective authors can be seen like this only as long as the early years of the medium are considered as converging towards the boxing of video games later initiated by Ralph Baer. In other words, *Spacewar* and *Tennis for Two* can be narrated in the way they are only as long as a history of video games is seen as the history of an industry and its products.

The obviousness of the processes of video game development and distribution, which Russell and Higinbotham allegedly failed to notice, can be attributed to a shift in the discourses about video games, with an influx of statements and assumptions that had originated in other discursive fields. As televisions became a widely distributed domestic technology, external devices such as tape recorders began to appear on the market. These were sold as pieces of hardware – boxes that could be connected to the TV set. The product on sale was the device and not the content, which could be sold separately.

I want to argue that video games, in the process that was about to be initiated by Ralph Baer and his Odyssey game console, occupied a place in a structure that had originally been created for other kinds of entertainment devices. In 1965, Sony, Ampex and RCA released video tape recorders for domestic use, while Philips developed its own video cassette format and a

specific recorder in 1970 (the N1500, also known as VCR). Philips' American division (Magnavox) released the game console Odyssey in 1972, by which time, as a result of the emergence of the video recorder, the notion that hardware had to be connected to the television set was already firmly established. Ralph Baer reconsidered the possibilities of television devices and Philips/Magnavox applied a model that was already framing their products. The fact that Ralph Baer thought about his game console mostly as a device for televisions is confirmed by the declaration of intents that introduces his documents for the design of the brown box: 'the purpose of the invention is to provide a large variety of low-cost data entry devices which can be used by an operator to communicate with a monochrome or color TV set of standard, commercial unmodified type.'[24] He applied an existing business model to his product, framing it as something similar to the existing television peripherals.

The name of the game

This historical chain of events has been narrated in several reconstructions of the origins of video games. However, from these perspectives the work of Russell and Higinbotham retrospectively appears difficult to define, and even to name. Thus, the open box or engine metaphors come to substitute the impossibility of closing and labelling what these games have been. If not as boxes, early games are narrated as tool sets, potentially open to uncountable modifications.

Spacewar might even become, as Stephen Levy presented it in *Hackers: Heroes of the Computer Revolution* (1984), the result of a form of hacking, with all its political connotations of individual freedom. According to Levy, Russell was influenced by the hacker culture that developed during the early 60s at MIT and in computer laboratories elsewhere, in a narrative that tends to mythologise the work of Russell and his colleagues at MIT. The hacking culture is defined as being inspired by a hacker ethic, where authorities are not to be trusted and the only reigning principles are freedom of access (to the computers) and freedom of use.

[24] The declaration of intent for the 'conceptual, TV and gaming display' invention is available on Ralph Baer's personal website www.ralphbaer.com [Last accessed 8/11/2014].

Spacewar is described as a concrete example of this ethic, and the non-commercialisation of the game is explained as an example of the opposition between freedom to share and modify software on the one hand and the restricted access required for commercial exploitation on the other. According to Levy, Russell considered the possibility of commercialising *Spacewar* only when it was already too late: 'at one point the thought crossed [...] Russell's mind that maybe someone should be making money from this, but by then there were already dozens of copies circulating' (1984: 65). In Levy's view, monetising one's work is the normal condition, the way it should be. From this perspective Russell's behaviour of not selling the game appears to be a decision motivated by a passion for sharing and collaborating on a collective work.

The fact that Russell and his colleagues at MIT failed to consider this option in a timely manner highlights a difference between their vision and that of those who, like Levy, later reconstructed their story. Russell's decision was in accordance with that which underpinned the discourses on computer programming at that point in time. In Levy's later description, it appears as an ethical and near-heroic choice. Between Russell and his commentator Levy lies the emergence of the video game market, and therefore the appearance of producers and consumers in the video game industry. It was only after Baer (and Nolan Bushnell, as I will discuss) invented the video game consumer that the story of Russell, and Higinbotham before him, could be considered as such and re-presented by Levy. It is interesting, for example, to notice how both Russell and Higinbotham report having failed to consider their software as a potential commercial product. The market had not yet been established and, as such, the notion of video game consumers would have been inconceivable. The conditions established by the discourses surrounding their own work made it impossible to address the production and consumption of a video game. Moreover, video game was not an expression used at that time, and *Spacewar* appears to be the name given to a series of playful experiments with the PDP-1 by later commentators.

What was *Spacewar*, then? If not a clearly identifiably entity but a series of operations and attempts to play with a PDP-1, how did it come to be defined as the first video game ever, or one of the very first? In Jeffrey Fleming's 'Down the Hyper-Spatial Tube: *Spacewar* and the Birth of Digital Game Culture' (2007), one

of the co-authors of *Spacewar*, J.G. Graetz, remembers the days when the game was in (permanent) development. When asked about his feelings when a similar game was released, fifteen years later, as a coin-operated machine by a video game company (*Space Wars* by Larry Rosenthal in 1977), he acknowledges that the idea of copyrighting *Spacewar* crossed their minds, but they did not consider the full implications:

> There was a very brief discussion, probably less than a minute, about finding some way to copyright Spacewar, but there were two things; one, nobody knew if it was copyrightable, two, it wouldn't make any money anyway because the game platform was $120,000. [...] We were just having fun. There was no inkling that computers would develop the way they would. [...] Nobody knew what programming was. It was something you did to make a computer do things but it had no existence apart from the computer. [...] The word 'software' didn't come into existence until just about the time that we got Spacewar done. In fact, the first use of the word in a DEC catalog spelled it wrong. Even after it had a name, nobody knew what it was. (Fleming 2007: 4)

Such a level of attention towards the commercialisation of the game could not appear in a previous article published in *Rolling Stone* magazine in December 1972. Writer Stewart Brand describes the first *'Spacewar* Olympics' – a tournament played among the engineers who had access at Stanford's Artificial Intelligence Laboratory in Palo Alto, California. In this article, *Spacewar* is described as a prophetic appearance of the world to come, one where computers will be used not just for work but also for entertainment purposes. While glorifying the game and its makers, this narrative lacked the historical knowledge needed to discuss the possibilities of its commercialisation. Commercialisation was still inconceivable; as a result of Brand's context and circumstance, such concerns were external to the frame of possibility. Indeed, the final paragraph of the article explains how to 'make your own *Spacewar*', extending the spirit of contribution to a never-ending project. In 1972, when the *Rolling Stone* article first appeared, the emphasis was on the liberating effects of computers for the masses. The first few lines made this clear: 'ready or not, computers are coming to the people. That's good news, maybe the best since psychedelics' (1972).

Graetz's comments about the idea of copyrighting *Spacewar*, as they appear in Fleming's interview of 2007, also suggest that the game was not considered separate from its platform. The required hardware was unavailable

on a large scale but, more importantly, at that time the separation between hardware and software was not a relevant distinction in discourses about digital computing – in fact, Graetz underlines how the very word software had not even been coined at the point when they were designing the game. The distinction did not appear as it was not effectively enacted in practical terms, but also because, more simply, software and hardware did not exist as words.

In fact, the separation between software and hardware came into effect in 1969 after IBM, in order to address the concerns of the antitrust committee of the United States Department of Justice, decided to split off the programming section of its company from the development of hardware products, and to sell them separately. This event effectively introduced a separation, in practical terms, between hardware and software, and therefore also made possible the enclosure of software and its marketing as a separate product. If discourses 'act both to constrain and enable what we can know', as McHoul and Grace (1993: 37) write in their discussion of Foucault's methodology, then the question about the boundaries of *Spacewar* as software could not be posed until the distinction between software and hardware came into place both technically and at the level of discourse. *Spacewar* was not boxed as a commercial product because its closure could not be formulated. It has never been closed because it was never open, as this distinction between openness and closure came into use only later. In other words, *Spacewar* could be given the status of open video game, an author and even a name only when histories of the medium were written.

The same article by Jeffrey Fleming echoes the story of Nolan Bushnell and his *Computer Space* coin-operated video game, a *Spacewar* clone considered to be the first commercial game product ever to be released for public spaces such as shopping centres: 'working out of his home, Bushnell struggled to make the game work on a Data General 1600 minicomputer. Unable to get the economics into the black, Bushnell realized that reproducing *Spacewar* in hardware, rather than software, was the answer' (Fleming 2007: 4). Bushnell managed to commercialise a video game precisely by introducing the distinction between video game software and hardware. From the toolbox, or open game, designed by Russell and his colleagues, the video game as a medium had to become a box – a piece of hardware – in order to be consumed on a large scale.

As also argued by Nathan Ensmenger in *The Computer Boys Take Over: Computers, Programmers, and the Politics of Technical Expertise* (2010), in the history of computing the separation between software and hardware, as well as the emergence of the figure of the programmer, appears separately and later in respect to computers as a technology.

These distinctions are historically embedded and, as such, they show how the narratives of production and consumption in video game culture, far from being fixed, have been changing and playing a significant role in shaping this medium. The *Spacewar* case highlights how the video game industry has not been oriented towards a progressive opening of the means of production but has revealed conflicting views on hardware and software and their accessibility (starting from the very distinction between hardware and software).

As Van Loon argues in *Media Technology: Critical Perspectives* (2008: 11-13), media cannot be understood without taking into consideration their historicity, the historical context in which they come into being. This not only works 'as an antidote to modes of thinking that attempt to read the "essence" of a medium purely from its internal, technological properties' (2008: 12) but is also a methodological prerequisite to understanding media and their evolution through the cultural context in which they have been developed and used. This is what Van Loon calls the cultural embedding of a technology: 'culture highlights that meaning and significance emerge from practices and do not exist in themselves' (13).

The historical looks at the origins of digital games have mostly reconfirmed the distinctions and categories that were already known at the time of writing. It can also be argued that most of the historical reconstructions of the medium have been published from the early 2000s, with the exception of J. C. Herz's *Joystick Nation* (1994). In that period the video game industry had taken a clear direction in becoming the source of entertainment for mainstream audiences, particularly in Western countries and many Asian markets. Moreover, software and hardware were already being discussed in that period through metaphors that contrasted openness and closure in the production of both. This dualism can be best understood through recourse to the metaphors introduced by Eric S. Raymond (1999) in *The Cathedral and the Bazaar*, a hugely influential

text on the discourses surrounding software development. Raymond criticised the earlier vision of Frederick Brooks, in which software is seen as a 'cathedral': a work designed by an engineer, the use of which is authorised only after completion, 'carefully crafted by individual wizards or small bands of mages working in splendid isolation, with no beta to be released before its time' (Raymond 1999: 29). There is a certain secrecy attached to the engineer's plan, one that resembles a form of magic or esotericism. This view, inspired directly by the theories on software engineering of the 70s and 80s, is criticised by Raymond, who, borrowing from the rhetoric of the open-source movement of the 90s, states that software can be engineered instead as a bazaar. According to Raymond, it is better to release software as often and early as possible, allowing users to contribute by finding errors and improving the software in a way that resembles a disorganised but efficient bazaar.

After the introduction of this dualism, it was possible to think of Russell's game *Spacewar* as a bazaar, with an unknown and theoretically limitless number of contributors, and Baer and Bushnell's products as two cathedrals. In a cathedral the architecture is complete, self-sufficient and not supposed to be modified. It is what Baer and Bushnell aimed to achieve with their boxes: closed environments that could be accessible only for a specific purpose (to play the game). In a bazaar, however, there is neither an entrance nor an exit, and the space can be expanded or closed with no restrictions as the limits are continually redefined. The perception of video game software either as a locked box or as an open application of pre-existing hardware is something that shifts and changes over the history of video games. In recent decades, video game software has again started to display features that are typical of the bazaar. Examples of this are programmable consoles and game construction sets. The open engine of *Doom*, released for free in 1997, has been seen by many as one of the most significant steps towards the inclusion of gamers in the production of game content and modifications. Other experiences, such as the first gamers communities (for example, the one organised around the newsletter The Arcadian)[25] or the continuous reappearance of closed consoles, further

[25] Following the failure of Bally's Professional Arcade, a home video game console released in 1977, a community of users organised themselves around the newsletter The Arcadian. The

complicate a linear reconstruction of the history of this medium.

However, those histories have been framing the succession of technologies, inventions and innovations around the presence of identifiable unities. The history of video games has been framed as a history of boxes that might sometimes become open to the interventions of their players. Even in the cases of popular games that have been conceived or later opened to the modifications of their players, such as *Pinball Construction Set* (1983), *Doom* (1993), *Second Life* (2003) and *Little Big Planet* (2008), the possibility of using the software of those games as toolboxes has been narrated by scholars, journalists and historians and even in the marketing of those games as the opening of something that is not expected to be open. The openness of *Second Life*, *Little Big Planet*, game construction kits or open game engines is mostly played at the discursive level, countering what is expected to be the norm, that is, that game products should not be modifiable.

The discursive game of opposing openness and closure to each other reinforces the structures around which discourses on video games can be organised. As with media archaeology, confidence in the structures of the present narrows down the possibilities of the things we can say, and know, about gamers and games. Openness and closure, boxes and engines, cathedrals and bazaars, software and hardware all constitute metaphors and dualities that allow and constrain the discourses surrounding certain objects and practices, including the questions that are asked about their histories and genealogies. Gamers and games operate similarly, as a structure for talking, knowing and doing things within the field of video game culture. The comfort given by these notions can be so reassuring that the same notions are found in the past even when they could not possibly exist and be named as such.

To what extent is discourse framing and establishing the notions used to understand the past (and present) of the medium of the video game? In the following section I will continue to concentrate on the concept of archaeology, and see how one more false duality, the one that separates language and

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newsletter was published by Robert Fabris and collected contributions from fans and hobbyists who often designed and shared with The Arcadian the games they programmed in BASIC language (the games were supposed to be typed by the readers of the newsletter on the Professional Arcade's programming tools). The Arcadian continued being published until 1986, and released several 'best of' cassettes of the most popular games made by its readers.

materiality, comes to provide a sort of easy escape from more troubling questions on the performativity of discourses and narratives in the understanding of video games.

E.T. the Extra-Terrestrial: materiality as evidence

On Saturday 26 April 2014, Microsoft spokesman Larry Hryb announced via Twitter that the expedition to find the buried cartridges of the 1982 video game *E.T. the Extra-Terrestrial* had been successful. The story of the game attained the status of urban legend in video game culture. As reported in many texts about the history of the medium, the video game *E.T.* was developed by Atari after a highly anticipated deal with film producer Universal Pictures, which gave Atari the rights to release video games based on the successful film directed by Steven Spielberg. However, the game turned out to be very disappointing, and it was released in a period, the early 80s, when the video game industry was struggling to sell sufficiently to maintain itself. As the legend goes, Atari decided to eliminate the unsold cartridges by burying them in the desert near Alamogordo, New Mexico. In 2014, Microsoft and the film company Fuel Industries obtained the rights to excavate the area to try to find proof of this legend and as part of a documentary project on video games [See Appendix: images 17 and 18].

The story of the discovery of Atari's dumped cartridges, as it has been told by Microsoft and other press sources, can be taken as an example of the ways in which historiographies of the medium of the video game often tend to operate. In fact, the excavation was attempting to discover evidence of a story already written and repeated in several contexts, more or less official, where the events around game company Atari were analysed. The archaeological endeavour was aimed at providing proof of something that was already expected to be true – that copies of the game *E.T.* had been buried in the desert. The contemporary knowledge about the story of the game company Atari was seen as the point of destination, as the safe arrival of the archaeological research.

I propose that other questions, apart from the existence of dumped cartridges in the desert, can be posed in relation to the anecdote about *E.T.* What

are the conditions that make it possible to tell the story of *E.T.* and its successive excavations in the way it has been told? Or, to put it differently, what is it that makes it possible to talk about *E.T.* and that makes the finding of proof of its existence relevant in a certain moment in history? The story of the excavation in the desert of New Mexico could be understood as a non-event, particularly if we look at it only as a research of the trashed copies of the game. The answer to the question posed by the game archaeologists is already known, and constitutes the reason behind the excavation in the first place. The story, as it is known, says that the cartridges were trashed in 1982 in the same place they were found in 2014 – an almost tautological endeavour that finds exactly what it was looking for in the place it was known to be. If we ask instead why is it that we know this story as narrated in this precise way – as a peculiar event that affected one of the major video game companies of the past decades – then the answers are less safe and straightforward.

I believe there are at least three possible arguments to be exposed when trying to answer these questions. Firstly, the story of *E.T.* is known as such because the history of the medium of the video game is mostly a history of boxes, as I have already argued. In this case, this is quite literally true. The story that has been narrated about the game is a story of the cartridges published by Atari and how they came to constitute a storage problem for the video game company. More generally, the story of the game is known because historians of the medium have focused mostly, if not solely, on what has been happening around the video game industry. Therefore, economic successes and failures constitute the main events to be narrated.

Secondly, the story of *E.T.* is known as such because myths and legends of gamers' communities are organised around the discourses of the video game companies and the historical reconstructions written about these companies. It is, again, a culture, or possibly a subculture, that elaborates a history of boxes, of commercial products and of the narratives surrounding them. Because of this, the apparently marginal story of *E.T.* is known by many of the hard-core gamers and can still attract the attention of documentary filmmakers and their sponsor Microsoft.

Finally, and more importantly, it can be said that the project to find the

boxes of *E.T.* satisfies the anxiety that might originate from not knowing for sure whether what has been told so far about the failure of the game is in fact true. The response to this is represented by the search for evidence that could confirm our knowledge of the history of Atari. As in the theoretical approach outlined by media archaeology, the answer is almost always to be found in the so-called materiality of objects. Touching and seeing the *E.T.* cartridges is the answer, or response, to the need to confirm the present notions about the history of video games. Materiality, in these archaeological approaches, is the concept that enables transparency: the possibility of saying the truth about anything, of confirming what we already know, and of talking about what we have been searching for in the location and position in which it was known to be found.

In *Game After: A Cultural Study of Video Game Afterlife* (2014), Raiford Guins approaches the story of *E.T.* from what he defines as an archaeological perspective. In his text, this means looking at the documents and remains of *E.T.* in a very detailed analysis of the first-hand accounts of residents of Alamagordo, searching the co-ordinates of where the game boxes were buried and the articles and interviews about the story of Atari and the development of the game. In Guins' work there is a strong focus on experiencing, in the first person, the stories that make video game culture, by witnessing, seeing and hearing what video game collectors, designers and hobbyists have to say and getting in touch with what is left of old coin-operated machines and video game consoles. Objects and things, Guins argues, have an afterlife: after their disposal they continue to exist as collectables or in museum archives, and in some cases, as happened with *E.T.*, as trash. Yet this is trash that continues to inspire stories and events, such as the excavation that recently took place in New Mexico.

Drawing on the work of Don Ihde, Guins argues that objects are 'multistable', as they can be 'many things at once' (2014: 12). From this, Guins proposes that in the analysis of video games, and artefacts in general, we should ask not only what something is but also when and where it is, how it emerges and how it is used. This would amount to taking into consideration its afterlife. In Guins' analysis of *E.T.* there is great consideration of how the game was originally perceived by journalists and critics and how it is now perceived in gamers' communities, how the packaging was done and what the economic conditions

were that caused Atari to suffer from such a commercial disaster.

Raiford Guins effectively illustrates the stories surrounding the video game *E.T.*, however, his approach to what this game *is* evades too easily the problems deriving from the ontological questions he formulates. The solution Guins finds, as in many other media archaeological accounts, is in the context: *E.T.* needs to be explained through the context in which it was conceived, produced, played, trashed and excavated. His definition of archaeology is to 'look around things' in order to understand them (2014: 7). Archaeology therefore remains a form of truth seeking (234), and what enables truth is, once again, the materiality of things (18, 26).

The necessity to refer to a context, in which things could be looked at in their original form, is significant of the flaws of the division between language and materiality that Guins, and others, assume. As long as materiality and discourse are treated as separate, language is secluded in a space from where it can only work as a signifier of reality: it can describe, illustrate, point at and present how things are. Indeed, from this perspective the context is necessary, as it provides a limit to what can be rightly said about materiality. However, in Foucault's theory of discourse, which is the foundation for his notions of archaeology and genealogy, discourse is not simply regarded for what it says, but mostly for what it *does*. That means that discourse is always already material, it affects and solicits bodies; discourse is, in fact, an event (Foucault 1981). Thus, discourse does not look at contexts but it creates contexts, continuously, making the concept of context quite useless – precisely by eliminating the strict separation between language and materiality.

In the introduction Guins refers to the early work of J. C. Herz, *Joystick Nation*, where the author asks herself what is it that constitutes the video game *Space Invaders*: is it the code, is it the original document written by the game designer, or is it a specific coin-operated machine? The answer provided by Guins, in the practice of his work, is oriented towards accuracy and inclusion. Many different objects are counted as part of the game, and these are described with as much detail as possible in their histories, uses and understandings in video game culture. As this list has to stop at some point, it is materiality that provides, once again, the safety to consider a description exhaustive and

transparent. Guins reminds us in many points of his text that as long as historians get their hands dirty in the archives, museums, and houses of game collectors, a more precise explanation of what games are can be offered.

The story of *E.T.* is not too different from the stories of *Spacewar* and the game designer Roberta Williams. In the cases of *Spacewar* and Williams, however, the problem for game historians is the absence of what is instead considered to be taken for granted: *Spacewar* was not a boxed product and Williams was not a gamer, as expected by those who have tried to explain their stories. In the story of *E.T.*, instead, what has been found is exactly what was known to be there: a pile of boxes and mud that confirmed the legend of the game. But in all these cases a historical preconception persists, together with the need to search for a confirmation of that preconception. In all cases the past is approached through the questions and modes of thinking of the present, assuming the present time is not influenced by temporality, and by what makes the current questions only temporary and partial in relation to the past.

This problem, which I see in the work of Guins and in the many accounts of game archaeology, has to do, as I will now argue, with the notion of the performativity of discourse. Acknowledging discourse as performative entails that the enunciation of a history has to be looked at in its relation to the act of speaking or, as Foucault would put it, for what it does and not only for what it says. Foucault himself noticed that the performativity of discourse can be accepted only as long as discourse is seen in its materiality. A perspective which, Foucault argues, brings a certain level of anxiety: 'anxiety about what discourse is in its material reality as a thing pronounced or written; anxiety about this transitory existence which admittedly is destined to be effaced, but according to a time scale which is not ours' (1981: 52).

Close encounters of the narrative kind: on the performativity of narratives

In the work of Guins and many other game archaeologists, the materiality of documents, cartridges, interviews, newspaper articles and so on appears as the

final level obtainable in reassuring the correctness of the retrospective looks at the past. Materiality is presented as the outcome of a purely objective excavation, and as such represents the moment of rebuttal of performativity as a methodology for understanding how we are implicated in the discourses we produce. In fact, objectivity is only possible assuming a certain margin of distance from the things that are analysed, described or excavated. Conversely, I argue that considering the performativity of discourse is a potentially alternative perspective if we are to understand phenomena and our interventions. The story of *E.T.* can tell us precisely how even the most objective excavations contribute to frame, and constitute, the remnants, relics and ruins they attempt to bring back to light.

As soon as the first pictures of the retrieval of *E.T.* appeared online, gamers and video game collectors started speculating about the evidence that was provided. As reported on Ars Technica, a website that extensively covered the event, many interruptions had slowed down and postponed the moment when the cartridges were revealed. The website argues that the first two excavations, to which selected journalists and a number of interested fans had been invited, were unsuccessful. Initially, some of the pits were inaccessible. Later on, other excavations produced no results. It was only after the first two attempts that press and fans were invited to a third excavation. This last attempt revealed almost immediately a copy of *E.T.*, buried quite superficially in the desert. Moreover, only one copy of the game was shown, and a few other Atari products appeared in the photos of the excavated area. Speculation was that the mission produced no results, but because the production of the documentary needed footage of that part of the story some sort of evidence had been thrown in the pits overnight, enough to collect photos and video and document the apparent find. Kyle Orland from Ars Technica comments:

> The simple fact that the film crew found some cartridges seems unlikely to fully kill the legend. Even today, new conspiracy theories are popping up to replace the old. Some Internet trolls are already suggesting that the Microsoft-affiliated film crew planted the cartridges for the benefit of the cameras and that the media has either been snookered or is in on it. Yesterday's dig did debunk some of those 'I heard...' myths (there were some games down there besides E.T., for instance), but it left others frustratingly unaddressed (archaeologist Andrew Reinhard told Ars 'there's no way' to estimate how many games were buried).

(Orland 2014)

Through the speculation and rumour that circulated in online communities and video game magazines, the materiality of the cartridges of *E.T.* lost its apparent solidity. When confronted with the multiple narratives that make sense of their presence, solid objects tend to sublimate. Materiality had been used as evidence in the story of *E.T.*, but what made the cartridges and their photos relevant *as evidence* was mostly a discursive construction, a series of narratives told and repeated in books, online forums and the press releases from the documentary filmmakers. The evidence was revealed to be relevant because of and for the words and the meanings associated with it in a specific community. Those same words can be said to be the very event that constituted the re-discovery of *E.T.*: the discourses generated by the archaeologists and the gamers communities were always already material and were the reason for the generation of further discourses about the discovery of *E.T.* and its later refusal.

As long as the question we pose is concerned only with finding out the truthfulness of the story of Atari's *E.T.*, there can always be alternative stories to tell. Thus, because *E.T.* is important essentially as a story, it is probably more interesting to inquire into these stories and ask instead what the conditions for telling the truth about Atari's *E.T* are, and what is at stake in inventing other stories (and not necessarily true ones).

It is through discourse that narratives are replicated, and materiality participates in this game of stories. The archaeologists, the film makers, the fans and the gamers have been involved in shaping multiple narratives of *E.T.*, and finding the cartridges is a part of those narratives. In exactly the same way, we are involved (myself included, as gamer, academic and author of this chapter) and are responsible for determining what constitutes the objectivity of the history of games. We are involved, and we always have been, in deciding why and how the story of *E.T.* is relevant.

Thinking of game and media histories as performative does not mean that the list of things to be included in the definition of what a game is should simply expand the number of elements to look at and analyse, or that everything makes sense according to the context of its interpretation (which would, at best, amount

to a platitude). Understanding game histories in their performativity means, in my proposal, thinking less through ontological questions and more about relations and processes of becoming. The problem is not what *E.T.* is but how it becomes what it is, and what else it could be. The articles in Ars Technica, an online magazine about technology and culture, phrase this problem well by asking: 'Why are we so interested in some buried hunks of plastic and silicon?' Questioning the reason these stories are told is a way of introducing the problem of the present, seen as an unstable position from which to look at the past. The instability that results from this other archaeology is also something we will have to take care of.

Michel Foucault maintained exactly this in his consideration of the unities of history: 'I shall accept the groupings that history suggests only to subject them at once to interrogation; to break them up and then to see whether they can be legitimately reformed; or whether other groupings should be made' (1972: 29). The responsibility of searching for other unities is what makes telling history a form of intervention, what makes it responsibly and ethically performative. Video game histories, or archaeologies, could be less about facts and more about the telling of those facts, about what keeps a series of statements together so as to constitute a fact, and how we can intervene in and by telling those facts.

Michel Serres proposed that historical eras, as well as objects, can be seen as multifaceted and as continuously folding into different unities: 'every historical era is likewise multitemporal, simultaneously drawing from the obsolete, the contemporary, and the futuristic. An object, a circumstance, is thus polychromic, multitemporal, and reveals a time that is gathered together, with multiple pleats' (Serres and Latour 1995: 60). From this perspective an archaeological look cannot take the present for granted as this becomes the result of a discursive, temporary and strategic folding. The present time in the archaeological perspective is a unity caught through discourse while in its undoing.

In the following chapter I will look at the story of the hacking of the video game console PlayStation3 and its related online service PlayStation Network in 2011. This case will be seen as a series of events whose unity came to be disputed through several contexts and actors (online communities, press and

industry analyses, legal trials between Sony, the consumers of its products and a group of hackers, and an uncountable number of other events). The boxing of PlayStation3 and PlayStation Network, as technologies and products, was disputed and redefined through the events of the hacking of Sony's console. The narratives surrounding this event (or series of events) performatively produced conflicting definitions of what a video game console is. The notions of producer and consumer similarly came to be debated and defined through authoritarian statements by Sony and its representatives, and by journalists and gamers.

Putting the story of the hacking of PlayStation3 and the PlayStation Network in a historical context, it is significant to notice how early consoles and coin-operated machines have also been subject to innumerable lawsuits. Ralph Baer (who proposed video games for home entertainment) and Nolan Bushnell (the proponent of video games for public entertainment), were, from the beginning, blighted by innumerable accusations of copyright violation. The economic interests of the private companies that were releasing the games are one obvious reason for this. But an essential condition for a copyright breach is also the presence of an identifiable unity that can be copyrighted and then (illegally) reproduced, partially or completely. The hacking of PlayStation3 is, among all the cases of copyright breach in the game industry, the largest and most significant. It came to involve the accounts of millions of users and was debated for more than a year in mainstream news media.

The story of the hacking of Playstation3 will be seen for the opportunities it opened (and mostly disappointed): the discourses surrounding the game console had to consider how producers and consumers, game products and users, actors and objects came to define themselves through their mutual relation. The boxes that make up the history of video games became, in the breach of PlayStation3, sources of conflict. The narratives of conflict that resulted from these events will be seen in the next chapter as an example of how the study of gamers' games can become a study of relations rather than a study of separated objects, and how gamers, games and the readings of them both can be destabilised and fold on each other.

Chapter 3

Narratives of conflict: the hacking of PlayStation *as a* Network

The series of events that became part of what was known as the hacking of PlayStation3, as happened between 2010 and 2011, has been the source of a multitude of discourses in which the object – PlayStation3 – opened up to several temporary framings. Individuals and groups of gamers took a stand to define their own position and freedom in relation to the games they were playing and to the publishers of those games. Defining what PlayStation3 *is*, its limits and boundaries in time and space, became the point of debate in a conflict of definitions, in which Sony and its representatives were claiming opposing ideas to those expressed by the consumers of their products.

The case of the hacking of PlayStation3 is relevant precisely as a process of unboxing of a supposedly closed technology. In its undoing, PlayStation3 became many things. According to Sony, it was a product released to customers on a licence, which Sony reserves the rights to change in its features and services one year after its release to the end user. For this reason (or using this as an excuse), Sony sued hacker George Hotz, who was responsible for releasing a method of his own invention to recuperate a feature of the PlayStation3 console, known as OtherOS, that Sony had decided to remove through an obligatory update of the operating system (the details of this turn of events will be explained throughout this chapter). George Hotz, in fact, declared that PlayStation3 is something you own once you buy it, and ownership also implies the right to modify. This is also what the consumer associations and the Electronic Frontier Foundation claimed when they sued Sony, in their turn, for having changed, with the removal of the OtherOS feature, the product as it was advertised to customers.

The hacking of PlayStation3 also generated a large number of different

gamers. There were gamers as consumers and customers, who defined themselves as such by claiming rights in the product they bought. There were also gamers as hackers, who proposed that playing with PlayStation3 might also include the modification of the console itself through hardware and software. There were gamers as fans of Sony's products, organised in online communities, who were the first to complain about Sony becoming an authoritarian and almost dictatorial figure. There were gamers as thieves, who stole the sensitive data of about 70 million users of the online PlayStation Network service in one of the largest hacking operations ever undertaken in the video game industry. Finally, Sony itself, as a video game producer, publisher and corporation, was also playing its own game, claiming to be the only subject to decide what can be done with PlayStation3, what the uses of this technology are and, ultimately, what it *is*.

In this chapter I want to argue that the multiple definitions of PlayStation3, produced by different actors in several contexts over almost a year of debates and controversies, created not only multiple PlayStation3s but also a large number of subjects and identities. Discourses will be seen here as putting subjects into effect and enabling their presence. As Foucault argued, to describe a statement means determining 'what position can and must be occupied by any individual if he is to be the subject of it' (1972: 107). Moreover, identity, as 'performatively constituted by the very "expression" that are said to be its results' (Butler 1990: 34), is the outcome of the series of statements produced by the actors involved in the stories of the hacking of PlayStation3. Identity will be understood in this chapter as an effect (in accordance with Butler's theory on gender), and through the political layers that pervaded the discourses surrounding the hacking of PlayStation3. However, I will also argue that, in the same series of events, the determination of subjects and identities has also been closing down the possibilities and alternative forms of political action that could have emerged from the hacking of PlayStation3. The statements pronounced in several institutional contexts, such as the district court of California or interviews on television shows and newspapers, has quickly identified specific subjects with precise identities. Gamers, Sony and the hackers have all been used as labels to mean precise groups of people, although such precision is difficult to achieve in the multiplicity of voices that overlapped with each other while the events

unfolded.

I will map what sorts of political ideologies have been replicated in these events, and how these operated as formations around which to orient statements and performances and, consequently, their subjects. Through the ideologies of freedom and the often evoked right to hack, I will contest the allegedly revolutionary claims that surrounded the breach of PlayStation3 and its online service PlayStation Network. I will present these claims as replicating the ideology that framed Sony's decisions and its rather aggressive and non-participatory approach to technology and freedom.

The hacking of PlayStation3 will be seen as a process of unboxing, in which the uses and interpretations of the video game console are proposed to be changed by the actors involved in the hacking. In order to make sense of this process of transformation, taking place at the interplay of social and material boundaries, I turn to actor-network theory, as originally formulated by Bruno Latour, as a theory of unstable relations and mediations. The concept of the network, in particular, will be understood through its multiple meanings. It is the name given by Sony to the console's online service, the PlayStation Network. According to the reconstructions of the international news media, PlayStation Network was the first service to be infringed in the more complex series of hackings of Sony's products. A network can also be a place through which connections happen and information is exchanged and flows. As Latour argues, flow and exchange can be static as much as transformative. It can be a relation between intermediaries that do not alter information as it passes from one point to another. But the points in a network can also be, or become, mediators. They can introduce and become sources of transformation (Latour 2005: 27-42).

Connections have been made between gamers and games in many different ways through the discourses surrounding the hacking of PlayStation3. The transformations they have been subject to puts the network at the centre. The stories narrated in this chapter are not, strictly speaking, about the gamers who played with PlayStation3 but about how they became gamers by relating to the video game console in a conflictual fashion. PlayStation3 became a network of transformations, a technology to be defined strategically and in accordance with new and temporary identities. Rephrasing Martin Heidegger's famous line,

it could be said that the essence of Playstation3 is by no means anything technological (Heidegger 1977: 6): the question concerning its essence soon became a debate on what can be done with video game products, who owns them and for what purposes. In other words, what these products are and who their users are.

The question concerning the essence of Playstation3 also became an instrumental question, imbued with conflicts and ideological claims, to be used by conflicting parties to define and settle their own unstable identities. The network became stable again at the end of the story through the same libertarian ideology that many of the hackers expected to oppose. In fact, Sony and the hackers made similar but oppositional claims about the possibility of removing any constraint to what can be done with and to technological products. Sony, the hackers and the consumer associations resolved their instability through authoritative statements, such as those produced by the California state court. The hacking of PlayStation3 ended with resolutions and agreements of peace. However, the opposition had the main consequence of defining and reinforcing producers (Sony) and consumers (everyone else) as separate subjects. Such an opposition, and particularly with regard to the PS3 hack case, closed down the space for alternative forms of production and consumption of video games and was based on the same assumptions about producers and consumers that originated the problem they pretended to fight.

The kind of freedom demanded by the PlayStation hackers was a libertarian and typically masculine claim for the right of an individual to tinker and produce.[26] The reconfiguration that emerged from the activity of the hackers was neither radically different nor more desirable than what they sought to supplant. In the end, the imagined and desired scenario from the side of the rebels still involved a marked separation between those who were capable of producing and opening up the video game console and the mass of unskilled passive consumers.

[26] Dovey and Kennedy (2006) already noticed how the 'dominant technicity' imagines the gamer as a 'lonely individual genius', as a character that almost perfectly overlaps with that of the hacker. Women appear as marginal figures in the same stories, if they are not completely absent. Women as gamers or game developers are narrated only through voices that are alternative to the dominant culture (2006: 63-83). The gamer/hacker character described by Dovey and Kennedy reappears, with its aggressive behaviour, in the events surrounding the hacking of PlayStation3.

I propose that we reconsider the claims surrounding the PS3 hack case and, more generally, the attraction expressed by many critics towards similar narratives of opposition in the video game industry. I want to offer what will hopefully be a more productive understanding of these narratives of conflict, taking as a starting point the statements produced in their favour by both specialised and mainstream media. I acknowledge the potential of these debates for legislative purposes and as a basis for more participatory practices among video game consumers. However, I suggest considering these reactive tactics as, possibly, an initial step towards more proactive strategies where practices of opposition could establish new networks of co-operation and propose an alternative to the linear and hierarchic model of production and consumption (Andersson 2009). Such a form of opposition would be oriented to the inclusion of users in the learning and sharing of experiences and know-how. The Arduino project, discussed in the conclusion, is an example of a similar form of inclusion, as it offers new opportunities for the involvement of potential producers and collective co-operation. I do not consider this option as necessarily preferable to the model offered by either Sony Computer Entertainment or by the hackers of the PlayStation3 console. It is, rather, a tactical manoeuvre to put at the centre the introduction of consumers into the production process and a strategy for preserving multiple definitions of hacking.

By providing an account of the events surrounding the hacking of PlayStation3, I outline a different reading of the relation between video game consumers, producers and video game technologies. Through this analysis I highlight the social, historical and political assumptions underlying many of the discourses produced in this context and the potential of cultural analysis for indicating different directions. Hacking will be interpreted as a process of mediation (Latour 2005) that effects an unboxing of technologies and establishes new hybrid networks (Michael 2000). The problem I intend to raise is, ultimately, about the quality of those networks and the possibility of evaluating them. Drawing on the work of Mike Michael (2000) and Lucy Suchman (2007) I argue that the problem with networks does not reside simply with the understanding of how material and human nodes are framed, but with how we become hybrids in our own turn and further mediators within those same networks. By narrating

some of the many different constitutions of temporary networks of human and non-human nodes that make PlayStation3, and through my own personal involvement in these narratives, I want to re-evaluate authorship and responsibility in deciding how relationships are, and how differently they could be. In this chapter the network will be considered as a metaphor also to the extent to which it makes it possible to be personally entangled into it, to be part of it.

The metaphor of the network will be useful as a method for breaking up the dualities (Sony vs the hackers, Sony vs the consumers, and so on) that the stories surrounding the PlayStation hacking appear to have put so often at the centre. However, a purely ANT inspired approach might still run the risk of limiting itself to a description of such dualities, rather than providing a theory of the differences and similarities that the description itself is bringing into the discourse. John Law (2007) has argued that ANT is descriptive 'rather than foundational in explanatory terms' (3). I believe instead that descriptions need to be explanatory of their own presence by justifying and making sense of their existence.

The potential of the stories told in regards to the hacking of PlayStation3 lies precisely in the possibility of delineating new stories and new networks, highlighting less represented modes of using a game console and the emergence of unusual forms of communication between gamers (such as those who shared the anti-firmware developed by hacker George Hotz). Thinking about the hacking of PlayStation as a network means thinking, in my account, of the conflicts that emerged in that context as being composed of a multitude of nodes. Hacking can be seen as a way of introducing and altering those nodes and as a method for playing with the porosity of a video game console.

The many narratives of the PlayStation hacking

The PlayStation hacking, the series of events that started on 28 March 2010 and proliferated until summer 2011, has been described by journalists, video game players and industry experts as a revolution in the relations that Sony, one of the

leaders in the video game industry, had with its consumers. The *casus belli* for hacking into the PlayStation3 system was the release of Sony's firmware 3.21. This release was intended to prevent, or at least reduce, digital piracy, and was presented as an obligatory update for all PlayStation3 consoles, automatically downloaded as soon as the console connected to the PlayStation Network Internet service.

However, in attempting to prevent digital piracy, the new firmware also removed the OtherOS feature from the consoles. OtherOS was the name given to an unprecedented possibility in the history of video game consoles, which allowed users to install any operating system on their video game consoles. However, the update to firmware 3.21 and the removal of OtherOS became mandatory in order to have access to many of the services Sony had been offering to the gamers until that moment, including new video game products. Also, online services such as PlayStation Network became inaccessible without the new firmware. Firmware 3.21 removed features and services without giving any real advantage back to the users. In fact, the new firmware curtailed many of the previous functions of the PlayStation3 console, which were probably not initially predicted by Sony but were definitely possible when the console was first released in 2006. As the protesters argued, installing Linux and connecting several PlayStation3s in a grid was an economical and effective alternative to buying expensive mainframes. OtherOS made it possible to use a PlayStation3 as a computer and therefore extended its potential uses far beyond those strictly related to digital gaming. The new firmware was therefore received by the consumers as a limitation rather than an advancement.

When the suspension of this feature was announced on 28 March 2010, users expressed their dissatisfaction by posting comments on online forums and on the official PlayStation blog, where the news first appeared. The official release of the firmware was scheduled for 1 April 2010, a date that caused many PlayStation3 users to think that this was Sony's attempt at an "April fool". This was not the case. The firmware was effectively released as announced, and its consequences were exactly those described by Sony. Even the official PlayStation blog shows the level of disappointment on the part of the consumers: the comments on the first announcement unanimously accused Sony of limiting the

activity of its users.[27]

The decision was described by the gaming community as an act of tyranny, an authoritarian decision that threatened their freedom. The reactions showed feelings of both disillusionment, as Sony is often considered one of the most successful companies in the video game market in terms of receiving and satisfying its customers, and violation of the privacy and rights of the players, who had their data changed or deleted at short notice. More importantly, and this will be a key element in the reconstruction of the events that followed, the definition that Sony was providing of its own product was seen as arbitrary and old-fashioned. New video games and online gaming, as well as uses of the game console that were not strictly related to gaming (such as using the console to watch movies from Blu-Ray discs or connecting PlayStation3 consoles in Linux-based grids), were all considered by Sony as features or extras. As such, they could be activated as well as removed. Consumers on the other hand held the view that PlayStation3 should be considered as a piece of hardware whose functions could be determined and implemented by its users. According to most consumers, nobody has the authority to determine what a legitimate or illegitimate use of the hardware is.

From this description of the events we can already draw a more nuanced analysis of the opposition between Sony and the consumers of its product. It appears in fact that the dispute is much more problematic and difficult to define than has been suggested by the news media. Actually, I would like to argue that the "war" between consumers and producers in the hacking of PlayStation3 was fought precisely to determine the boundaries between consumer and producer in the first place. At stake, in defining the very terrain of the battle, was the definition of both the contenders. The contenders were mostly defining their own possibilities for intervention over PlayStation3, although posing primarily the question of what PlayStation3 is.

The events that followed, extensively reported in the news media, were most frequently described as PlayStation hack or PS3 hack. These included first the development of a counter-firmware to contrast with Sony's firmware 3.21,

[27] The original post by Sony and its comments are available on the official PlayStation blog: http://blog.us.playstation.com/2010/03/28/ps3-firmware-v3-21-update [Last accessed 21/10/2014]

and later the hacking of the PlayStation Network in April 2011, during which the sensitive data of 77 million accounts (including credit card information) were illegitimately accessed and saved on a private database.

Indeed, the sensationalist terms that have been used by news media in introducing the developments of the PS3 hack case are justified by the numbers of users involved and the significance of PlayStation3 as a product sold on a global market. The hacking of the PlayStation Network has been described as a breach of an allegedly closed system,[28,29,30] which tested consumers' patience and trust.[31] However, I believe that the grounds for interest in this case are quite different from those presented by newspapers and online magazines. The PS3 hack has been narrated as a massive break-in to an allegedly super-protected environment that has been responsible for enormous damage, in economic terms and in terms of public image, to one of the biggest companies in the hi-tech industry. The hacking has indeed had massive consequences, and the reasons are undoubtedly relevant to discourses relating to the ownership of technological products and user privacy. The implications of this case, however, are much deeper, and possibly much more sensational.

I believe that the PS3 hack case magnifies the narratives of conflict that were already present in video game culture but never reached such high levels of opposition. Digital piracy has been one of the reasons for video game publishers to adopt authoritative decisions over copyright, intellectual property and digital formats. Also, forms of opposition between producers and consumers of video games have been emerging, for example in the form of gamers' strikes, where players stopped playing online games or caused servers to crash in protest at the decisions of the games' designers, or in the form of hacking and modifying video game hardware and software.

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[28] Baker, L. B. (26 April 2011), 'Sony PlayStation suffers massive data breach', *Reuters*, http://www.reuters.com/article/2011/04/26/us-sony-stoldendata-idUSTRE73P6WB20110426 [Last accessed 21/10/2014]

[29] Morris, C. (26 April 2011) 'Sony: PlayStation breach involves 70 million subscribers', *CNBC*, http://www.cnbc.com/id/42769019/Sony_PlayStation_Breach_Involves_70_Million_Subscribers [Last accessed 21/10/2014]

[30] Carnns, A. (27 April 2011) 'The PlayStation breach: Why you should remain calm', *The New York Times*, http://bucks.blogs.nytimes.com/2011/04/27/the-playstation-breach-why-you-should-remain-calm/ [Last accessed 21/10/2014]

[31] Schiesel, S. (27 April 2011) 'PlayStation security breach a test of consumer trust', *The New York Times*, http://www.nytimes.com/2011/04/28/arts/video-games/sony-playstation-security-flaw-tests-consumer-trust.html [Last accessed 21/10/2014]

One of the most recent examples of this occurred in June 2011 when a significant number of players of the online role-playing game *EVE Online* decided to protest against the decisions of the publisher of the game. The changes were supposed to concern the economic exchanges within the video game environment. Following a leak from an internal newsletter supposed to circulate only among the game designers, it became common knowledge that the game was about to change and introduce real-money transactions. This was to follow other changes that had already limited gamers' options. On 21 June players decided to gather in the online space, on a planet in the simulated galaxy of the game environment. By gathering together at the same time, the gamers caused the servers to crash and forced the designers to acknowledge that their decisions were not necessarily going to be accepted peacefully.[32]

Illegal modifications, both to game software and video game console hardware, have also been popular for a very long time and pertain to almost every video game product ever released. During the 1980s the most common storage technology for video game software was the audio cassette, which could be easily copied and distributed outside the market officially intended for it by the original producer. Similarly, CD-ROMs in the 1990s were copied and shared or re-sold at lower prices than those proposed by the original publishers. Sony's PlayStation console (1994), later re-branded as PSOne (2000), was the first case of a video game console being illegally modified on a large scale. The hardware could in fact be modified to bypass regional blocks and also read illegally copied CD-ROMs. However, in those earlier cases the illegal modifications were rarely, if ever, justified through political discourses. Piracy was intended as a more convenient way to access video game software. Also, those modifications did not attract the attention of the mainstream media, unlike the recent hacking of PlayStation3, probably because there was no relevance for the general public as it was mostly an issue for video game publishers – and potentially important only to a still relatively limited number of video game consumers.

In the PS3 hack case, however, the dialectic of opposition exploded in such a violent and significant way that its consequences could not be ignored either by

[32] The story is explained in detail at http://www.myth-games.com/news4927.htm [Last accessed 21/10/2014]

specialist or mainstream channels of information. The massive media coverage went far beyond the report of an alleged and unconfirmed leak of credit card details from Sony's database. The high number of video game consumers contributed to making this story more relevant to the general public. However, I believe that the reason for the wide attention given to this story is the intrusion, in the narratives that justified and framed this series of actions, of a political discourse. According to the reconstructions of the PS3 hack case, the event did not occur only for the sake of more convenient access to digital games. It was not pursued to enrich the experience of a game (e.g., to bring forward a specific request to the game designers, as in the case of *EVE Online*). The main reason was not even to open a supposedly closed system and play pirate copies of video games (although this was the accusation brought by Sony). The story became popular on news media, instead, as a political statement that involved the privacy of users and their freedom to use a product in any way they wanted.

Conflicting freedoms

The concept of freedom so often invoked by the hackers, as reported in press releases and public announcements, appears to be inspired by a libertarian ideology. The stress on the individual and his/her potential is a founding element of libertarian discourses. Also, as pointed out by Richard Barbrook and Andy Cameron in 'The Californian Ideology' (1996), technology appears in these discourses as a determining force for social change. In the PS3 hack case, the release of both hardware and software, by Sony or by the hackers, is understood as a potentially revolutionary moment, which changes the configuration of the producer-consumer relation. According to the hackers, it is because of this potential that consumers should be free to tinker with technology, otherwise they would be passive subjects of this process.[33] Barbrook and Cameron note

[33] Ben Kuchera reports George Hotz's words in the article 'Donations pour in for PS3 hacker': 'Once it's paid for and mine, I have the right to unlock it, smash it, jailbreak it, look at it and hack on it' (*Wired.com*, 22 February 2011). George Hotz also sang a rap song related to his personal story and released it on YouTube. Through the lyrics, reported in the same article, Hotz claims to be 'a personification of freedom for all' (http://www.wired.com/threatlevel/2011/02/hotz-donations/ [Last accessed 21/10/2014]).

that this approach to technology started in the 60s in California and was inspired by (although through several processes of simplification) Marshall McLuhan's ideas on media. According to Barbrook and Cameron, such a view oversimplifies the social and economic complexities of technology, as it puts the individual at the centre of technological development overshadowing more complex relations of power and the ideological backgrounds to the notion of innovation. Moreover, technological development becomes, in the Californian ideology, an engine for social development, as society and culture are seen in direct relation with technological changes. Barbrook and Cameron use the importance of public intervention as an example of the complexities that this ideology overshadows. State-funded initiatives can be crucial for the development of private industries, which often rely on publicly funded infrastructure. The Internet itself is seen in their work as an invention that strongly relied on existing public infrastructures for its initial development. Barbrook and Cameron see in Thomas Jefferson the precursor to this sort of Californian ideology. A slave owner and latifundist himself, Jefferson's claims regarding freedom appeared to ignore the extent to which this notion of freedom often comes at the cost of restricting the possibilities of others.

Similarly, in the PS3 hack case the freedom to manipulate the PlayStation3, according to the statements produced by the hackers and their supporters, comes at the cost of limiting Sony's freedom to change its own product. The ideology espoused by the hackers conceives of freedom as a right of the individual and describes its own proposal as purely positive, while it also implies that the original publisher should not control or own developments resulting from their initial product. Also, freedom to manipulate does not necessarily involve the extension of the know-how to include further potential hackers. It is rather oriented to individual freedom to tinker and manipulate.

When describing the conflict in terms of a battle for freedom, we can already see several different discourses intersecting with each other, many of which come from fields that are not, strictly speaking, related to video game culture. When the dispute revolves around the possibility of manipulating the hardware of PlayStation3, the definition of freedom tends to be a classical liberal one, as in free speech or freedom of thought. It involves a concept of sharing

software modifications with the community of users. However, Sony's manipulation of software is evaluated as oppressive because it limits further interventions. Andersson points out that this seems to be a common understanding of the term in the debates in favour of digital piracy:

> Along with its countercultural connotations and romantic aura of dissent, 'piracy' here invokes positive liberty: freedom *to* rather than the negative freedom *from*. It is a means to assert one's autonomy, a way of becoming proactive (strategic) rather than reactive (tactical). Piracy here defines the ability to make one's own destiny, to open the black box of technology and utilize it for one's own ends – while doing this in the open, even forming part of the 'mainstream'. (Andersson 2009: 10)

The proactive strategies enumerated by Andersson seem to be absent in the PS3 hack case. As Laura Murray (2009) writes while reviewing the movie *Rip! A Remix Manifesto*, claims for a wider freedom are often continuous with 'the base concept of market capitalism, with all its contradictions, rather than a challenge to it' (5). Freedom in this context means freedom to tinker, and as such it also appears as a strongly gendered claim that involves a very limited category of consumers. We can see this in the PS3 hack case, where there does not appear to be a particular attempt to actively include in the protest, and its positive aims, an audience broader than the original participants. In fact, the "we" defined by the hackers' statements appears to be a very conservative group whose aim is to join Sony in a position of power rather than open up freedoms to a broader demographic.

George Hotz, also known as GeoHot, a hacker who became famous for previous hackings of Apple's iPhone, decided to provide a solution to circumvent the limits imposed by firmware 3.21. The hacker group known as fail0verflow had already attempted to break into Sony's highly secure system. When Hotz succeeded, he released the anti-firmware on his website. In response to this action, Sony sued Hotz, who suddenly received support from many gamers, mostly thanks to the work of the Electronic Frontier Foundation. The foundation defended their decision to support Hotz and garnered media attention with the following statement:

> Sony is sending [a] dangerous message: that it has rights in the computer it

> sells you even after you buy it, and therefore can decide whether your tinkering with that computer is legal or not. We disagree. Once you buy a computer, it's yours. It shouldn't be a crime for you to access your own computer, regardless of whether Sony or any other company likes what you're doing (Kushner 2011: online)

As Hotz declared during an interview on the online video programme *Attack of the Show!*, there is much more at stake in the legal controversy than the destiny of a single man against a corporation, as 'the case is about whether you own that device that you purchased'.[34]

Similar statements emerged a few months earlier in different media contexts. The music, movie and book publishing industries have faced similar debates concerning the ownership of digital content. The possibility to copy and share digital files undermines the business of most publishers, thus media industries have reacted by implementing forms of control over the digital content they distribute online. Digital rights management (DRM) is one of the most widely adopted anti-piracy technologies for containing the user's control of digital files. Amazon's Kindle, for example, was subject to criticism from consumers and technology reviewers when Amazon deleted a limited number of digital books from Kindle devices without notice, although the consumers were reimbursed. This was seen by many consumers as a breach of their privacy and illegitimate manipulation of an owned device, despite the fact that Amazon explicitly (although not with sufficient transparency) reserved the right to act in similar ways regarding digital copies sold through Kindle.[35]

Similarly to the PS3 hack case, the use of DRM in other industries raised debates about the effectiveness of this method in preventing digital piracy and about the limits to the privacy and rights of the consumers.[36] The fact that the release of digital content through Kindle had explicit references to the limitations to the ownership of files did not prevent criticism from consumer organisations

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[34] The interview 'Hacking and Jailbreaking with George Hotz' is available at http://www.youtube.com/watch?v=tG9r7cCpk_g&feature=player_embedded [Last accessed 21/10/2014]

[35] Claburn, T. (17 July 2009), 'Amazon says it will stop deleting Kindle Books', *Information Week*, http://www.informationweek.com/news/personal-tech/digital-content/218501227 [Last accessed 21/10/2014]

[36] Both perspective are addressed by the Electronic Frontier Foundation's collection of cases, white papers and press releases, available online at https://www.eff.org/issues/drm [Last accessed 21/10/2014]

such as the Electronic Frontier Foundation, who were also very active in defending the hackers of PlayStation3. The Kindle case appears very similar to the PS3 hack case as it concerns the ownership of both software and hardware. The controversial release of firmware 3.21 by Sony and its effects on the use of the PlayStation3 console have been discussed in similar terms to the removal of specific book files from the Kindle devices sold to the public. Interestingly, both cases were discussed, in online forums and news media, in terms of freedom. Questions concerned the meaning of buying a technology and to what extent this makes the consumer free to have complete access and control over it. Jack Schofield, writing in *The Guardian*, describes the Kindle thus:

> Although we are used to PCs that offer a wide range of choices at every level, the Kindle is a typical vertically-integrated consumer platform. In these, a single company owns or controls everything (or as much of it as it can) from top to bottom: hardware and software design, content distribution, retailing and sometimes pricing. Apple's iPad and Nintendo's Wii are also examples. Vertically-integrated businesses can develop more integrated products with greater ease of use, while freeing consumers from all the burdens of choice. Basically, you give up your freedom in exchange for a simpler and perhaps more satisfying life. (Schofield 2011)

What are the implications of 'giving up your freedom', and what does it mean to claim it back or demand a more radical scenario of complete choice? The notion of a vertically integrated business not only has consequences in the number of options and the respective ease of use that a technology can offer. It also reinforces a hierarchical separation between those at the top of such a vertical process and those at the bottom. As I will argue, the story of the hacking of PlayStation3 did not do much to rethink this metaphor of a top-down concession (or privation) of freedom.

In fact, a few weeks after the Sony vs Hotz case became public, a class action against Sony followed, issued by a group of PlayStation3 consumers. The United States District Court for the Northern District of California in San Francisco followed both the cases. In February 2011, the result of the class action declared Sony guilty of having violated the Computer Fraud and Abuse Act. Sony's fault was to have advertised OtherOS and then stopped supporting the service. The Sony vs Hotz trial, however, was ended by an agreement between the

two parties. Sony accused Hotz of helping the piracy industry, while Hotz claimed that his hack was intended to let consumers run their homebrew software and emulators, thus bringing back a greater level of openness into the PlayStation3 system. As part of the settlement of the lawsuit, Hotz agreed not to commit any further hacking offences against Sony. In his official statement he declared, 'it was never my intention to cause any users trouble or to make piracy easier. I'm happy to have the litigation behind me.'[37]

In the meantime, the lawsuits received intensive media coverage. The group known as Anonymous decided to take revenge on Sony, which was accused of not respecting its consumers and their freedom to use technologies to their full potential. Anonymous started what is known as Operation Sony, also called OpSony. On 19 April 2011, a few days after Sony and Hotz settled their lawsuits, Sony's servers in San Diego, California, which backed the online service PlayStation Network, reported an anomalous overload. The hacking into the servers forced Sony to suspend PlayStation Network. Officially, Anonymous denied responsibility for this hack. However, the hacking of PlayStation Network took place at around the same time as Anonymous announced OpSony. The link between the group and the hack seemed evident to most of the news media that covered this story in the following days. Therefore, in the reconstructions that were publicly released, OpSony and the hacking of PlayStation Network, including the hacking by George Hotz and the following legal debates, all come to constitute a unique story.[38] The hacking of online databases and services of other video game publishers in the following days (Codemasters on 10 June, SEGA on 19 June and Bioware on 24 June) seems to confirm that the events surrounding Sony's PlayStation Network were not necessarily related to the release of

[37] The statement is reported by Gilbert, B. (11 April 2011), 'Sony and PlayStation3 jailbreaker George Hotz settle out of court', *Joystiq.com*, http://www.joystiq.com/2011/04/11/sony-and-playstation-3-jailbreaker-george-hotz-settle-out-of-cou/ [Last accessed 21/10/2014]

[38] In an article published by Keith Stuart in *The Guardian* (29 April 2011), the events (George Hotz's hacking, Anonymous's OpSony and the hacking of PlayStation Network) are distinguished from one other, however, they are analysed as possibly connected to each other. In the words of Peter Wood of First Base Technologies, the encryption of Sony's firmware is seen as a possible starting point for the more damaging hacking of PlayStation Network. In this version, the events appear separated but also the cause of one other. However, I note, this does not explain the hacking in the following days of different video game publishers' databases, which were not attacked prior to Spring 2011. The article is available at http://www.guardian.co.uk/technology/gamesblog/2011/apr/29/psn-hack-industry-reactions?INTCMP=ILCNETTXT3487 [Last accessed 21/10/2014]

firmware 3.21 and the deterioration in their relationship with their consumers. More likely, the hacking of PlayStation Network was oriented to steal sensitive data from the users' online transactions. Fairly significantly, the hacking into other publishers' databases received minor media coverage compared to the larger PlayStation3 case. The PS3 hack case became part of a complex narrative that started with the release of firmware 3.21 in April 2010 and ended with the break-in to PlayStation Network and the data of 77 million users being stolen. As I will go on to argue in this chapter, understanding the order of these events constitutes a key process in the establishment of the narrative of the PS3 hack case. Such a narrative, in its turn, frames the roles and definitions of the subjects involved in it, including what is or could be expected from them.

Sony's network: 'it said one year'

Following the events of the PS3 hack case, Sony had to publicly excuse itself for having overlooked the safety of users' data. As soon as it was rumoured that data relating to the credit cards of millions of users could have been stolen, Sony's data protection system came under critical scrutiny. At the beginning of May 2011, Sony received further criticism from the mainstream media for having refused to testify before the US Congress, which was reasonably concerned with the loss of millions of American citizens' sensitive data. On 1 May 2011, Sony's executive vice president Kazuo Hirai and company executives Shiro Kambe and Shinji Hasejima delivered apologies in a press conference. The image of the three bowing to the public appeared in several online and printed newspapers. Video game critics rapidly announced the decline of the Sony brand and the PlayStation – a steady collapse from the peak of the first video game console, PlayStation, released in 1994, to the partial failures of PlayStation Portable (2004) and PlayStation3 (2006). The critics were mostly concerned with what soon came to be defined as Sony's misunderstanding of the evolution of the video game audience in the last decade. As Colin Campbell summarised on Gamasutra.com: 'Sony's values have always been attractive and alluring. Right now, Sony is hiding. That's not attractive. It does not allure. It frustrates and it annoys' (Campbell

2011). The same position is maintained by a comic video, entitled 'PS3 song' and published on YouTube in February 2007, which ridicules Sony and its poor choices regarding the PlayStation3. As the events surrounding the PS3 hack took place, it reached over six millions viewers, becoming a reference for many of the debates against Sony.[39]

The PS3 hack case can be understood in more depth if looked at in relation to the longer history of Sony's customer relations. Most of Sony's history can be read in direct contrast to recent events, as a history of increasing openness and involvement of the consumers in their products, rather than the restriction of their activities. Interestingly, the first company to consider open software as an opportunity was exactly Sony Computer Entertainment with the Net Yaroze console. When Sony released Net Yaroze on 31 December 1997, no one would have predicted that the same publisher would in the future be the victim of a large-scale hacking operation because of its compromised relationship with its consumers. Net Yaroze was the first fully supported development kit for amateur video game producers. Its name is a Japanese expression meaning "let's work together". In an interview published on the online magazine Joystiq.com, Sony Computer Entertainment's chief Phil Harrison stated: 'I fully support the notion of game development at home using powerful tools available to anyone. We were one of the first companies to recognize this in 1996 [*sic*] with Net Yaroze on PS1'.[40] Soon after, Phil Harrison himself spoke in support of a new publishing concept, tentatively called Gaming 3.0. Already introduced in this dissertation, Gaming 3.0 aims to involve the player in the production of content for existing games or of completely new games. As reported by *Bloomberg Businessweek* in an interview with Phil Harrison: 'Game 3.0 takes connected consoles to a new level by leveraging online collaboration and user-generated content. Suddenly the content is dynamic and, as Sony says, Game 3.0 "puts the spotlight back on the consumer".'[41]

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[39] The video is available at http://www.youtube.com/watch?v=R98qC0fd_1w [Last accessed 21/10/2014]
[40] Doerr, N. (23 April 2007) 'Phil Harrison answers your questions again…', *Joystiq.com*, http://www.joystiq.com/2007/04/23/phil-harrison-answers-your-questions-again/ [Last accessed 21/10/2014]
[41] Radd, D. (9 March 2007) 'Gaming 3.0', *Bloomberg Businessweek*, http://www.businessweek.com/innovate/content/mar2007/id20070309_764852.htm [Last accessed 21/10/2014]

However, in 2009 the database where Net Yaroze's games were preserved, as well as the online forums of Net Yaroze's fans, were officially shut down by Sony.[42] The anti-piracy policy that led to the release of Firmware 3.21 in April 2010 has been understood as consistent with a new understanding, from the side of Sony, of the role played by consumers in the production of content through their technologies. These events were connected in accounts published by video game magazines of what they considered to be a new policy by Sony, now much more conservative, authoritarian and interested in asserting and preserving its position as opposed to allowing consumers to reinvent their products. From the affective engagement offered through Net Yaroze, Sony began to propose different forms of involvement for the consumers and defined these as part of a new business model.

There is one particular case where Sony's attitude towards its technologies emerges clearly. In defending, in the context of the legal trials, the release of firmware 3.21 and the consequent abandonment of the OtherOS feature, Sony claimed that PlayStation3 is sold with a warranty of one year and any modification after that period should be perfectly acceptable. All the features and even the availability of game software are not, strictly speaking, guaranteed more than one year from purchase. Sony in fact reserves the right to update the software installed in the console through the online connectivity provided with each unit. Failure to update the console might exclude the user from Sony's services. Luanne Sacks, attorney for Sony's defence, reported to the court that 'the only thing that Sony told anyone about the duration of any feature of the PS3 is what it said in the one year express limited hardware warranty. It said one year'.[43] As part of Sony's defence, another important fact emerges. The written express warranty, the 'System Software Licence Agreement' and the 'PlayStation Network Terms of Service' provide the purchasers with a licence, not ownership. On top of this, the 'Terms of Service' agreement gives Sony the right to disable or alter software features, and also to terminate or limit access to the PlayStation

[42] Video game online magazine *Joystiq.com* reported the news with a feeling of melancholia, see Fletcher JC (29 June 2009) 'Sony's Net Yaroze homebrew PS1development community shutting down', *Joystiq.com*, http://www.joystiq.com/2009/06/29/sonys-net-yaroze-homebrew-ps1-development-community-shutting-do/ [Last accessed 21/10/2014]

[43] An extended analysis of the case is reported on *Groklaw.net* (21 February 2011) http://www.groklaw.net/article.php?story=20110218181557455 [Last accessed 24/10/2014]

Network, and this includes issuing firmware updates. In the transcript of the 'Sony PS3 OtherOS litigation', as it was debated in the district court of San Francisco, California, on 4 November 2010, we can also read how Luanne Sacks attempted to propose that Sony should have no responsibilities one year after selling a product and is free to alter as many parts of that product as it wishes: 'if [Sony Computer Entertainment America] cannot have liability under California law for the PS3 completely failing to perform after one year, how can it have liability for the fact that it does 99 percent of what it was advertised to do, and just not one [i.e. the OtherOS feature]? That is completely irrational and cannot be'.[44]

These statements contribute significantly not only to Sony's defence in its legal disputes but also in defining Sony as a subject. Sony here presents itself as the author of the agreements, the entity that is in charge of writing what it is acceptable to do with PlayStation3. From this position of power, Sony is defining PlayStation3 not only with regard to its legal implications but also in its material boundaries. The legitimate uses of PlayStation3 are dependent on what PlayStation3 is. In the words of Sony's attorney, it is a product whose hardware and software are conceded to the user, and this concession is regulated by a temporary licence. The possible uses of both hardware and software are defined even in time. In fact, the product is only guaranteed to offer what is advertised for one year after its purchase. After that period Sony reserves the right to modify PlayStation3. This act of redefinition is a reframing of which nodes, both material and cultural, human (consumers and producers) and non-human (software and hardware), might be included or excluded in PlayStation *as a* network.

Hybrid mediators: becoming part of the network

Sony's defence can be summarised as such: Sony reserves all rights over PlayStation3 and by "PlayStation3" Sony means the hardware as well as its software and online services, and also their legitimate practices of consumption.

[44] The transcript is available online at http://www.groklaw.net/pdf2/SonyPS3OtherOS-109.pdf [Last accessed 21/10/2014]

In so doing Sony reframes PlayStation as a network, claiming that its definition must include its software and hardware, their features and their possible uses, and thus the implication is that Sony can then exercise its power over all these varied elements. By stating this, Sony proposes a definition of what PlayStation3 is and, more importantly, claims the right to introduce in the future any further definition. Sony's legal defence not only seeks to preserve the rights of the producer in its product but also raises ontological assumptions about the definition of the technology itself.

The controversy forced the opposing notions of networks as presented by Sony and the hackers to confront each other. However, both were definitions of what PlayStation3 (and generally any video game console) is or should be. Through these statements, in the legal dispute in front of the court, Sony became the producer. Hierarchically superior, authoritative and therefore distinct from its consumers, Sony is not authorised to define PlayStation3 because of its position; quite the opposite, it assumes this role through the process of defining PlayStation3. The statements pronounced in the court performatively defined Sony and assigned to the corporation the role of the producer of PlayStation3. What I am proposing is therefore to reverse the order of causation as it is usually presented in the narratives surrounding the PS3 hack case. The definition of what Sony, the hackers and even PlayStation3 are is not the basis of the debate. It is rather its final outcome.

Is it possible to change that outcome, by reopening the debate on what these characters can be? I will attempt to answer this question by reinterpreting the notion of network, and understanding how it could be useful in delineating a further mediation of the hacking of PlayStation3.

Edge magazine (2011) reported a statement by Sony's executive Shinji Hasejima regarding the hacking of PlayStation Network: 'The network vulnerability was a known vulnerability. But Sony was not aware of it … was not convinced of it' (19). Such a statement fits quite perfectly all the meanings of network that are presented in this chapter. The Sony executive chooses the word to refer to a database of users' data, and possibly also evokes the name of Sony's online service, PlayStation Network. By stating that what is at stake in these events is actually the hacking of PlayStation *as a* network, I am indeed suggesting

a reversal of the meaning of the word. I intend to use it instead as it has been adopted by actor-network theory (ANT), and in particular Bruno Latour (1999, 2005). Considering the involvement of very different elements (social, technological, legal and economic) in the enactment of the definitions of PlayStation3, I believe Latour's ANT can provide an understanding of the implications of this case.

The dissimilarities between the different uses of the word "network" suggest significant considerations. Sony's network, the database of information about the users, is a fixed one. It works by accumulation (the number of registered users is supposed to increase in time) but is mostly a record of information, an archive. Network can also be understood as a point of access to online services (PlayStation Network) but in any case it does not entail transformations of any sort along its nodes. Latour reminded us, instead, to be aware of this new use of the word, as it might evoke 'the Internet', and be associated with the idea of information exchange and 'transport without deformation' (1999: 14). The concept of network he proposed instead, and the one I am considering when debating PlayStation *as a* network, is composed of plural relations – associations that ceaselessly transform themselves. These continuous transformations have some forms of rigidity, which is reached through discursive performativity. As argued by Law (1999), entities acquire their attributes as a result of relations with other entities. ANT has to do with the displacement, dissolution and fractionality of those relations. Moreover, ANT includes all materials, not only the linguistic side of social phenomena. Networks, Law explains, are composed of linguistic and non-linguistic, human and non-human materials (3-4).

As Latour (2005) points out when describing ANT, we can understand the study of society both as a study of a state of affairs and as a study of associations. Latour is in favour of the latter, and notices how this type of sociology works particularly well when the participants in the social phenomenon are not 'assembled' yet and are still in a very open process of defining themselves (2005: 12). This sociology of associations is based on the understanding of the connections as they occur, as they frame themselves, and it is in this sense that I read the events of the PS3 hack case – not as a social event, structured and ready

to be deciphered, but more as an intricate network whose threads can be untangled in innumerable ways and yet reassemble themselves in a new shape every time they are unfolded.

Crucial in this process of change is the role played by what Latour calls mediators: 'mediators […] cannot be counted as just one; they might count for one, for nothing, for several, or for infinity. Their input is never a good predictor of their output; their specificity has to be taken into account every time. Mediators transform, translate, distort, and modify the meaning or the elements they are supposed to carry' (2005: 39). ANT is about understanding mediators, identifying them and evaluating the changes they introduce. Examples of mediators are, according to Latour, two interlocutors in a conversation, or even a computer that breaks down and generates unpredictable outputs, becoming an agent to understand and decipher.

In the 'sociology of associations' that Latour proposes, mediators can be looked at for the modifications they introduce in a network. As Mike Michael has argued (2000), ANT has been concerned since its inception with social phenomena in their complex constitution of relations and entities. ANT, however, left us with the question of where the list of entities and relations ends in the constitution of such networks. The list is potentially infinite, and there is some degree of arbitrariness involved in their constitution that allows networks to be understandable as partially closed entities (41). What comes to be included and excluded in those networks is the point Michael intends to discuss and present in a different light. He argues: 'a particular human or a human collectivity, a specific technology or a technological system, is the upshot of ongoing configurations of heterogeneous associations' (22). The process of the establishment of a network transforms heterogeneous assemblages of human and non-human entities into collective subjects. To take account of heterogeneity of a collective subject, as it loses its diverseness, Michael proposes to look at the hybridity of networks and nodes, their co-constitution and the temporary new assemblages that these might constitute.

In fact, the author seeks to invent hybrids, 'that is to say […] characters made up of a few humans and non-humans (including mundane technologies and aspects of "nature") by which to narrate the processes of ordering and

disordering' (42). Michael then seeks to consider himself as a hybrid, mutually influenced by his own writing, and emerging as a linking entity of 'familiar and novel co(a)gents' (17). It is from these co(a)gents that the writer of the book emerges. Mediators can be seen as being essentially and necessarily hybrid, and the author of a text, as a source of transformation, can also be looked at as a hybrid mediator.

As argued by Lucy Suchman, ANT is seen by its authors (particularly in the words of Michel Callon) as a configuration of ontologies in which agents take the shape of the relations in which they are involved (Suchman 2007: 260-261). One of the problems with this formulation of ANT lies in the symmetrical division between the human and the nonhuman, and the reliance on agency as the crucial notion for making sense of relations between the two sides. Agency is seen as the outcome of the relations between humans and nonhumans. However I argue, drawing on the work of Suchman, that ANT can only continue to replicate a purely descriptive look on networks, nodes and relations, as long as the focus is on the agency of those same networks, nodes, relations and descriptions that ANT brings about. The author of the analyses of actor-network relations stays invisible and detached as long as the focus is on the notion of agency. In this view, the author of the network stays safely in a purely discursive realm, seen as separated from the material network of human and nonhuman agents. The author is put again in the 'Middle Kingdom' (Latour 1993: 77-78) of human-nonhuman relations when the focus is instead on how discursive reconfigurations make differences matter, thus when discourse and materiality are no longer considered as separate.

In this chapter I look at the hackers of PlayStation3 not simply through their agency, but for ways in which they have multiplied the possible configurations of the network, becoming themselves part of it. The hybridization of the hackers is in this case, I believe, particularly evident: hackers have not only said what PlayStation3 is (or should be), but in doing so have involved themselves in that same definition, in often contradictory ways, by imagining their own position (as gamers, tinkers, thieves and so on) within the network. My own entanglement within this network of narratives of human-nonhuman relations brings about several further narratives and possibilities of how the

hackers of PlayStation3 could have imagined themselves. Thus, the concept of network is here used less for the purpose of studying ontologies and more as a strategy for saying something about what made the difference in the stories surrounding the hacking of PlayStation3.

What about the numerous characters composing the narratives of the hacking of PlayStation3? What sort of mediators are they, and how do they take account of their hybrid condition as describers and modifiers of a network that involves them from the very beginning?

The hacker, a figure considered central to the events surrounding the breach of the PlayStation3 database, could be seen as a hybrid character. The hacker, in the narratives of conflict surrounding the PS3 hack, has been responsible for creating new links, enabling new channels, and allowing entities to become relevant and central. George Hotz, for instance, has not only managed to invent a way to bypass Sony's firmware but has also distributed his counter-firmware through his website to a countless number of other PlayStation3 users. By doing so, he has highlighted the presence of other channels of communication, from gamer to gamer, and marginalised Sony and its direct control of PlayStation3 consoles. George Hotz, however, as I have debated, justified and narrated this act of bravado with a strongly masculine and aggressive approach, challenging Sony as the enemy. In doing so he has restated that the conflict involves a duality of forces, Sony and the hackers/gamers, one against the other. His act of hacking, instead, opened the possibility of looking elsewhere than this duality.

The hackers I have been looking at so far seem to have lost the opportunity of becoming interesting 'parasites' (Serres 1982): noises in a system capable of generating new, parallel and alternative channels of communication. We can look at the hacker as a mediator, in the Latour sense, of the networks underpinning the PS3 hack case, but also explore their hybridity as mediators involved in the network itself, trying to respond to Sony's decisions by inventing new positions and definitions for themselves. What sort of subjects are these hackers then, and what other forms of hybrid mediation could they have been responsible for?

Hacking networks: the hacker as subject

We can interpret the concept of subject in at least two ways. On the one hand we can use this word for designating human beings, thus recalling a sociological understanding of a phenomenon. On the other hand we can intend it as subject of discourse. In the latter definition a subject does not necessarily equate to one specific human being, nor even to a multitude of humans, but it can also be a concept or an abstract entity. Also, as Foucault pointed out:

> The subject of the statement should not be regarded as identical with the author of the formulation – either in substance, or in function. He is not in fact the cause, origin, or starting-point of the phenomenon of the written or spoken articulation of a sentence; nor is it that meaningful intention which, silently anticipating words, orders them like the visible body of this intuition (…) It is a particular, vacant place that may in fact be filled by different individuals (…) If a proposition, a sentence, a group of signs can be called 'statement', it is not because, one day, someone happened to speak them or put them into some concrete form of writing; it is because the position of the subject can be assigned. To describe a formulation qua statement does not consist in analysing the relations between the author and what he says (or wanted to say, or said without wanting to); but in determining what position can and must be occupied by any individual if he is to be the subject of it. (Foucault 1972: 107)

From this specific understanding of subject I would now like to analyse how 'propositions, sentences and groups of signs' produced in the context of the PS3 hack case contributed to assign the position of the subject usually called "hackers". In this case, the label of hackers has, as I have already discussed, been used to group very different practices and approaches to video game technologies. George Hotz and his attempt to bring back a feature of PlayStation3, and the hackers who stole credit card information from PlayStation Network seem to belong to different, if not opposed, approaches to the uses of a technology; the former oriented to debate and challenge the allegedly linear and hierarchical process of regulating the distribution and consumption of technologies, the latter interested in possibly profitable forms of digital piracy.

George Hotz, the hackers of PlayStation Network and the group Anonymous are defined by the discourses that regulate and determine their

capacities and actions. As Butler (1990) noticed, statements produced in regard to feminism produce and restrain the category of women. In a similar fashion I believe that the term hacker has been defined and limited as the result of several discursive practices since its first appearances. The hackers, in the accounts of the hacking of PlayStation3, appear to be actors opposed to Sony. George Hotz in particular, the only one in this case who has appeared in public (in interviews, personal press releases and also defending himself in court), in presenting a narrative of the events that led him to counter Sony's decision to remove firmware 3.21 often considers his condition as one that does not only involve himself but has strong implications for the category of gamers in general. The case is presented by Hotz as an "us against them" narrative.

In fact, it appears clearly that this collective class to be defended is vague and unspecific. The same can be said for the group of hackers. Looking at the interview with George Hotz on the online programme *Attack of the Show!*, he is introduced as an unpredictable but highly skilled genius of super-protected systems who 'is making Sony mad'. As I have stated previously, George Hotz (and hackers generally) are constituted by discursive practices, as happens in the presentation of Hotz in this online show. Thus, the vagueness surrounding their actual identity is not necessarily an issue to be solved, or at least not in the present context, but to be analysed and understood as the result of the constitution of a discursive formation. There is a lack of specificity around the role of Hotz, and also of a clear reason for his activity to be considered similar to the hackings that took place in the following months, which appear to be of a very different nature. The hackers as subjects are the product of a series of statements that also prescribe a series of actions to be expected from them. Hackers have been classified as a common category in the discourses surrounding the breach of Sony's console: a group of people with predictable motivations and goals, highly skilled in the use of digital technologies and willing to show off their talent. Understanding the constitution of this generic subject is, I believe, a key element in the understanding of the implications of the PS3 hack case in the definition of the video game consumers as opposed to the producers of digital products.

A similar lack of specificity, and an almost identical fascination, appears in

the accounts of the work of Anonymous. As Gabriela Coleman points out (2011, 2014), this should not thwart an appreciation of the potential of similar practices for political activism. However, we should be aware of oversimplifying these phenomena. It is certainly true that Anonymous achieves most of its collective actions thanks to the work of a few committed individuals, whose work is usually attributed to a generic unnamed actor. However this does not exhaust the potential of a collective anonymous identity for the realisation of forms of political activism that would otherwise be hindered by the lack of community work and collaboration. In the case of the PS3 hack, however, the hackers involved are very far from the ethos of Anonymous, as they do not seem to aim for any form of collaboration and, more importantly, they do not act on the basis of a strictly political objective. Thus, celebrating the activity of these hackers has often led video game critics to overlook the actual potential that the hacking attitude could bring to the relation between producers and consumers in the video game industry. Classifying the actors of the PS3 hack case as hackers has oversimplified not only the story but also the issues at stake. These hackers do not appear to be concerned with sharing their skills and results, their actions are not oriented to a supposedly collective benefit. As a matter of fact, it appears that the claimed opposition to the original producer is not rooted in an effective proposition for a more liberal process of production and consumption of video games, which could possibly confuse the roles of producers and consumers in a more effective way.

Gary Hall has expressed his scepticism about many of the statements produced in favour of digital piracy, stating that 'for all the romantic, counter-cultural associations of its apparent challenge to the commodity culture and property relations of late capitalist society, there is nothing inherently emancipatory, oppositional, Leftist, or even politically or cultural progressive about digital piracy' (2009: 25). I also maintain this criticism in regard to hacking in the context of the PS3 hack case. George Hotz does not appear to wish to emancipate the gamers, the collective subject for whom he claims to fight. The scenario he is delineating with his actions is even more conservative than Sony's. In his attempt to bring back OtherOS and access to those services that were accessible before firmware 3.21 was released, he is not attempting to institute a

further system different from the preceding one, but is attempting to re-establish what already existed. Furthermore, the hackers of the credit card data from PlayStation Network did not even pretend to appear to be actively proposing a different scenario. For these reasons, I believe that the expression hackers is used in this context with a considerable change to its meanings in earlier accounts.

This change seems to be rooted in a very stratified discursive formation, in which anyone who can gain illegal access to protected information is a hacker. To acknowledge a change in the use and definition of the expression raises the issue of what sort of scenarios these new hackers are trying to institute for the collectivity they claim to defend. Mostly, they appear to accept, rather than fight or oppose, the linear and hierarchical model of production and consumption. The attempt by George Hotz is to slightly expand the definition of producers for the PlayStation3 console, to include not only Sony but also highly skilled programmers. However, it is not his concern to establish a system of co-operation where the two categories of producers and consumers are actually questioned.

This is confirmed by the way the lawsuits have been handled. Sony has been left with the opportunity to define through a juridical discourse the boundaries of PlayStation3, both in the class action against the company and in the lawsuit that Sony started against Hotz. Doing so, it has defined itself as the only subject that is authorised to define and decide the limits of PlayStation3 as a network. This confirms, in my opinion, that all these attempts to perform forms of opposition against Sony were based on the acceptance that Sony has a privileged position, as the producer. It has never been questioned whether the decision to expand the role of producer was actually an issue Sony had to authorise. Thus, these practices of opposition had the effect of reinforcing in discursive, practical and even juridical ways the separation between the roles of producer and consumer.

A different approach would have been to co-operate in the establishment of a new network of human and non-human elements, one where PlayStation3 consoles could be used independently from Sony, bypassing its updates and services, and co-operating with/in the production and consumption of video game software through new forms of official and non-official, collaborative, help.

PlayStation3 hardware could become, as a result of its hacking, a console where "we" can co-operate over and emancipate "our" productions from Sony's regulations. In this way, the hacking of PlayStation3 could have transformed the console into a revamped version of Sony's Net Yaroze: a piece of hardware used for the purpose of working together.

Hackers could have been the subject of a different discourse and reassembled the network-PS3 in a different way. PlayStation3 could have been thought of as a hospitable network, one in which gamers could co-operate. Sony, in this new configuration, did not have to be the enemy at all costs but, at the same time, re-evoking Michel Serres' parlance (1982), a host and a guest: hospitable towards the initiatives of the gamers, and a guest, a welcomed user, of the technologies redefined by the consumers. Consumption and production could have been questioned in terms of what keeps them separate. But they have not, and the hacking of PlayStation3 ended by confirming the same separations that existed before. The hackers acted as 'consumers who want to become producers', but this opposition never evolved in a successive formulation, and the liminal condition they confined themselves by was quickly dismissed by the authoritative statements of the court and the news media, which put the initiatives of the hackers in a defined context.

The relation between producer and consumer could have been not exactly oppositional but oriented to a form of reciprocal assistance. A similar aim would have been closer to the meaning of the expression hacker as intended by many authors and practitioners. As McKenzie Wark suggests

> To hack is to express knowledge in any of its forms. Hacker knowledge implies, in its practice, a politics of free information, free learning, the gift of the results in a peer-to-peer network. Hacker knowledge also implies an ethics of knowledge open to desires of the productive classes and free from subordination to commodity production. Hacker knowledge is knowledge that expresses the virtuality of nature, by transforming it, fully aware of the bounty and danger. When knowledge is freed from scarcity, the free production of knowledge becomes the knowledge of free producers. This may sound like utopia, but the accounts of actually existing temporary zones of hacker liberty are legion. (2007: 70)

Bruce Sterling (1992) provides a historical account of the concept of hacking, which is probably less utopian and more based on the pleasure of tinkering.

Sterling also provides an extensive account of the legal issues the hackers and the phreakers (phone lines hackers) had to settle, and the police appear in his text as the enemy, the force to evade. This shows how the figure of the hacker seems to have been based on a form of opposition since its first uses. However, both Sterling and Wark, in very different periods, acknowledge that hackers are expected not to subvert for the sake of it but to propose, through their practice, an alternative to the mainstream practices of production and consumption.

Conclusion

In this chapter I have offered a reading of the hacking of the PlayStation3 video game console. Many of the statements produced by the authors of the hacking and their supporters offer an opportunity to consider legal questions relating to the ownership of a video game console. However, I have also argued that the hackers' actions and their justifications of those actions, as they appear in the public statements produced in support of their work, present an underlying political perspective, which is possibly what justified the emergence of the hacking on such a large scale. Asking for a more transparent agreement over the terms of use of a video game console, and possibly a wider degree of freedom for its users, does not necessarily lead to such a level of vehement opposition. I believe that there is a further discursive level that played a key role in influencing the actors' actions and their justifications, in the cases of both Sony and the hackers.

Having considered the wide mainstream media coverage of this case, I argued that the opposition between producers and consumers concerned the material and cultural boundaries of the PlayStation3 console. It was not simply PlayStation3 as a video game product to be hacked but the boundaries of PlayStation3 as a cultural-material object. What has been at stake in these events was the hacking of PlayStation *as a* network. The definitions and boundaries determining PlayStation3 were precisely the object of this controversy. To determine what could be included or excluded in a definition of PlayStation3, and the hierarchy between these elements, was the reason and final aim for both the

contenders.

Hacking into PlayStation *as a* network entails the involvement of a series of cultural and material nodes. These include pieces of hardware as well as human actors, software and firmware and their distribution through private/public channels (the ownership of the servers and of the platforms where data was saved and from where it was distributed has also been part of the problem). The full story, outlined in this chapter, included many different characters, such as hacker George Hotz, the millions of PlayStation3 consoles and the distributed copies of its operating system, the collective group Anonymous, the Electronic Frontier Foundation, the Linux operating system, Sony's servers in California, and also the American Constitution. It could have included many others, such as the collective LuLzSec (a subsidiary group of Anonymous responsible for further hackings targeted at Sony executives) as well as a rap song on YouTube that popularised the personal story of George Hotz for the gaming community.[45] The story of how all the aforementioned characters combined and interacted with each other could have been formulated in many different ways. To determine the role that each of the actors played in this story means to reformulate and reshape the object PlayStation3. In fact, to say that the hacking concerned PlayStation as a network means that the clash concerned different formulations of a narrative that put producers and consumers in relation and opposition to each other. At each different configuration, a different narrative of conflict could have been formulated.

The relation between Sony and the video game players reached a point of rupture when the two sides formulated two different understandings of what constitutes the object PlayStation3. Different networks resulted from the production of statements from the two opposing sides. However, these verbal and written performances were rooted in rigid forms. Discursive formations, surrounding video game culture but also digital piracy and different definitions of freedom, influenced the statements produced by both sides. The two sides actually emerged as subjects through these performative acts, but in emerging they also adapted to pre-existing visions that kept them separate. I have argued

[45] The rap song is 'The light it up contest – geohot' and is available on YouTube at http://www.youtube.com/watch?v=9iUvuaChDEg [Last access 21/10/2014]

that by looking at the emergence of these subjectivities different forms of conflict can be proposed. Different narratives can be imagined that would redefine these opposing forces and their roles and duties.

One such alternative narrative suggested in this chapter is based on a different connotation of the term hacker, one that is probably closer to the meaning proposed by earlier authors. In this definition, the hackers recombine elements of a system for a more transparent and open network. This particular ethos could have framed a different narrative where the concepts of producers and consumers are not seen in rigid contradistinction but possibly merge into the same subject.

An example of how an alternative to the conflictual relation between producer and consumer could be articulated is the Arduino model. Arduino is an open-source computing platform. Among the many microcontrollers released so far, Arduino offers open-source and expandable hardware and software. The software is published as an open-source tool, based on C++, while the hardware's modules, published under a Creative Commons licence, can be expanded and modified with no legal restrictions. The concept behind Arduino draws from existing models of computer technologies to propose a different relationship between producer and consumer. The result of this simplicity and openness, combined with low costs of production, is a wide and always expanding database of free and open software that is offered and modified by the consumers. The possibilities of what can be done with Arduino are not decided in advance. Arduino is designed for those interested in tinkering and programming, and encourages a collaborative environment where beginners and experts co-exist and can all take the best from the work of the others thanks to openly released pieces of code and tutorials. Arduino does not pretend to subvert or revolutionise existing models, and in its apparent simplicity eliminates the grounds for any narrative of conflict. This comes at the cost of lower profits for Arduino's manufacturer, although if the offered working environment for the consumers were not so free and open the company would probably not be so large in the first place. Arduino is not necessarily the best solution in all circumstances but it is intriguing as a model for the video game industry, where such a solution has never been fully experimented with.

Similar attempts in the game industry have never reached the popularity of consoles such as Sony's PlayStation. The handheld console GP32, for instance, produced by Korean manufacturer GamePark in 2001, offers an open environment for the production of home-made video games. GP32 does not require the payment of licences for the publishing of video games, and this has contributed to its popularity, which, however, is still relatively marginal and is confined to the communities of homebrew game developers. These experiments have never been combined using a model of co-operation similar to the one established by Arduino, but the technological and economic means to achieve it are currently available.

The reading I have offered in this chapter focuses on a relatively recent case but also attempts to address recent concerns emergent in video game studies. Critiques of the modes of consumption of video game products have often been employed in support of forms of radical opposition against video game publishers. While Sotamaa (2009) and Kücklich (2005) argue that producer-consumer relations must be assessed in terms of their political implications, authors such as Galloway (2006) encourage forms of countergaming to subvert traditional ways of using game software, potentially for artistic as well as activist purposes. Authors such as Dyer-Witheford and de Peuter (2009) propose a broader, global context in which the medium of the video game entangles with the dynamics of oppression and power of capitalism. The 'Empire' introduced by Dyer-Witheford and de Peuter, a direct reference to Hardt and Negri's text with the same name (2000), is the video game industry nowadays: a conglomerate of power and wealth connected to the military industries and based on low-cost manufacturing in China and Africa. It is described as a colossal corporate complex that configures 'machinic subjectivities' as part of the global biopolitical machine of the Empire. The reaction to such a conspiracy should be to become nomads and migrate at the borders of the Empire. Forms of counter-play against the Empire include and are not limited to a refusal to play video games in the expected way ('never play the fascist in [the war video game] *Combat Mission*', 2009: 193), the design of activist and educational games, engagement in independent productions and the emergence of critical content in mainstream games.

The perspective I have offered in this chapter attempts to outline an alternative to that of Dyer-Witheford and de Peuter. A strictly oppositional approach would only have the effect of reinforcing, or indeed establishing, its own enemy. An opposition, by placing two terms into a definite binary structure, undermines neither in its discursive enactment. The alternative proposed by the authors, to become a nomad, implies moving across the borders of the Empire, thus tracing these borders and defining the alleged Empire in its shape, giving it an inside and an outside. These practices of conflict do not appear to outline an oppositional force but a very consistent discourse and, therefore, very consistent forms of subjectivity. It is not by evading, roaming or countering the Empire that this will come to an end. Different subjectivities can only emerge through different discourses that do not aim to counter existing structures but to offer possibilities for alternatives. Applying the example of Arduino to the video game industry is already a more radical response than the one proposed by Dyer-Witheford and de Peuter. The two authors do provide a 'coherent account of the political economy of the industry' (as argued by book reviewer Bart Simon in 2011: online) but fail to understand the full potential of discursive practices, such as the one they provide in their text, in effectively shaping the structures they enact.

The hacker, defined as a hybrid mediator, could establish different networks and escape the binaries underpinning oppositional discourses. Reconfiguring existing games in both software and hardware, opening the black boxes, could be methods for exploring channels of communication between a multitude of nodes rather than just between producers and consumers. The conflict, in other words, is not necessarily between these two characters but also lies in the discursive and material nodes that establish a separation between the two in the first place. Becoming hybrid mediators also requires acknowledging that we are inevitably implied in the technologies we discuss, and that we participate in their definition. Being involved to such an extent also entails, in my opinion, agreement to take care of all the others implied in the same network, thus avoiding libertarian, individualistic and oppressive perspectives.

In the next chapter I will analyse a different narrative where the consumers, although not strictly opposing the main publishers of the video game

industry, attempt to emancipate themselves and claim a form of independence in the practices of production of new video games. While different from the discourses generated in the case of the PlayStation hacking, the notion of independence is similarly disputed through varied and conflicting notions of freedom. The question of defining independence recurs frequently, as will be seen, and never receives an ultimate answer. The undecidability of the condition of independence will be used to articulate a different way of thinking about the position of the producers/consumers of video games outside a structural binary. The impossibility of defining independence will be seen as a source of opportunity for the emergence of questions of hospitality towards those who are differently independent. An ethical endeavour that can supplant the ontological questions of what independence is and what producers and consumers, gamers and games, are.

Chapter 4
Narratives of independence: taking care of one's own game

In this chapter I will discuss the emergence of various forms of independent production of video games. In the last decade the concept of independence has become increasingly important in relation to the practices of production and distribution of video game software. In the context of video game culture, independence generally refers to the possibility of financing, developing and releasing a video game independently from a mainstream publisher. Allegedly, this form of production brings benefits to the developer. The developer can in fact work at his or her own pace while experimenting with new forms of design, controlling the production process from beginning to end and potentially receiving, on top of personal satisfaction, all revenues from sales or in-game advertising.

However, the liberating effects of independence are often disputed. Mainstream publishers have quickly managed to appropriate some of the channels of digital distribution of those games, offering game producers visibility on these spaces and, consequently, higher revenues. This has reintroduced, for many independents, relations of power and control that were already in place in the previous, non-independent condition of work. Moreover, independence appears to mean very different things to those who profess to be part of it. For many game developers who attempt to receive attention and visibility on distribution channels controlled by new or pre-existing publishers, independence appears as a different way of organising work, taking sole responsibility for a larger and more diverse number of issues (game concepts, programming, storyline, budgets and so on) that would instead be assigned to specialised personnel in a non-independent production. In this understanding,

independence appears as a new mode of work management. For others, independence mostly constitutes the opportunity to express oneself outside the logic of the market, releasing games for free and claiming a larger degree of freedom in the choice of content and style in a game.

While critics of this concept currently claim that independent might not mean anything in particular nowadays,[46] precisely because of the large variety of very inconsistent practices and games labelled as such, I believe and propose in this chapter that the notion could still be of use in video game culture. As an academic and gamer, I believe the novelty of the concept is not to be dismissed too quickly as it might still generate valuable forms of *gaming*. I am not referring to specific modes of game design but rather to new questions within the culture of game development that could help destabilise pre-existing notions of production and consumption.

To achieve such a re-evaluation of independent gaming I propose to look at what it is that is actually generated by the difficulty of defining the concept of independence. In this chapter, I argue that independence can be seen as a repressive and productive concept at the same time, which forces game developers to confront their own definition and position in relation to other forms of independence and non-independence.

Through the work of Ernesto Laclau, and particularly his theory of discourse developed in collaboration with Chantal Mouffe, I will look at independence as a floating signifier: a term that receives different ascriptions of meaning and that stays open to a variety of often contradictory fixations (Laclau 1993a: 287; Jørgensen and Phillips 2002: 28). The undecidability of independence, of what it ultimately means, happens to be temporarily fixed and resolved through the production of definitions. This continuous production, from the side of game developers, game journalists, gamer communities, organisers of independent festivals and mainstream publishers, operates a temporary closure of the meaning of independence. In the theory of Laclau and Mouffe, independence might be seen as working as a hegemonic act, a concept the authors borrow from Antonio Gramsci: it is evoked in discursive practices to

[46] McShea T. (10 July 2014) 'We named the dog indie', *Gamespot*, http://www.gamespot.com/articles/its-impossible-to-define-indie-so-we-should-stop-u/1100-6420984/ [Last accessed 23/10/2014]

define and delimit specific forms of game development and distribution as independent. However, hegemonic fixations overlap with a multitude of diversely-hegemonic actors, who constantly let the notion of independence slide towards a different definition, sometimes contradictory to the previous one. Different ideas about what the consequences of independence are, as will be seen throughout this chapter, define the concept, but only temporarily.

Independence may appear in video game culture as a blanket that is too short: pulling it in one direction may reveal a gap in the other, leaving some self-professed independents in the cold. However, it is also as scarce as it is necessary. Independence is not only a label to put on oneself but is also productive of that very same notion of the self. Through Foucault (1980: 78-108)[47] I intend to consider independence as a productive force, precisely because of its floating condition. For the game developer who has decided to make and release his or her own game, the notion becomes a driving force to differentiate him- or herself and understand what it is that makes that product personal and unique from the undifferentiated outside of independence. Independence serves here to constitute a form of individuality. Becoming an independent and individual game developer is a process of self-definition, which in its turn offers the ground for disciplinary measures of self-regulation. As Foucault puts it, 'the individual is no doubt the fictitious atom of an "ideological" representation of society; but he is also a reality fabricated by this specific technology that I have called "discipline"' (1977: 194).

Discipline operates on a variety of levels and supports the regulation of the self. It appears in the constant production of discourses about the definition of the individual, for instance, as it is solicited by the interviews, application forms and festivals that are addressed to independents. As I will discuss in this chapter, examples such as the Independent Games Festival, Indie Game Night and other institutionalised conventions for independent developers constantly demand that the applicants and participants provide self-definitions and explain how exactly they relate to the notion of independence. In these contexts,

[47] The relation between power and knowledge is indeed central in the work of Michel Foucault, and will be addressed in the rest of this chapter through a variety of sources. In particular, the notion is well explained and summarised in the lecture he gave on 14 January 1976 at the College de France, collected in the text *Power/Knowledge: Selected Interviews and Other Writings 1972-1977* (1980).

developers have to describe themselves and their work, and clarify how and to what extent it is independent. Discipline of the self is also operated through specific institutions of education and training. Incubators and workshops teach developers how to become independent, through specific practices of work management, communication with potential players of their games or specialised journalists, and also by means of self-motivation. As Foucault argued, discipline works through observation, normalisation and examination. It coerces and produces, and it is perfectly consistent with the presence and reinforcement of processes of individualisation (Foucault 1977: 170-194).

I believe that such a short blanket, so essential and uncomfortable at the same time, is also needed more broadly in the discourses surrounding video game culture because it introduces questions over the individualisation of the game developer. The developer becomes, in the discourses on independent gaming, an individualised subject but does so in a conflictual and unresolvable manner. The conflictual aspect derives from the indeterminacy of the concept of independence, which forces one to look at the other developers while constituting and regulating one's self.

The production of individuals requires a form of alterity to confront oneself with. Defining oneself as independent assumes the presence of a form of dependence, or non-independence, to be differentiated from. However, in order to confront two different independences, a certain degree of similarity must be acknowledged, at least in the presence of a conflicted idea of what independence means and from where a comparison could be established. The impossibility of resolving any form of contamination between different forms of independence brings us to an ethical question of hospitality and care of the diverse, the independent-which-is-not-me. Ultimately, I propose that the question of how to share the short blanket of independence with other sleepers, those who are already there or might be there, who might join later or who are already gone, offers a valuable supplement to the drive towards individualisation (and, occasionally, narcissism) that claims of independence often involve.

The problem of defining independence

Defining what independence means, in the context of video game culture, is probably the most pressing and recurring question that emerges in relation to this phenomenon both from academics and practitioners. As I will discuss in what follows, the need to answer this question performs a double function. On the one hand, it reduces the possibilities of what should count as independent, putting boundaries around this notion so as to include and exclude specific practices. On the other, it produces the notion of independence and the idea of the independent game developer, giving it a clearer set of characteristic duties and responsibilities. This is, for example, how independent gaming is described in the documentary *Indie Game: The Movie* (2012) by James Swirsky and Lisanne Pajot. In this documentary, well received by critics and awarded the prize for best World Cinema Documentary Editing at the 2012 edition of the Sundance Film Festival, the directors interview four of the most celebrated independent developers: Jonathan Blow, author of the game *Braid* (2008); Edmund McMillen and Tommy Refenes, authors of *Super Meat Boy* (2010); and Phil Fish, author of *Fez* (2012). The directors celebrate, through their interviews, the changes wrought by independent gaming and, in particular, the emotional attachment that independents have to their games. This attachment, according to the documentary, has begun to diminish in the most recent major productions, where much larger budgets and numbers of developers are now required. In mainstream productions, according to this narrative, it is necessary to cover the initial input by trying to appeal to an overly broad audience. Meanwhile, the production process is broken down into undistinguished, mechanical tasks. In the same documentary we also see that mainstream productions are allegedly too polished and lacking in personality. Independent games represent, in the narrative replicated by those interviewed by Swirsky and Pajot, a sort of new opportunity where game designers are now finally free to express themselves as authors of their own work. In the words of independent designer Jonathan Blow:

> […] part of it is trying not to be professional. A lot of people come into indie games trying to be like a big company. What those game companies do is create highly polished things that serve as large as an audience as possible. The way that you do that is by filing off all the bumps on something. If there is a sharp corner you make sure it is not going to hurt anybody if they bump into it or

> whatever. That creation of this highly glossy commercial product is the opposite of making something personal. (*Indie Game: The Movie* 2012)

However, there are also different and co-existing interpretations of the same concept in video game culture. Some game designers define themselves as radical independents functioning in an antagonistic relationship not only with the video game industry but also with the more famous indies popularised by game conventions, magazines and documentaries, such as Swirsky and Pajot's. According to these other independents, designers such as those interviewed in *Indie Game: The Movie* represent a sort of polished version of independence as they tend to replicate the same system of production and publishing as that embraced by mainstream productions, only on a smaller scale.

An example of this understanding of independence can be seen in the collective Molleindustria, who define their works as 'radical games against the tyranny of entertainment'.[48] Molleindustria conceive game design as a political practice for activism and social critique. Their games are not commercially released and are available for free on their website. Molleindustria's games usually articulate a political standpoint. Examples of this are *McDonald's Videogame* (2006), a game about the unsustainable business of food corporations, *Oiligarchy* (2008), a critique of the exploitation of natural resources, *Operation: Pedopriest* (2007), about the Vatican sex scandal, and *Unmanned* (2012), a game about the life of a drone pilot in the American army [See Appendix: images 19-22]. Moreover, the founder and main spokesperson of the group, Paolo Pedercini, has publicly expressed his view on independent gaming on many occasions. In a recent talk at the game conference IndieCade, Pedercini argued that not all self-proclaimed independent designers can consider themselves to be properly autonomous. The re-appropriation of independent productions operated by some of the major video game publishers (an issue that I will soon introduce) undermines, according to Pedercini, the liberation of the video game developers. Pedercini further suggests that we need to reconsider how best to pursue independence, and how different forms of independence could (and in fact do) co-exist and be supported. As he put it himself at the 2012 IndieCade conference:

[48] Molleindustria (2014) www.molleindustria.org [Last accessed 8/11/2014]

> There are a lot of people these days trying to come up with new definitions of independent development that take into account the various degrees of autonomy from platform owners and hardware manufacturers; the co-optation of styles, keywords and modes that used to be part of the 'indie' identity; and the mainstream acceptance and structural expansion of the most successful independent developers. (Pedercini 2012: online)

He suggests in the same speech that we consider independence as a spectrum whose extremes are, at one end, a sort of unreachable utopian autarchy and, at its opposite, a completely de-humanised activity where the worker does what he or she is told, with no emotional involvement in the final outcome. Pedercini argues that the utopian idea of complete independence can never be fully achieved but can nonetheless frame the practice of those game designers who aim to reach it.

Interestingly, major publishers have attempted to appropriate independent productions in recent years, further complicating the debate on what should count as independence. In fact, the games presented in *Indie Game: The Movie*, as well as many of the most popular independent games and the movie itself, are on sale on the online markets of game publishers Valve and Microsoft, which are far from being grassroots companies or at the margins of the game industry. These two game publishers have promoted in recent years the indie channels of their online platforms for digital distribution (respectively, Steam and Xbox Live Arcade). Valve and Microsoft can offer a wide distribution and market visibility to otherwise isolated independent developers, asking in exchange for a percentage of the sales generated on their platforms (usually estimated at about 30 per cent of the final price of the game).

The presence of these distributors has shaped a sort of other video game industry, which is parallel to the mainstream one. Individual, or small groups of, game developers design and promote video games in the hope of being offered the possibility of featuring on the indie channels of Valve or Microsoft, where they are sold next to the major productions of the game industry. Conceding part of the revenue is considered acceptable by these developers, who are often confronted with an increasing number of small-scale competitors and with the associated difficulties of competing against them in an open online market. Pedercini's argument appears to be a reasonable description of some of the current developments of the independent sector: the emerging practice of

substituting the previous employers with new gatekeepers such as Valve and Microsoft can be seen to undermine some of the claims of independence. Furthermore, the new gatekeepers have a determining power with regard to which games will reach a sufficient audience and therefore be able to cover the initial investment and hence finance future projects.

However, the new conditions of precariousness do not seem to affect adversely the enthusiastic claims in favour of independent gaming. The documentary *Indie Game: The Movie* begins by showing the developer Tommy Refenes looking desperate in front of the homepage of Microsoft's XBox Live Arcade because it is not displaying his most recent game, as had been agreed with the publisher. Despite this mistake by Microsoft being described by the designer as a matter of 'life and death' for his independent career, it does not hinder, in the rest of the documentary, the celebration of independent gaming as a form of liberation for video game developers.

A more recent example of the conflicting definition of independence has been presented by the game designer Jonathan Blow – acclaimed for his game *Braid*, released in 2008 and considered by the independent community to be the first independent game to reach mainstream visibility – and also features in *Indie Game: The Movie.* Blow appeared on the stage of Sony's PlayStation2013 conference announcing his new game, *The Witness*, as an exclusive for Sony's new PlayStation4 console. What sort of independence are Blow and Sony referring to in this case? What is the difference between Blow's presentation and those of the major producers who also presented their works in progress for the incoming new product from Sony Computer Entertainment?

There is indeed something quite problematic about these claims of independence, particularly considering the undefined political connotations of this term. Terms such as freedom and emancipation appear in the discourses surrounding independent gaming. In the previous chapter, while discussing the case of the hacking of PlayStation3, I saw how these terms appeared in the statements by hackers or in articles in mainstream news media. In the case of the hacking of PlayStation3, the claims of freedom and emancipation were contextualised by a specific event in which a group of consumers wanted to claim ownership over the product they had bought. However, the process I am now

discussing is a much broader phenomenon, which involves thousands of game developers and journalists, as well as events and institutions, who all make use of, and in the process redefine, the concept of independence. Also, we are first and foremost concerned here with the production process of a video game rather than the consumption of a video game product.

More importantly, these more or less apparent ambiguities are frequently debated by the practitioners of the independent scene. The question of what independence means is frequently asked and receives different answers. The polysemy of the term is quite evident to the actors who participate in the so-called independent community. While for some game developers and critics independence means freedom *to* produce, for others it instead, or also, means freedom *from* the alleged restrictions imposed by the mainstream industry. The first kind of freedom resembles the freedom expressed by the California ideology (Barbrook and Cameron 1996), introduced in the previous chapter in relation to the ethics of the hackers of Sony's PlayStation3. This kind of freedom often leads to forms of individualised work, where the emergence of the individual is both the foundation and the result of a neoliberal ideology. Freedom in this context stands for individual freedom, and the success of the process of the acquisition of such freedom is evaluated on the basis of the success of the individual endeavour. Thus, in this view, independence is achieved when one is "truly oneself", and failure is seen as a consequence of a compromise where one's work does not fully respect this true self. The second kind of freedom, which in the case of independent gaming does not necessarily conflict with the first but rather might also co-exist with it, more often develops in the attempt to construct an alternative to the existing relations of power inherent in the production process. In this latter sense, freedom mostly means emancipation and autonomy. Freedom *from* also comes to signify that the political or artistic significance of a video game is considered to be more important than its economic success or popularity. This is the case with Molleindustria and also with other game designers I will introduce later, such as Cactus or Anna Anthropy, who want their work to be looked at for its political or artistic potential rather than its commercial success.

As I will discuss in what follows, the academic debate on independence

with regard to video game culture is equally fragmented. Notably, the question of what independence could potentially entail, and therefore what its significance in the context of video game culture might be, frequently appears as the leading research question for scholars. I want to investigate how different meanings of independence co-exist and come to be constituted through discursive productions. From this perspective the diverse ideologies of independence will not be reduced to their common denominator but instead understood for their roles as regulatory frames in the production of different identities.

The question of what independence amounts to in the context of video game culture has also been posed by academics in the last few years. Bart Simon, introducing the special issue of the academic journal *Loading*, addresses the problem of defining independent gaming and its practitioners in these terms:

> There is the question of who or what is indie? Where do they come from? How do they work? But this 'they' begs the question. It is a 'they' in-the-making who appear simultaneously as a legal-economic category (developer controlled IP), a social identity for a group or groups of game developers, a set of ideas or an ideology about developer freedom, creativity and autonomy (the idea of 'being indie') and a cultural style or set of styles. (Simon 2013: 3)

Simon further suggests that the term independence is used by many developers to describe control over their video games as intellectual property (to be understood as game concepts, character and level design, narratives and so on). Such games are to be sold on proprietary or external channels, often in a serialised form. However, independence is a concept that underpins the formation of a community of developers, who often establish networks of collaboration, even if working on different intellectual properties, through online forms of collaboration, conferences, workshop and meetings. But then there is also a political connotation to this term, which does not disappear even in its most business-oriented forms, and which instead pervades the emergence of new forms of management in video game production. Last but not least, independence constitutes a genre of video games which are recognised for their tendency to experiment with new forms of game design. Simon proposes we could look at independent gaming via different methodologies and through posing a variety of questions. The phenomenon could be understood from a sociological perspective, by looking at its political implications, at its

consequences for the management of a game development company, and finally also as a culture or subculture. However, all these approaches proceed from the same fundamental question: *what is* independent gaming?

The question is particularly complicated when considering the forms of co-optation operated by the mainstream companies of indie as a label to advertise low-budget games (Lipkin 2013). Also, websites such as Indie City offer visibility to game developers who produce casual games on a low budget. As a business model it is similar to what Steam and Xbox Live Arcade already offer. However, on Indie City independent comes to signify easy-to-play games produced with a low budget, not necessarily showing any particular originality in their content and style, and oriented towards a mainstream audience. Ideally, a game published on Indie City will reach a large audience of casual gamers, who usually play games on their tablets and mobile phones [See Appendix: images 23 and 24].

The example of Indie City undermines attempts to define independence solely on the basis of the content of the games. Producing and releasing video games by negotiating agreements with a publisher in a different way to what usually happens in the mainstream industry does not necessarily result in new forms of game design. Can we then legitimately define these examples as a somehow corrupted version of independence, therefore assuming a set of moral values that should be associated with this different way of producing and releasing a video game? And what then would these values be?

Some scholars have been proposing a progressive view of the practices of video game production, arguing that independent gaming could be a practice for the inclusion of under-represented minorities. Emma Westecott (2013) suggests we consider independent game development as a means of involving diverse communities usually excluded by the average mainstream companies:

> The ongoing fragmentation of the game market holds potential for games that represent a diversity of voices, which could work towards more equitable game development practices. While the commercially oriented indie industry maintains a capitalist status quo, the more DIY expressive productions remain outside the commercial imperative and stand as fertile ground for the experimentation and learning necessary to engage a broad community of makers. (Westecott 2013: 89)

On a similar note, writer and game designer Anna Anthropy, a key voice in the independent scene, suggests that recent trends are transforming video game design into a widespread practice, where design and development tools are easily accessible and the development process is facilitated thanks to the assistance of the growing communities of independent producers. In her view this should eventually lead to more varied forms of digital gaming through which minorities and under-represented groups could express themselves. In *Rise of the Videogame Zinesters* (2012) she makes her case by listing which software and techniques can be used to produce independent video games and by presenting some of her own games as instances of feminist approaches to game design [See Appendix: images 25 and 26]. Anthropy and Westecott are explicitly sceptical about the abuses of the term independent by the video game industry. They advocate instead a more explicitly open access to game development as a way to introduce under-represented ideologies to the medium of the video game. From their perspective, freedom from the restrictions of the mainstream industry is the essential condition for a progressive politics of inclusion. Anthropy in particular thinks about the medium of the video game as a tool for self-expression, and of self-expression as essential to individual freedom. Teaching and assisting players how to make a video game thus become, in her view, political practices oriented towards inclusion and participation.

However, it is difficult to define independence merely on the basis of the content of the games, or to decide which approach to game design should have a privileged status in the independent scene as an allegedly more complete form of liberation from the ideologies of the mainstream industry. The term is used to describe a variety of games, often because the content of a game is simply not the criterion for its definition as independent. As for the case of the games published on Indie City, there are many examples where independence signifies a different organisation of the production and distribution processes but not necessarily unusual or politically aware game design.

Independent gaming and its discontents

Even when the defining criteria are focused on the practices of production, this still appears to be a very unstable and disputed territory, as many independent designers are likely to emulate the working conditions of the major companies. In fact many independents, similarly to larger companies in the industry, plan so-called crunch sessions: intense weeks of work activity scheduled to reach the milestones of a project. As Jennifer Whitson (2013) notes, referring to an article by Chris Remo,[49] reports on the career of an average game developer in the mainstream industry mention an average of 55 hours of work in each of about 13 weeks of intense crunch mode per year (124). As reported by the International Game Developers Association (2004), developers on average tend to leave the industry after less than ten years, precisely because of these exasperating conditions. Becoming independent is seen by many as a potential solution to improve the quality of time spent at work and, for some, it probably is. However, the activity of an independent developer does not seem to necessarily bring a radically different and less burdensome amount of work. Considering the high number of competitors in the independent market, the demand for quick and intensive production is simply increased. Although numbers and statistics in this case are still lacking, even the most celebratory reports agree that the life of an average independent is not easier than that of a worker in the mainstream industry.

For example, the documentary *Indie Game: The Movie* frequently stresses how intense the activity of independent developers can be. It could be argued further that, while for developers in the mainstream industry crunch periods mean sleeping in the office, independent developers, who mostly work from home, have already blurred the distinction between free time and work, which therefore makes it difficult to calculate the number of their working hours within a week.

Whitson argues that '[...] developers themselves are resistant to change. Part of this resistance is rooted in the finely tuned technological skills, aptitudes, and specializations they have developed over time' (2013: 124). Whitson also notices that game development is based on a sort of developer culture that works

[49] Remo, C. (2 June 2010) 'Study: Developers Claim 13 Weeks of Crunch Per Year', *Gamasutra.com*, http://www.gamasutra.com/view/news/28669/Study_Developers_Claim_13_Weeks_Of_Crunch_Per_Year.php#.UTc_SxxfZ8E [Last accessed 8/11/2014]

as a self-coercive system. There are other examples of similarly self-exploited forms of production in the video game industry. Nieborg and van der Graaf (2008) note that teams of *modders*, who design and release modifications of existing video game software, tend to replicate the organisation of a video game company and transform what could be defined as 'grassroots cultural production' into 'plain hard work' (191). They therefore conclude that 'through emulating the first developers' risk-averse, capital-intensive mode of production and within a proprietary context, total conversion modding has become a "proprietary experience", as modders anticipate the developers' act of re-appropriation and subsequent commodification' (192).

Independent gaming, or at least its most market-oriented version, appears to be moving in a similar direction. The possibility of working at a faster pace is one of the reasons why some game developers quit their previous jobs and work independently. This therefore appears to provide a slightly different definition of independence, as a condition of work where more duties, responsibilities, risks and effort are taken by one or a few individuals in exchange for potentially higher revenues, in an analogous, rather than alternative or even emancipatory, way to the profit-oriented industry.

It could then be argued, with Dovey and Kennedy's early account (2006), that:

> […] the notion of independence needs to be interrogated somewhat if it is to have any purchase. As we have seen in the film and music industries, the 'indy' tag may not signify much more than 'wannabe'. In other words, the power of already established publishers may in fact be strengthened by the creation of an industrial diaspora of hopeful independents looking for commercial sustainability by copying game formats that already exist. (Dovey and Kennedy 2006: 141)

As well as being a form of false subversion, independence might also become, according to many authors – including, although less directly, Kucklich (2005) and Sotamaa (2009) – the propitious dream that ends up leading to self-exploitation.

From this perspective the rise of the independent sector, at least in this specific market-oriented form, could replicate the emergence of forms of self-employment in other so-called creative industries. This is precisely what Angela

McRobbie argued, a decade ago, in 'Clubs to Companies: Notes on the Decline of Political Culture in Speeded up Creative Worlds' (2002) with regard to the creative industries. In the scenario analysed by McRobbie, the new multi-skilled, de-specialised workforce had been justified by the actors involved through the use of terms such as creativity, authorship and independence in the actual process of production. Enthusiastic comments have been made by many commentators and practitioners engaged in the creative industries in favour of the emergence of the individual auteur, as opposed to the highly structured and hierarchic model that allegedly shaped the previous forms of labour. For McRobbie, this enthusiasm is misplaced:

> For the young woman fashion designer working 18-hour days and doing her own sewing to complete an order, 'loving' her work but self-exploiting herself, she only has herself to blame if things go wrong. After all she opted for this kind of unstable career choice. […] Self-blame where social structures are increasingly illegible or opaque, serves the interests of the new capitalism well, ensuring the absence of social critique. (McRobbie 2002: 521)

Such a process of individualisation and redistribution of responsibilities marks the disappearance ('ironically', as McRobbie points out) of any form of independence and the emergence of 'creative sub-contractors' (519). As maintained in 'Everyone Is Creative: Artists as New Economy Pioneers?', this scenario has an immediate effect on the quality of the work produced: 'where there is little or no time for thinking, the art-work itself can hardly be thoughtful' (McRobbie 2001: 3).

Stephanie J. Fisher and Alison Harvey maintain similar scepticism about independent gaming. In 'Intervention for Inclusivity: Gender Politics and Indie Game Development' they state:

> Being indie in no way translates to being inclusive. Rather, a great deal of the values and meanings associated with going indie actually reify the structural inequalities of the mainstream industry through the valuation of a supposed meritocracy that not only denies persistent systemic exclusion but celebrates in its own way the precarious labour conditions of digital games production. (Fisher and Harvey 2013: 37)

Independent developers might be allowed to work at their preferred pace, as self-employed workers, but the preferred pace could also be, and often is, a

self-exploitative regime. Independence could then also be seen as a discursive justification for the introduction of pre-existing forms of work ethics in a new guise, in accordance with the 'new spirit of capitalism' (Boltanski and Chiapello 2007). The introduction of a series of changes in the production process of a video game is presented by the actors involved as an allegedly less alienating process, making possible a 'perfect *fusion* of the needs of personal emancipation with the system's needs of capitalism' (Fisher 2010: 141).

Furthermore, video game publisher Valve has recently started to offer an online service where users can vote, comment and help the works in progress proposed by the independent community. Called Steam Greenlight, the service was released in August 2012 and serves as a sort of crowd-sourced filter to select which games should be featured, once completed, on the online market Steam. As also maintained by Dyer-Witheford and de Peuter (2009) and Kline, Dyer-Witheford and de Peuter (2003), the video game industry has increasingly attempted to assimilate forms of consumer production in the last decade. Steam Greenlight could be seen as another example of this trend. Independent producers are attracted by online services where their works receive support and visibility, while their games come to complement the variety of products offered by major publishers, such as Valve and Microsoft. Also, the practices of co-operation between developers that emerge in the context of these grassroots productions are assimilated in a proprietary system. Steam Greenlight appears to confirm Dyer-Witheford and de Peuter's take on Hardt and Negri's *Empire* (2000), which they view as a metaphor for the contemporary video game industry, increasingly reliant on incorporating forms of nomadic production in order to maintain its position of power. However, what sort of nomadism is really suggested by the video game design concepts put forward on platforms such as Steam Greenlight? Is there anything particularly 'independent' about them? They might just as well be viewed as perfectly consistent with the modes of production of the mainstream industry, except for their much lower investment levels and smaller workforce.

In the context of independent gaming, these forms of assimilation and co-optation blur the boundaries between the independent and the non-independent sectors. Self-employment, despite the advantages one might claim in favour of it,

does not necessarily entail any forms of freedom, emancipation, self-expression and economic success – which are often associated with independent gaming by its most enthusiastic supporters. This discrepancy is particularly evident when we consider instead the economic safety and freedom to experiment guaranteed by some of the major companies. Independence, in the context of video game culture, could be said to describe a different organisation of work, which does not automatically and necessarily bring any of the positive aspects attributed to it by the enthusiasts of this alleged revolution.

More recent debates within gamer communities have started to argue that, maybe, the label independent should be replaced with a more specific denomination. Tom McShea, in the video game web magazine *Gamespot*, has argued in a popular article that 'indie has become a term as nebulous as it is ubiquitous. […] It's time we put these categorisations to rest'.[50] Several days later on the same website, Alex Newhouse replied with an article claiming instead that we should not 'throw "indie" away just yet', as it is the only word we have to designate games in which the personalities of the authors 'shine through'.[51] In any case, the lack of an agreed definition does not slow down the practitioners of independent gaming and the emergence of festivals, incubators for new companies, articles and awards centred on this phenomenon. Quite the opposite. The phenomenon is increasing in size and at the centre is the establishment of several institutions based around the production of independent video games.

I believe it is precisely this undefined condition that stimulates the need to produce definitions of the concept of independence. The latter are often self-definitions, produced by game developers as they try to position themselves in relation to the existent independent scene. Furthermore, the re-appropriation of the indie label by the mainstream industry highlights the difficulty of understanding what a radical outside to the discourses of independence could be: to what extent is it possible to talk about such acts as forms of appropriation or re-appropriation rather than seeing them as forms of the actual production of

[50] McShea T. (10 July 2014) 'We named the dog indie', *Gamespot*, http://www.gamespot.com/articles/its-impossible-to-define-indie-so-we-should-stop-u/1100-6420984/ [Last accessed 23/10/2014]
[51] Newhouse A. (15 July 2014) 'There is no other word to describe these games', *Gamespot*, http://www.gamespot.com/articles/dont-throw-indie-away-just-yet-we-still-need-it/1100-6421044/ [Last accessed 23/10/2014]

independence? The indie channels on Steam and Xbox Live Arcade, Indie City or the sponsoring of independent festivals by mainstream companies can be seen as producing in their own turn further definitions of what independence is rather than being just belated attempts to exploit a pre-existing phenomenon. This process of moving and contesting the boundaries of independence is, I suggest, what constitutes independent gaming: it produces and incites verbal performances; it facilitates the production of games, events, articles and festivals, as well as forms of hospitality (inviting gamers to play for free or inviting designers to distribute their games through dedicated online channels), which all contribute to defining who and what is included in the independent territory. In the rest of this chapter I will question what the implications are of this abundance of interpretations and how seemingly contradictory definitions can co-exist in the practices of independent production.

Independence as a discursive un-formation

In this chapter I propose to change the typical question posed in the academic context about independent gaming. Instead of asking *what* independence is, we should rather ask *how* it functions (i.e. how independence is defined while being performed by its promoters and practitioners) and *where* it is discussed and defined, in which contexts and on what occasions. I believe that from this perspective we could also look at independence as having its own series of events, practices, video games, conferences, online services, institutions and so on that are based on, or are a direct response to, the emergence of the concept of independence (regardless of which definition the term is given). Independence, from this perspective, would be seen as the result of a series of discursive stimulations that incite producers to respond to, participate in and relate their own practice to the concept of independence.

Independence can therefore be understood, I believe, not as one thing, one idea (or ideology), one business model or community. Rather, it is a social and historical construct through which a significant number of material and discursive productions are channelled. It can be positioned in a similar fashion to

the way in which Michel Foucault analysed other historical constructs, such as sexuality (1978). In his words:

> [Sexuality] is the name that can be given to a historical construct: not a furtive reality that is difficult to grasp, but a great surface network in which the stimulation of bodies, the intensification of pleasures, the incitement to discourse, the formation of special knowledges, the strengthening of controls and resistances, are linked to one another, in accordance with a few major strategies of knowledge and power. (Foucault 1978: 106)

Referring to the above quote by Foucault, I will not focus, particularly in the following part of this chapter, on what the 'major strategies' of independence are or could be. Instead, I will expand and articulate independent gaming in its 'surface network' of multiple occurrences. As I have argued, processes of redefinition of the production and marketing of a video game do not seem to follow precise guidelines when relating to the concept of independence. These processes instead delineate strategies that are often incoherent when confronted with each other. In line with Foucault's project of an 'archaeology of knowledge', I would like 'not to overcome differences, but to analyse them, to say what exactly they consist of, to *differentiate* them' (Foucault 1972: 188).

What does this process of differentiation entail? I will attempt, through this process, to preserve and analyse the various identities performed in the unformed field of independent gaming. I have already presented some examples where different actors have attempted to define independence: when the designers interviewed in the documentary *Indie Game: The Movie* propose an interpretation of their own work, when Molleindustria's Paolo Pedercini argues what independence should mean in the context of video game production and also in the academic context when questions about the nature of the indies are posed and articulated. There are no specific authorities or institutions that define what independence is, what objects it forms and what the conditions of its existence are. This amounts to a large number of voices that categorise and frame independent gaming through different kinds of 'serious speech acts' (Laclau 1993b: 434). More importantly, there is no scientific or legal discourse that defines independence in the context of video game culture (as much as there has been, for example, a legal discourse that has contributed towards the constitution

of the roles and limitations of producers and consumers in the case study of the hacking of PlayStation3, discussed in the previous chapter). I believe that independent gaming is worth studying, at this precise moment, because of this discursive instability and because of the resulting variety of subjects that come to be constituted through it.

In this sense I would like to talk about independent gaming as a discursive un-formation: a not-yet-formed 'regularity between objects, types of statements, concepts, thematic choices' (Foucault 1972: 41). In the absence of a legal, scientific or theological discourse that could somehow crystallise specific rules of formation (and structure a case of study similar to those discussed by Foucault), independent gaming works at the same time as a label for very different practices and also for redefining existing ones. From this perspective I believe it becomes quite significant to notice the proliferation of attempts to provide those missing rules, through discourses that have an authoritative role (documentaries, academic papers, conferences and so on) and propose to map, classify and list what is independent and what is not, and what the consequences of this phenomenon are.

In reading this discursive un-formation in its making and unmaking, through the production of definitions and their continuous contradictions, I turn to discourse theory as formulated by Laclau and Mouffe (Laclau and Mouffe 1985; Laclau 1993b; Jørgensen and Phillips 2002: 24-59). In their perspective, the interplay between the hegemonic crystallisations of discourse (a concept reinterpreted from the work of Gramsci) and the persistence of 'floating signifiers' that remain open to different ascriptions of meaning, points towards a theory that manages to take into account the both stable and unstable condition of the structures of language. In particular, their turn to a post-structuralist understanding of discourse allows the instabilities to thrive and multiply rather than being resolved. Instabilities of the concept of independence, rather than their resolution, are precisely what I intend to look at in this phenomenon, as they drive the production of discourses on the multiple meanings of being independent.

Moreover, Laclau and Mouffe look at how expressions are actively reduced by discourse in the moment of their articulation within a structure of signs. The

process of articulation of signs operates a double function. On the one hand, it replicates previous associations of meanings, or challenges those same associations while moving them towards a new, undecidable, terrain. On the other, it operates a temporary closure. In this latter sense, discourse is hegemonic (Laclau and Mouffe 1985). In their understanding of hegemony, Laclau and Mouffe turn to Gramsci, who was mostly interested in theorising the relation between power and the economic and ideological structures in a society. In the discourses surrounding independent gaming, the temporary closures of the meaning of independence cannot be reduced to the control exercised by an allegedly ruling class. There is instead a multiplicity of forms of power being enacted that define and classify the boundaries of independence. When game publishers, such as Microsoft and Valve, and academic scholars, practitioners and game journalists provide a temporary closure of the meaning of independence through their own words and actions, these can be seen as exercising a temporary hegemony.

However, independence keeps floating, as a signifier. Turning to Laclau and Mouffe's perspective can be useful precisely because it allows us to look at how independence can be at the same time open and closed. It defines an independent territory, but such closure never really manages to prevail over the multitude of similar attempts to exercise further authoritarian definitions. Independence is a thought-provoking concept to look at precisely due to its floating across multiple temporary grounds. Moreover, discourses of independence involve the construction of one's own identity in relation to other independent developers or the non-independent. Because of this necessary confrontation with other developers and other forms of independence, the claims of autonomy and emancipation are necessarily corrupted: independence can only be defined through the presence of the other, of that which is outside one's own territory.

Independence forces us to look at how the boundaries between oneself and others are always necessarily in contact with each other, thus it entails a certain degree of contamination. But what are the consequences of acknowledging the co-existence of a plurality of contaminated forms of independence? How is this inconsistency in the discourses on independent

gaming reflected in the subjects who perform these same discourses? What is at stake in living in a disputed terrain? What does this unstable condition lead to? In the following section I will attempt to answer these questions by drawing on Laclau's work on emancipation, which directly deals with the (im)possibility of tracing a line between oneself and others.

Independence(s): constituting boundaries between the particular and the universal

Laclau's *Emancipation(s)* (1996), which deals, among others, with the topic of multiculturalism, could offer a helpful rejoinder to the argument presented here. He approaches the relation between identification and alterity from a political perspective but also as an issue that involves the philosophy of language. Laclau argues that individuals, or specific social groups, are constituted through the construction of a form of particularity, a certain idea of uniqueness that establishes a difference with other groups of individuals. However, 'particularism', claims Laclau, when asserted in its pure form, is a 'self-defeating enterprise' (1996: 26). Laclau lists two reasons for this. The first is that each particular group, while claiming respect for its own particularism within a larger social context, has to make an appeal to a universal law, which transcends the particularism of any group (48). The second reason is that in asserting one's own particular identity one 'has to assert the identity of the other' (49): to propose or claim a form of particularism, while constituting a context to be separated from, also re-invents this same context.

Laclau intends particularism to be logically dependent on the universal. Particularism, according to Laclau, is entwined with the universal, with that larger context that is re-inscribed by introducing an element of differentiation. This does not undermine the possibility of achieving a multicultural society in which several 'particular' subjects co-exist, but at the cost of a redefinition of the universal itself when confronted with social particularities.

Understanding this entanglement via Laclau's work means, I argue, identifying areas where the limits of universal and particular contexts are being

redefined, and not only looking at them from a logical-philosophical perspective, or through the rhetorical construction of what independence is (always in relation to what it is not), but also understanding what sorts of discursive productions are involved in and solicited by this continuous process of temporary and strategic redefinition. The term independence assumes a separation between a previously constituted object and a new, detached one. When used in a context that is not, strictly speaking, related to the medium of the video game, independence usually evokes a separation on a cultural, political or economic level. It might also connote geographical divisions, where a visible element of the landscape marks the boundary between two territories.

This geographical separation is also occasionally repurposed in the context of video game culture. Some independent game conventions take place in buildings that are distant from those of correlated industry meetings. More often, independent tracks are based in a separate room or on a different day to the rest of the industry convention. The example of the Nordic Game Conference 2010 is particularly significant. The event took place in Copenhagen, Denmark, while its independent counterpart, the Nordic Game Indie Night, was intentionally planned to open the day before in Malmø, Sweden, on the other side of the Øresund Bridge. Similar choices mark the distance between the two sides of the game industry. The act of separation leads to the constitution of the other side, as a previous, hierarchically superior and sometimes opposed actor.

Although not explicitly related to the notion of independence, the Finnish convention Assembly, dedicated to computer hobbyists, can also be seen as hosting several conflicting and particular groups. Tyni and Sotamaa (2014) have looked at this event and at how, since its first edition in 1992, it has been changing due to the introduction of industry sponsors. The participants of Assembly have been negotiating, since then, their own independence from the institutionalised game industry by redrawing boundaries within the conference space. Dedicated events for hobbyists have been preserved within the convention but in a conflicted relation with the software and hardware companies that occupy the spaces next to them. Moreover, different interests of the event's participants overlap with each other. While some prefer to show their skills with demos (demonstrations of programming abilities, sometimes also involving

music and 3D modelling), others come to play video games with other participants. According to the authors, these two interests are seen as conflictual by many attendees (one is about making, the other about consuming game products); however, the boundaries between the two fade and open to forms of contamination because of the physical proximity of the participants. The relation with the game industries also opens to a form of hospitality, where equipment and technical solutions are shared between the guests of Assembly during the typical three days of full immersion in the spaces of the convention.

The aforementioned Nordic Game Indie Night proposed in its 2010 edition an interesting selection of games representing different kinds of independence, some of them in clear contradiction to each other. On closer inspection, it can be said that each of the six video games presented at the festival offered a different understanding of independence. Jonatan Soderström, also known as Cactus,[52] one of the most acclaimed designers in the independent scene, exhibited *Tuning*, a psychedelic game experience where controlling a rotating ball in a geometric scenario quickly becomes a very complex activity [See Appendix: images 27 and 28]. Cactus usually offers his video games on his own website, available for free download. Each game is designed in a few days (the number of working days required is displayed next to the description of each game) and is allegedly produced by Cactus himself, with no collaborators. According to the statements accompanying his video games, there is no budget, no market research and no business plan. Cactus invites his audience to a sort of anti-mainstream experience; he presents himself as not profit-oriented but rather attempts to propose original forms of game design.

In the context of the same edition of the Nordic Game Indie Night, next to Cactus's game, Frecle's *Youropa* was instead produced by a team of experienced game developers who, after working in the industry for about a decade, decided to plan their own productions and sell them online through Steam [See Appendix: images 28 and 29]. *Youropa* received grants and large-scale financing, took several years of production and has been conceived as a product to be sold

[52] Cactus defines himself on his own website: 'I'm a game developer living in Gothenburg, Sweden. I've been making small freeware games since 2004. My aim is to create interesting things, whether it be through visuals or gameplay mechanics. A lot of the games on my site are just small experiments dressed up as games. I'm glad that people still seem to enjoy them.' (Cactus 2014, cactusquid.blogspot.co.uk).

on the market. These two projects, exhibited one next to the other as representatives of the Scandinavian independent scene, draw two different boundaries to separate themselves, as independents, from the non-independent side. Cactus's claim for an artistic and economic independence in the production process of a video game is interpreted and applied in the opposite way by Frecle.

In its own turn, the Nordic Game Indie Night defines both of these games as independent by displaying them together in the same event. Despite the apparent contradictions between these two games, the presence of both does not appear to be a problematic issue for the festival organisers. In the application page of the Nordic Game Indie Night website, the organising group Copenhagen Games Collective answers the frequently asked question 'What counts as indie?' in these terms: 'Honestly, the term is a little meaningless. Everyone seems to have a different definition. Our answer is, we'll know "indie" when we see it. If you're not a AAA company and you're not working with a major publisher, chances are you do indeed qualify as "indie"' (Copenhagen Game Collective 2013). Despite the number of attempts to define independent gaming and question what it really means, the indeterminateness of the answers does not stop the use of the term and the emergence of contexts where independent video games are exhibited. There is a general acceptance of who the game developers represented in these festivals are and what can be expected from them. The more famous Independent Games Festival, held in San Francisco each year since 1998, also expects submissions to be 'created in the indie spirit by an independent developer', and does not further explain what this entails (Independent Games Festival 2014).

These and similar festivals present themselves as the authorities that define and allow video game developers to be exhibited as independents. But these institutions also work in a negative way, defining what is not independent, what is not allowed in the same contexts. In these processes of assigning to a video game its place inside or outside the independent territory, I would like to propose, drawing on Laclau's theory of emancipation (1996), that what is individuated and discursively enacted is a kind of particularism within a universal context. I argue that independence emerges precisely at the interplay between the particularism of each developer and its relation with the universal, the outside, the preceding and different territory of the mainstream industry. The

two sides also constitute each other in the act of denying any relation, collaboration or co-optation. This continuous process comes at the cost of negotiating one's own definition and relation to the outside. The result of the process, which I would like to discuss in the following section, is the constant need to talk about, analyse and describe the game developers as individuals.

Strategies of individualisation: the need to talk about the outside of independence

Independent game developers often discuss, or are brought to discuss during public interviews, about what it is that makes them different from the conventional, mainstream industry. Finding this element of difference is one of the discursive strategies used in order to construct their own individualisation. Cactus, for example, became particularly well known in the independent games community for his ability to design and release a video game in no more than a couple of days. He is celebrated by the likes of the Independent Games Festival, where he was nominated in 2008 (Excellence in Visual Arts and Excellence in Audio with the game *Clean Asia!*) and won in 2010 (Nuovo Award with the game *Tuning*). When he received the Nuovo Award, given in the category of original visual design, he remained silent on the stage for some time, sipped some water, and finally thanked 'Jesus [and God] for the inspiration to make this game'.[53] With this intentionally irreverent presentation, Cactus provided an anticlimactic moment of bathos that clashed with the declamatory style of the award ceremony as a whole. Cactus marks his distance not only from the so-called mainstream but also from other independent designers such as Blow, who instead appear as much more conformist in their attitudes to the established industry. Cactus marks his own difference through a variety of actions. His refusal to work for a stable company or to publish his games anywhere other than on his own website led to him being viewed as a representative of the advocates of pure indie gaming.

[53] The award ceremony and Cactus's speech can be seen on YouTube, 'IGF Awards 2010 Part 2/2', min. 4'00''-5'58'', https://www.youtube.com/watch?v=EDVZg9kZXEY [Last accessed 7/11/2014]

Claiming an irreducible particularism evokes a form of purity, which places Cactus in a different territory, not reducible to the rules of the universal one. However, the risk, according to Laclau, of claiming an absolute difference and particularism, is to relegate oneself to the periphery – a sort of 'self-ghettoisation'. Laclau argues, while analysing the concept of apartheid, that 'if the oppressed is defined by its difference from the oppressor, such a difference is an essential component of the identity of the oppressed' (1996: 29). The problem with radical separation is not really the act of separation per se. I propose instead that the issue to be considered here is what sort of outside is formulated in shaping these radically independent identities. Laclau continues: '[the oppressed] cannot assert its identity without asserting that of the oppressor as well' (29). Oppression is not necessarily a physical coercion but it is, at the same time, a limiting power and, in Foucauldian terms, always already and necessarily productive. What comes to be produced is not only the independent territory but also its outside, which often appears as a uniform coercive force. That is, an undifferentiated side, where the economic, social, cultural and political aspects involved in the production of a video game are predictable and imposed on the workers.

When Molleindustria's Paolo Pedercini argues that independence should be understood as a spectrum of possibilities, his assumption that 'the code monkey working on slot machines for Zynga'[54] would be the 'least independent developer' (Pedercini 2012) highlights that there is still a structural frame in this discourse that assumes the existence of the outside of independence, a supposedly non-independent condition, that we should avoid in preference for autonomous forms of game production. Even when the number of potential conditions of non-independence are multiplied and are acknowledged by Pedercini to be of different kinds and degrees, his argument still suggests a distinction between what is independent and what is not.

A further development of this approach, I argue, is to consider instead the practices of production of video games as involving a multiplicity of particular

[54] Zynga is one of the largest video game companies to become popular thanks to products developed for social networks such as Facebook. Zynga's games are often considered repetitive and unimaginative, as they are produced for the largest possible audience and with little care for original forms of game design.

approaches, none of them single-handedly constituting the universal and non-independent context. Rather, each is delineating, in its own way, an element of difference. This approach, however, comes at the cost of re-analysing not only independence as a plurality of forms but also non-independence in its multiple variations. In other words, it would entail a redefinition of the very distinction between the two sides as a multiplicity of different practices of production, not completely consistent or equal to each other but all mutually defining the other through a process of self-differentiation. Thus, not only particularism but also universalism needs to be looked at again in its apparent unity.

As Zerilli points out in 'This Universalism Which Is Not One', reflecting on Laclau's political theory: '[…] universalism is not One: it is not a pre-existing something (essence or form) to which individuals accede but, rather, the fragile, shifting, and always incomplete achievement of political action; it is not the container of a presence but the placeholder of an absence, not a substantive content but an empty place' (2006: 102). Molleindustria's view does not suggest the presence of a further outside in the continuum between independence and non-independence. In his view each game developer is potentially involved in this continuum, which means that anyone who is involved in the production of a video game could be assessed according to his or her degree of independence (and non-independence).

From this perspective independence becomes an enticement to a discourse of self-definition, a regulatory frame that produces the need to define and locate oneself in relation to this continuum. In Foucauldian terms, independence could be seen as a concept around which one organises a practice of care of the self. As Foucault argues: 'the care of oneself is a sort of thorn which must be stuck in men's flesh, driven into their existence, and which is a principle of restlessness and movement, of continuous concern throughout life' (2005: 8). From this perspective the discursive articulation of independence and non-independence can be seen as immediately productive of discourses and performances, and the productivity of such binary lies in the latter's unresolvable condition. As there is no solution to the problem of defining what becoming independent means, there is no end to the potential productivity of this concept and no final resolution to the quest for independence (as much as in the

Foucauldian understanding of the care of the self, the *epimeleia heautou*, there is no method to test when complete self-sufficiency is reached, or when sanctity is achieved).

Is this logic of negotiation between an outside and an inside, universal and particular, an essential condition of any claim of independence, and not only in video game culture? Is independence necessarily predicated on the constitution of these discursive boundaries? What is it that makes the emergence of this narrative in video game culture different from the use of the same term not only in a political context but also in the other entertainment industries, such as cinema or music? I believe these questions cannot be answered exhaustively, but I would like to propose that there is an interesting aspect of this narrative that seems to belong mostly to the video game context. The construction of independent game developers as individualised subjects takes place in workshops, meetings, conferences and incubators where game designers are instructed on how to become independent. The abundance of these almost educational contexts offers occasions to look at how precisely the constitution of a boundary between the first person and the others is solicited, curated and evaluated, and with what consequences.

Independence as regulated practice

Recent years have seen the rise of several contexts where presentations, workshops and meetings are organised to provide guidelines and suggestions to video game developers who want to be independent. On these occasions an expert or consultant usually provides instructional material on how to express oneself in a personal and unique form through a video game. This process involves advertising, communication with the press, direct contact with the audience through social networks, management of intellectual properties, relations with online distributors, and more issues focused on the economic sustainability of independent companies. These services satisfy the demand, mentioned at the beginning of this chapter, to overcome the increasing competition among developers in the independent sector, where introducing a

new product is relatively easy in economic terms. However, I believe there is a more pressing issue at stake here for the developers, apart from gaining the necessary visibility to sell a video game product. This sort of training focuses not only on how to market an independent video game but also on how to make sure it can belong to the category of independent.

What comes to be associated with independence is often a series of provisions and limitations on which actions are to be performed in order for a game designer to become independent. These often take the form of operational procedures, a series of dos and don'ts, lists and instructions. This process of becoming independent therefore appears to include not only verbal performances but also certain practical and operational behaviours. Independence comes to stimulate a need or desire (or probably a need to desire – the necessity of feeling attracted) to be in control of one's own production. This solicitation also produces specific contexts where the drive to become independent is seen as an operation that can be instructed.

Thus, independent gaming signals the introduction of explicit forms of 'care of the self' (Foucault 2005) in video game culture. Foucault distinguishes between the *cura sui* and *epimeleia heautou*, of the Roman and Greek cultures, and the Californian cult of the self. While the first are procedures to learn and practise in order to 'take care of the self' and access truth, the Californian cult of the self assumes the presence of a true, inner self to be discovered and then expressed and communicated. As I will soon discuss in relation to Execution Labs – one of the most important incubators for independents – this and other similar institutions provide a technology of the self that is grounded, as in the Californian cult, in the idea that game designers have an identity to express in their video games. Expressing one's own self is what a designer should desire, in this narrative. However, the desire might need to be instructed in order to be successful.

Also, the individual plays a significant role in these narratives of independent gaming, as an actor who brings an element of their own personality to the final product. More importantly, in these examples the relation between producer and product comes to constitute the object of a form of knowledge. Some of the institutionalised practices that are now emerging in independent

gaming are operating at both a conceptual and a practical level to create an institutionalised path to becoming independent. Such practices therefore come to constitute a further articulation of a more general self-regulatory practice, where the emergence of a different market and production process of video games materialises and is grounded in the constitution of individual identities, and of institutions where one can learn how to become this kind of individual.

The Execution Labs project, founded in Montreal, Canada, in 2012 and begun in January 2013, is one of the latest and major examples. One of the three founders of the project is the 'indie evangelist' (as defined on Execution Labs' website) Jason Della Rocca. Della Rocca has been involved for several years in the video game industry as a consultant and entrepreneurial expert. Before this latest activity at Execution Labs he had been presenting to, and consulting for, a large number of independent developers. Part of the outcome of his work consists of a series of videos of public presentations where Della Rocca suggests what developers could do in order to become independent, and why this choice is sensible and potentially rewarding.

Della Rocca's Execution Labs works as an incubator for new game projects by small teams of developers, and aims to provide the business expertise that most independent developers usually do not have. The incubator also provides expertise in public relations, infrastructure (working space, computers, development tools and Internet connection) and funding (Execution Labs 2013a). On top of this, selected applicants receive supervision, mainly on three aspects, namely 'business', 'creativ[ity]', and 'production' (Execution Labs 2013b). The idea behind such an organisation is that through this process applicants will become independent game developers and make profit on their games.

Execution Labs has an interesting way of interpreting independence. In the application process applicants are required to answer two questions, among others: 'Has your team (or team member) made an indie game before?' and 'What is your personal motivation to be an independent developer (if you are not already one)?' (Execution Labs 2013c). Being independent appears, in this application form, as a feeling and an expectation about one's own actions, a form of self-judgement and an ambition.

Execution Labs proposes itself as an institution that knows how to

channel ambition and personal motivation in the right direction and towards independence. In this narrative, creativity has to be regulated in order to become productive and marketable, and once this process is completed independence is achieved. The forms of mentoring and consultancy that Execution Labs offers are therefore oriented towards the regulation of the self, making a business out of the capacity to communicate personal creativity through a video game. The main service offered by Execution Labs is assistance in regulating the constitution of a particularism, a difference from the universal context, which the game development company then has to market to the community of video game players.

On the Execution Labs blog, on 6 February 2013, in a post entitled 'First Mentor at Execution Labs Sets a High Bar', we can see how this happens in more detail:

> Yesterday marked our first 'individual' mentor day here at Execution Labs. On Monday several dozen mentors spent the afternoon helping each team, which everyone agreed was super helpful. However, one of the things that sets [Execution Labs] apart from other incubators and accelerators is what happened yesterday. Adrian Crook, who has been in the biz [*sic*] for years and is a professional mobile/social gaming consultant […], spent the entire day at the Badger Lair. In the morning Keith and Adrian sat down for a wide-ranging interview-style Q&A session with the entire Lab in attendance asking follow-up questions. After lunch, Adrian spent an hour or so with each team deep diving into their gameplay, monetization systems, and everything in between. This is the kind of guidance that most indies simply can't get, and here's the kicker: we're doing this nearly *every week.* (Execution Labs 2013d)

Furthermore, the guidance often combines practical advice with motivational lectures on how to improve one's personal take on game design, thus making a particular independent video game stand out from the rest of the offerings on the market. On 4 March 2013, three important guests visited Execution Labs. The first was game designer and scholar Eric Zimmerman, who 'shared his thoughts on what it means to be a game creator and principles to guide yourself' (Execution Labs 2013e). Zimmerman introduced his lecture, entitled 'Being a Game Designer: 10 Principles for a Thoughtful Practice', thus:

> Most game design talks focus on how to make a better product – a more successful game. This session frames what game designers do in a different way. I want to ask the question: What does it mean to be a game designer?

> Apart from the problems and challenges of designing particular games, what are the attitudes and approaches that cut across all kinds of games that can connect us more deeply to what we do on a daily basis? […] Could we take a similar approach to game design? Is it possible to think about game design as a way or mode of being? The talk is structured as a series of 'principles.' The principles help describe games as a cultural form, and they also describe game design as a creative practice. The principles are meant to anchor a set of ideas around what being a game designer can mean. Each principle will be presented with examples from my own experience as a designer, player, and teacher. (Execution Labs, 2013f)

On the same day, before Zimmerman's talk, Execution Labs hosted 'happiness guru' Scott Crabtree, whose consultancy work deals with how to be happier (and therefore more productive) at work. Following Crabtree, 'leadership master' Christopher Avery visited the studios. Avery's main focus is on how to take better decisions at work and how to develop leadership 'every day in yourself, your team and your entire business' (Avery 2013).

Execution Labs is representative of a specific part of independent gaming, in which the marketability of the final product is crucial (Execution Labs earns money back from the sales of the video game products designed in its offices during the incubation period). Jason Della Rocca, who has been co-chair of the International Game Developers Association (IGDA), also chairs the IndieCamp, a yearly workshop focused on 'funding, marketing, distribution and other business-related topics for garage and indie developers' (IGDA 2012). Similarly, the convention IndieCade, held each year in the United States, provides several occasions for networking with other independents, and is mostly concerned with discussing how to be independent and how to make independence economically feasible. The IndieXchange sessions take place before the conference and are explicitly organised to share knowledge on practical matters. This is from the FAQ section on the official website:

> [Question:] What are the topics of IndieXchange sessions?
> [Answer:] All IndieXchange sessions are designed as practical and hands-on clinics specifically for Independent developers. Past clinics have included PR, pitching, and IP issues. Each of these clinics provides sample contracts, PR plans, and other useful elements. (IndieCade 2013a)

In the same context, there is also the Game U – IndieCade's Gamemaker 101:

> Game U is a special program from IndieCade that focuses on pulling back the

> curtain on the game development process, and the work that game designers do. Specially designed [*sic*] for a diverse audience from entertainment and media professionals who want to learn about the game development process to amateur game creators who are considering trying to become professional. (IndieCade 2013b)

In Europe similar events take place in Scandinavian countries and in the United Kingdom. One of the most prominent events for independent game designers is the Indie Dev Day, which takes place in Brighton, UK, during the Develop conference, addressed to the mainstream industry. On 11 July 2012, during the latest Indie Dev Day, independent designer Michael Movel from game company Fat Pebble delivered a presentation about what it means to be independent and how to manage independence through the production and marketing of a video game. Interestingly, his case is particularly complicated because of an agreement with game publisher Zynga, one of the biggest publishers for online video games addressed to a casual audience. Despite this agreement, Movel explains how and why his work should be considered independent. According to Movel, an indie developer is someone who creates his or her own game, has creative control and cares about the quality of the final product. Movel argues that the absence of a marketing department is one of the three most important 'indie power-ups', the other two being the absence of any restraint ('you are free to push the boundaries, you don't have to make another First-Person Shooter or strategy game' Movel 2012) and individual passion, which contributes to the differentiation of each product. The absence of a marketing department, in particular, is also one of the greatest challenges, according to Movel. In his specific case, Zynga had stepped in during the production process, when a few videos of Movel's new game had already been released, to help with the marketing of the game. Movel points out that, despite the intervention of a publisher, he has full creative control and is therefore to be considered independent.

Movel then explains how, precisely, a video game should be marketed, presenting it as the result of a personal, almost intimate process. Part of the marketing takes place on social networks such as Twitter, where the independent designer is expected to present the game and narrate the production process itself, engaging in discussions with the potential players (and buyers) of the

game. These comments are supposed to show the developer at work, while struggling to reach the final stages of the production process and communicating the personal fatigue of taking care of the whole process on one's own.

This process is regulated through a precise technique, where the number of tweets to deliver each day, the press releases and the preview videos are predetermined. They have to be consistent and engage the audience. The process is so precise that it can be put in the hands of a professional company, as happened to Movel with Zynga. Such a precise communication, and the possibility to outsource it to a separate company, does not undermine, according to Movel, the claims of freedom and self-expression often associated in the context of video game culture with independence. What is communicated is still a very personal and individual perspective, a passionate understanding of game design, despite this communication being strongly calculated, almost numbered.

Independent gaming, in this more recent development that I have introduced here, involves the emergence of practical organisational techniques, such as application forms, workshops and incubators, of which Execution Labs is an example. This way of approaching the notion of independence is not bringing us to an explicit understanding of what independence is but it is providing explanations of *how* to be independent, and *where* independence should be negotiated. On these occasions the process of becoming independent is transformed into the object of knowledge. Independence here becomes a *methodology* for the creation of difference and particularity.

The question I would like to pose, in the conclusions, is how such a methodology could be evaluated not just in terms of its effectiveness in guaranteeing autonomy to a game developer, so that he or she might also be called independent. I would like to question the possibility of introducing some new standards of evaluation and different criteria for deciding when independence is also what we might term a *good* independence. How else can the practice of taking care of one's own video game become, in the context of video game culture, a *good methodology*? In the final part of this chapter I will propose that independence might also become an ethical practice, precisely because of its undetermined condition and of its necessity to include a confrontation with a form of alterity, whether the rest of the video game industry or the other

independent developers.

Conclusion: independence as a form of ethics

We could interrogate the extent to which the production of techniques to communicate the individuality of the game developer through their game can be understood as an example of a more general production of techniques of the self. In a Foucauldian sense, the production of an independent video game, particularly in the latest development I have introduced, could be seen as a mode of being, to be achieved through specific principles (as those offered by Eric Zimmerman and the hosting institution Execution Labs). Thus it might also be seen as a different way to approach the hermeneutics of the subject (Foucault 2005) as based on a practice of production. What is involved in this *modus operandum* as it becomes a general *modus vivendum*, and as it represents a re-evaluation of the practice of doing and reflecting at the same time? Can independent gaming be redefined as a means to 'know what you are doing', and therefore a practice that becomes a form of politics, as proposed by Richard Sennett in *The Craftsman* (2008), in relation to Hanna Arendt (1958)?

Joanna Zylinska, in *Bioethics in the Age of New Media* (2009), argues about similar forms of self-management with regard to the phenomenon of blogging. Bloggers can be seen as being part of a larger 'neoliberal imperative for individualized productivity' (96) but they can also be questioned with regard to the forms of hospitality that this individualisation, which 'necessarily' becomes a form of narcissism, entails. To what extent can we then think in terms of an ethical narcissism, 'one which is more open to the experience of the other as other' (88)?

Being an independent game designer could become a way of doing games through the ethical question of taking care of the other, of the non-independent or the diversely independent, the other form of independence which-is-not-mine. This other, as we have seen, is always and necessarily there; he, she or it is intrinsic in the notion of independence. It can be the other to be separated from (the mainstream industry, for instance), or the other who is defining him or

herself as independent but differently than someone else (the small company that makes clones of mobile games and the solo artist can both call themselves independent). What independent gaming is introducing into video game culture is more than an alleged revolution in the management of game production, or in the broadening of the availability of the means to make and publish a game. The original aspect it is introducing rather lies in the need for game designers to relate themselves to a form of alterity.

As Zylinska again argues, through Emmanuel Levinas, the infinite alterity of the other, and its undecidability, are at the foundation of discourse (Zylinska 2005: 14). Discourse needs confirmation in an interlocutor, or in a form of otherness that confronts, evaluates and judges it. Independent gaming is showing us that even the highest level of narcissism and separation from a more or less imaginary mainstream context, precisely because of this act of separation, needs to confront itself with a form of alterity. The difficulty that independence poses, therefore, is in how this alterity is accounted, taken care of and hosted.

Producing one's own identity through the production of a video game, and making sense of this practice in relation to other forms of independence and non-independence, simultaneously generates forms of alterity. How, to what extent and with what consequences can the narcissism of certain kinds of independent video game design remain open to such alterity and also become an ethical game design?

The most pressing question I have tried to approach in this chapter is how diverse claims of independence come to constitute a practice for the definition of the identity of the video game producers. From this perspective, it seems to me that independent gaming is a name given to a set of discursive practices related to the production of a video game through which the game developer seeks to answer the question, 'Who am I?' I am here generalising about a phenomenon that I have tried, so far, to keep untied in its multiple forms. But if a unifying proposition had to be found, for the sake of a summarising and conclusive note, then I believe that this quest to define oneself is what characterises independent gaming. More than a practice of production, it appears to be mostly a practice of self-production.

Moreover, the incessant emergence of discourses that attempt to describe

what independent gaming is, how to be part of it and also how to succeed and make a living out of it, could also be reinterpreted as not only a practice of self-production from the side of the game developers but also a way to avoid, so to speak, self-consumption. The risk of not regulating the self, not emerging as a defined first person singular, could come at the cost of disappearing in an undefined universalism 'which is not one' (Zerilli 2006). Indeed, this also seems to be part of the anxiety inherent in the self-exploitative regimes that some independent developers prepare for themselves. In the documentary *Indie Game: The Movie* there is a moment where this appears, I believe, quite clearly. It is when designer Phil Fish, developer of the game *Fez*, narrates his own personal story. The difficulties he is facing in concluding the video game are not only economic but existential:

> The game has become a bit of a reflection of me over time. It certainly wasn't the intention at first. […] and now we're here. We don't have any money. I'm over-worked and over-stressed. I'm on the line. Me. My name... my career. If this fails, I'm done. I don't think I'll work in games again. And it's not just a game, I'm so closely attached to it. It's me. It's my ego, my perception of myself is at risk. This is my identity: Fez. I'm guy [*sic*] making Fez. That's about it. If that doesn't work out then […] I would kill myself. I would kill myself. That's my incentive to finish it. Because then I get to not kill myself. (*Indie Game: The Movie* 2012)

Narcissism can turn into solipsism, and when the only thing that matters for the independent developer is the game he or she is making then, at the risk of making too big a statement, life itself can be under threat, as there is no form of alterity to account for, or to seek confirmation from. Independence forces one to look for different others. It appears as a necessity for tracing the boundary of one's own independence but also for looking for contamination and similarity, for finding other independents that can attribute value to an otherwise isolated work. Independence can be a repressive power that forces one to say what one *is not*, but it is also productive. It produces alterity in the first place, and movement towards the other.

I have offered in this chapter a reading of an ongoing practice, a phenomenon that is changing, quite literally, as I am writing about it (many of the examples and references in this chapter are very recent events). This, I believe, is

one of the challenges and also one of the most interesting aspects of studying the phenomenon of gaming. Suicidal notes such as the one mentioned above by Phil Fish, claims of anarchy and political critique such as those pronounced by Molleindustria, and workshops on how to guide yourself and become successful independent designers, all co-exist as part of the process that independent gaming is. This broad label can be seen as categorising a series of ongoing negotiations over the processes of individualisation of various video game producers.

Chapter 5
Narratives of engagement: gamification and the performativity of video games

In this dissertation I have been debating the emerging narratives that attempt to define the allegedly new forms of relation between video gamers and video games. Narratives of conflict and independence have been presented and critiqued in relation to the discourses they tend to replicate, such as the separation between producers and consumers. Reading these same narratives, I have started to delineate and propose potential alternative views and forms of intervention in the relation between gamers and games – starting precisely from questioning how the separation between the two comes to be enacted. I have argued in favour of some alternative narratives that would allow us to reinterpret the practices of production and consumption of video games while also reconsidering the ethical and political issues implicated in these same practices.

However, I believe that we need to address in more detail the performative potential of these different narratives I have been outlining. What is at stake in proposing such alternatives? How are these supposed to bring about different realities, and what is it that should make them more appealing than the existing ones? In this chapter I intend to answer these questions by looking, more generally, at how the issue of performativity is currently enacted in the discourses surrounding gamers' games. While the ultimate aim of this chapter will be to consider the possibilities opened up by academic contributions with regard to the understanding of video games, these considerations will be reached through an analysis of how similar questions – although very differently phrased – are currently emerging in the debates on the effects of video games and on the possibility of channelling these effects for economic and social purposes.

In this final chapter I will discuss the relatively recent interest, expressed in the field of game design, in developing video games that can potentially

influence players in their everyday practices, in a more or less controlled way. The phenomenon, alternatively known as serious games, games for change or games with an agenda, generally refers to the design of video games aimed as a form of critique or used for political and activist purposes. The underlying idea of these games is that game design can be used for more than mere entertainment, and that it could be applied to serious contexts. Players are supposed to learn something from these games, or be influenced in more or less explicit ways when it comes to their thinking about a serious topic of contemporary significance.

In more recent times, specifically since 2011, a similar approach has been adopted by the marketing industry. Interestingly, here the topic has also been presented through a political lens. In the view of the promoters of this more recent variation of the serious games phenomenon, understanding how to develop games that can effectively influence human behaviour is beneficial for businesses as well as having a social purpose.[55] In this chapter I will discuss games such as *SuperBetter*, where the player is encouraged to follow real-life goals, such as losing weight or recovering from an injury, through a series of steps presented in a game-like scenario. Another popular example is *Nike+*, by the sports company Nike, where sport practitioners are invited to submit the scores of their performances in order to have them compared with those of their friends and neighbours – consequently motivating people to practise sports. These and other similar games have been presented, through a series of TED talks and self-help trade books, as part of a narrative of engagement with video game players who could collectively gather the energies usually spent on a video game to fix the problems of the world – while possibly contributing to the business of a company. Gamification is the name most often given to the process of transforming an experience into a game-like environment, with the purpose of engaging players in the resolution or improvement of a real-life situation.

Engagement is the keyword of gamification. One of the best known texts about gamification, *Gamification by Design* (Zichermann and Cunningham 2011) starts precisely with a definition of engagement:

[55] As will be seen in this chapter, references to positive psychology, and particularly to Mihaly Csikszentmihalyi's theory of flow (1990), are often used in this context.

> The term 'engagement', in a business sense, indicates the connection between a consumer and a product or service. Unsurprisingly, the term is also used to name the period in a romantic couple's relationship during which they are preparing and planning to spend the rest of their lives together. Engagement is the period of time at which we have a great deal of connection with a person, place, thing or idea. (2011: xvi)

However, for Zichermann and Cunningham this definition is a problem as it is too broad. Therefore they propose to create a metric to break down engagement:

> We would be better off thinking of engagement as being comprised of a series of potentially interrelated metrics that combine to form a whole. These metrics are: recency, frequency, duration, virality, ratings. Collectively, they can be amalgamated as an 'E' (or engagement) score. (2011: xvi)

The need to count, number and evaluate appears quite often in gamification. It is frequently brought forward to record data and compare results. In one of the most often mentioned examples of gamification, what comes to be quantified is life itself. This is what *NikeFuel*, a recent development of the *Nike+* series of sport applications, states in its advertisement:

> Our minds, our bodies and our experience all tell us that movement is life and that the more we move the more we live. It's something athletes have understood from the beginning. The kind of movement it takes to improve your game is the kind of movement it takes to improve your life. But unlike sport, life doesn't come with convenient ways of measuring movement. So we developed one. *NikeFuel*: a single universal unit uniquely designed to measure the movement of the entire human body for the entire human race, whatever your weight, whatever your gender, whatever your activity. It's that simple and that revolutionary. So get out there, find what fuels you and get moving. (Nike 2013)[56]

NikeFuel is a service based on a wearable technology that counts the heartbeats of the body during its daily activities. In so doing it provides a number that is supposed to quantify movement – and life, which is allegedly the same thing. Again, what can be seen here is an attempt to engage sport practitioners, and potentially beginners, through a service that quantifies what would otherwise be difficult or problematic to quantify.

In this chapter I will suggest that this specific idea of engagement, as it is

[56] Nike Inc. (2013) 'What is Fuel', *NikePlus.com*, http://nikeplus.nike.com/plus/what_is_fuel/ [Last accessed 8/11/2014]

presented in the books on gamification and its applications, has a problem with the notion of life: participation and involvement of the players should have an impact, in the theories of gamification, on their daily lives. However, the ways in which this impact is performed brings about a rather limiting concept of life, one that remains static rather than being in movement. I will suggest that reconsidering life and movement can be crucial in rethinking engagement, gamification and more generally the performativity of video games. I will do so through the philosophy of Henri Bergson and some more recent contributions in anthropology (Tim Ingold) and media studies (Sarah Kember and Joanna Zylinska) that have been closely inspired by Bergson's notions of intuition, creativity and vitalism. Bergson's idea of life as movement, strikingly similar to Nike's slogan, will be seen in its radical difference to what Nike and the gamification "gurus" have been proposing so far.

I will first start by discussing some of the ways in which gamification has been presented and critiqued. In the second part of the chapter I will argue how an alternative narrative of engagement can be articulated.

This alternative narrative of engagement will ultimately lead to a vision of gamers' games that will be more radical, and hopefully more interesting, than the one that is usually presented in the mainstream media, game studies and industry reports, as a new trend towards the involvement of consumers in the production of games and game content. Such a different vision will be articulated at the end of the chapter as potentially leading to what I have called a creative study of video games: a proposal for game study seen as a form of invention, which could bring about new narratives while taking responsibility for evaluating its own contribution to the debate. The examples I will bring from the field of game art, Gazira Babeli's *Come to Heaven* (2006) and Bittanti-IOCOSE's *Game Arthritis* (2011), will be seen as possible ways of practising game studies by other means, and yet reflecting on the possibilities of *being engaged* within the culture of video games by participating in it. They will also be presented as examples for inventing new questions and ultimately bringing the notion of life into the discourses on the relation between gamers and games.

Gamification, or how to do things with games

> Gamification as a term originated in the digital media industry. The first documented use dates back to 2008, but gamification only entered widespread adoption in the second half of 2010, when several industry players and conferences popularized it. (Deterding et al. 2011: 1)

Gamification is a relatively recent term in the discourses surrounding video game culture. Extensive use of the term has been reported from 2010, while its origins are probably to be found in a British consultancy company, Conundra, founded in 2003 by game designer Nick Pelling, who claimed to be specialising in 'gamification' (Deterding et al. 2011; Werbach and Hunter 2012). Conundra, not currently in service, focused on helping 'manufacturers evolve their electronic devices into entertainment platforms' (Pelling 2012). Conundra's business consisted of offering consultancies to companies interested in attracting new customers by implementing game features in their offer. Such activity was given the name gamification on Conundra's website. In more recent times, the idea of gamifying a business has re-emerged, not necessarily directly with reference to Pelling's first attempt but in a very similar vein.

Since 2011 the marketing/consultancy sector has been re-evaluating gamification as a potential source of revenue. The last few years have also witnessed the emergence of several events and publications that have contributed to defining gamification. Zichermann and Cunningham's text *Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps* (2011) is the most popular, as are Zichermann's website Gamification.co and the associated annual conference, Gamification Summit, held in San Francisco every year since 2011. Jane McGonigal's work, culminating in her contribution at the TEDtalk series in 2010, is also concerned with selling gamification to corporations.[57] In her book *Reality is Broken: Why Games Make Us Better and How They Can Change the World* (2011) she mostly looks at her own work as a consultant for McDonald's, the Olympic Games organising committees, and other companies for whom she organised marketing campaigns based on alternate

[57] Jane McGonigal's talk at TED is entitled 'Gaming can make a better world'. Since its publication it has been viewed by more than 3 million people, according to the TED website. Available from http://www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world.html [Last accessed 24/10/2014]

reality games.[58] In McGonigal's view, gamification is not only a new goldmine for designers and business makers. It is also a tool for social policy and for changing the world.

From her perspective, gamification is the term that describes a new age where gamers can collectively use their problem-solving skills not only in the context of a digital game but also for solving social and political issues. McGonigal's idea of fixing the world through video games has generated, quite predictably, heated discussions about her over-simplistic proposal of a unified world with clear problems to be fixed by means of design.[59] In addition, her view tends to maintain an unproblematic acceptance and positive evaluation of forms of civic engagement, as good per se and as an essential part of progressive politics.

Similarly, although in a different field, the genealogy of such positive re-evaluation of engagement and participation has been discussed by Claire Bishop in the context of contemporary art practice. Bishop argues that, particularly in the United Kingdom during the New Labour government, art was redefined, by means of government policy, as a socially inclusive tool for creating employment and helping local communities. Art as a social tool thus comes to be evaluated not on the basis of its ability to pose questions but rather on its capacity to solve problems by engaging citizens and involving them in art projects. Redefined as an inclusive and democratic practice, in many aspects art comes to substitute welfare (Bishop 2012).

Digital gaming, in Jane McGonigal's vision, could and should play a similar role. Game designers could become the new social entrepreneurs, and citizens gamers. The decision as to what comes to be defined as the problem, and a solution to it, should be put in the hands of game designers. Gamification thus becomes, from this perspective, a technique that allows for such an ambitious change. Terms such as engagement and participation, which receive positive connotation in other contexts, including art practice, come to be further

[58] Alternate Reality Games, or ARGs, are games that take place to a large extent in the real world. Players are usually asked to take action in public spaces in order to progress with the video game. ARGs usually make use of geolocation and mobile devices to track the activity of the player and record his or her movement.

[59] Poole, S. (12 March 2012) 'Opinion: Devastating Humanism', *Edge-online*, http://www.edge-online.com/features/opinion-devastating-humanism/ [Last accessed 8/11/2014]

articulated in the discourses surrounding gamification.

In fact, gamification is promoted (and, ultimately, sold through consultancies) as a technique. Gamification appears to be a process through which cultural and social change could be achieved. More importantly, it is not just suggested as a generic approach to the design of playful experiences through which citizens/gamers should fix the world. It is narrated as a technique with some very precise instructions. McGonigal herself includes in her talk at the TED series a list of rules for living and playing well. Such rules all appear to have a scientific foundation that supports their authenticity; they are based on supposed facts and evidence that provide the grounds for making gamification a technique with predictable results.[60]

As a technique, gamification can be seen, through Foucault, as being grounded in, and at the same time bringing about, a specific form of truth (Foucault 2005). The techniques of knowledge of the self, analysed by Foucault in Greek and Latin times and then in Christian and contemporary culture, construct the possibility of arriving at and articulating the truth about oneself. The existence of a form of truth is replicated in the discourses surrounding gamification. In these discourses, truth is presented as the equivalent of the collection of all possible data about one's body. In McGonigal's games, self-improvement is defined through the evidence of statistics and medical research, and the standards for a good life are seen as a direct consequence of this data. In the textbooks on gamification, such as *Gamification by Design* (Zichermann and Cunningham 2011), gamification is presented as a technique based on the collection and analysis of previous experiences in user engagement. Resulting from the systematic analysis of previous successful cases, gamification can be sold as a reliable, trustworthy technique for engaging audiences. In this view it then becomes possible, in other words, to tell the truth about gamification and its effects. It also becomes possible to talk about a correct form of gamification as opposed to a wrong kind of gamification, which could be imagined as being based on misleading or incomplete information, or relying on unquantifiable aspects.

[60] Suggestions include 'Don't play more than 21 hours a week', because an average of 3 hours per day releases the right amount of dopamine and more than this can cause depression and affect 'real-life goals'. Much of McGonigal's perspective on happiness and satisfaction, and how these can be channelled through design and used to solve social issues, is allegedly inspired by theories on psychology and, in particular, by the theory of 'flow' by Mihaly Csikszentmihalyi (1990).

It is these aspects of gamification that have made it what it is known as today: a series of practical and operational suggestions on how to involve users (be they customers, citizens or gamers) and maximise their performance towards a specific goal. In the previous chapter, I discussed how independent game production is increasingly becoming, in some contexts, a form of institutionalised knowledge where the development and marketing of a video game product is organised through a series of structured choices that come to be associated with the concept of independence. Similarly, gamification tends to take the form of a technique, a precise set of design solutions to gamify a certain experience. Gamification has been invented and narrated with the purpose, in the first place, of being a regulated and regulatory practice. It is born as a topic for design consultants, as a pitch for a new category of user-experience gurus and advertisement strategists.

It could then be asked, following Foucault's perspective, what kind of self is created through and by this specific technique. The gamified self is constructed through the collection and archiving of data about the user. This data needs to be first archived and processed to later become part of a game, and is collected according to a principle of transparency: gamification plays with the facts about the user, and attempts to assist the user in improving these same facts, these truths about him or herself.

This very notion of the self is evoked by the Quantified Self movement. The Quantified Self movement originated in a context similar to that in which gamification was first promoted. It was in the TED Talk series, in around 2010, that the idea of the Quantified Self received major exposure through the words of experts involved, mostly, in the editorial team of *Wired* magazine.[61] The movement promotes the introduction of technologies for the measurement of daily activities in the lives of individuals. Collection and data processing is oriented towards the improvement of life, here intended as the sum of the data about a person's body as it is generated during daily activities. The quantified self

[61] Gary Wolf, author and contributing editor at *Wired* magazine, presented his idea of the quantified self at a TED Talk in June 2010 (http://www.ted.com/talks/gary_wolf_the_quantified_self) and during the '*Wired* Health Conference: Living by Numbers', October 2012 (http://fora.tv/2012/10/15/Wireds_Gary_Wolf__Kevin_Kelly_Talk_the_Quantified_Self) [Last accessed 24/10/2014]

is also promoted as a solution to medical problems and for the improvement of certain characteristics of the body. Gamification can actually be seen as a further step in the process of quantifying the self, in which the improvement of life happens through a game-like environment and towards the establishment of practices of participation between users.

However, the principle of truth that underlies the quantified self has been critiqued by Gary Hall (2011) for its political implications. Hall argues that the idea of the transparency of data, and of the very possibility of acquiring data as a transparent process, is compromised by the necessary presence of an agent who decides how and why this data should be acquired in the first place. Transparency is contextually defined by that same agent who is collecting the data, a process that is not necessarily transparent in its methods and purposes. Hall argues that metadata, as the key principle that makes data hierarchically organised and accessible, is what undermines the notion of transparency as it introduces a contingent perspective into the organisation and collection of data. Thus, the alleged transparency of data ultimately relies on a rather opaque point of origin. Hall points out:

> All information and data is ordered, structured, selected and framed in a particular way. This is what metadata is for, after all. […] The specific ways in which metadata is created, organized and presented helps to produce (rather than merely passively reflect) what is classified as data and information – and what is not. (Hall 2011: 20)

Hall sees the practices of quantification and data visualisation as emerging within the humanities and becoming more and more relevant (in what is often termed the digital side of the humanities). However, this emergence appears to Hall to be mostly a response to political pressure towards a measurable and quantifiable kind of academic research (which makes it possible later to sell the outcome of research as published papers identified within a numeric system based on referencing, usage and other quantifiable factors). Hall's answer to this would be to move towards a re-evaluation of the creative aspects of the humanities: making data accessible is not enough to be able to make a claim about that very reality the data is supposed to explain. Gamification appears to me to respond to a similar pressure towards quantifiable effects, although one

exercised in the field of the design of video games. Gamification provides a justification and a proof that video games can make a difference and influence their players. In this chapter it is precisely the need for such proof and justification that I would like to discuss and, along with Hall, provide a proposal for a creative approach to the study of video games, one possibly closer to the field of the humanities.

Moreover, gamification as a technique is what makes it marketable in the first place. It is for this reason, I believe, that texts such as *Gamification by Design* by Zichermann and Cunningham (2011) are essentially presented as lists of case studies where this technique can be applied in order to inspire designers to transform existing businesses into gamified experiences. It is also for this reason, I propose, that critiques of gamification (some of which will be introduced shortly) have been addressing an obvious point when claiming that gamification is not much more than a marketing strategy. In fact gamification, as we know it through the words, books and public talks of those who have been promoting this concept, has never been presented as much more than a marketing tool. When it comes to be associated with a form of social entrepreneurism, it is still listed under a business approach. Even when Jane McGonigal claims that games will change the world, or when Gabe Zichermann, in his Gamification Summits, argues that a new generation is growing up through playful simulations, their bottom line is that understanding and orienting such potential for businesses require a new kind of expertise. Such expertise can be acquired through training at one of the gamification workshops around the world or bought as a consultancy, but it always requires an invoice to one of the aforementioned authors. If it is a ploy to introduce new forms of consumer exploitation, then it is quite explicitly so, and certainly not part of a hidden agenda. What is more interesting, I believe, is how a tool for marketing comes to blend with forms of social intervention, so that gamification becomes a technique for improving businesses as well as society as a whole. Also, as I will argue, what gamification gurus are now proposing appears to be consistent, in its theoretical background, with the theories of game design that have been taught in recent decades in academic programmes about video game development, and in publications on this same topic.

Examples of gamification occupy a significant proportion of books such as *Gamification by Design* and similar how-to publications. Among the most referenced successful cases of gamification is *Nike+*, a product by the corporation Nike.[62] *Nike+* is a mobile device that helps users track their running activity through GPS (Global Positioning System). Recently released as a smartphone application, *Nike+* keeps a record of the time, weather conditions, pace and route of the sporting activity. When the performance is over, *Nike+* saves the data and provides statistics about the runner's progress (or lack thereof) in comparison to previous performances, to their personal contacts, or to neighbours who run in the same area. *Nike+* serves to motivate the user by showing their goals and achievements while also keeping a detailed record of every workout session. The *Nike+* website lets users log in and access all personal data, in a graphic style largely influenced by contemporary video games and social networks [See Appendix: images 31 and 32].

Another allegedly successful example is *SuperBetter* by Jane McGonigal.[63] According to McGonigal, *SuperBetter* is a game that helps players achieve any possible goal in life by offering a systematic self-improvement guide. Losing weight, for example, is divided into a long series of daily tasks to be achieved and registered on *SuperBetter*'s website. The website offers a constant flow of deadlines and goals to reach while mutating the lexicon and graphic of video games: users score points, advance in the rankings and are awarded badges and titles, all the while achieving real-life goals [See Appendix: images 33 and 34]. *SuperBetter* assumes that a best possible scenario, for human beings and humankind as a whole, could actually exist. It is the scenario in which all the goals of the game are achieved and the player has taken care of him or herself in a fulfilling way. In *SuperBetter*, the player is expected to provide data about him or herself on a daily basis – data that also necessarily has to be true in order for the game to have any effect. Truth is therefore constructed; it is made by the game and its players through the act of playing. It is, however, not a theological transcendental truth, as in the Christian hermeneutics of the self (Foucault 2005). This is a much more mundane kind of truth, yet still confined in the realm

[62] Available from http://nikeplus.nike.com/plus [Last accessed 24/10/2014]
[63] Available from https://www.superbetter.com/ [Last accessed 24/10/2014]

of the obvious and the taken for granted, still undisputable (if not by more accurate data), and similarly brought forward for the purpose of serving the individual in his or her own self-judgement.

Gamification is not only confined to the realms of self-improvement and physical health. Other examples include *Stack OverFlow*, an online community of programmers, where each user can score points by assisting other members of the community.[64] *Stack OverFlow* regulates the social capital of the programmers, motivating their personal pride as well as their inclination to help and assist each other. Leaders receive an incentive to keep their leadership unchallenged, although the entire system rewards only on a social level and not in economic terms [See Appendix: image 35].

Zichermann and Cunningham, in *Gamification by Design*, also mention early examples such as the loyalty programmes of airlines or the coffee-points offered by coffee shops such as Cafe Nero that motivate users to visit the same shop and receive a free coffee after reaching a certain number of purchases. Popular websites such as Foursquare and LinkedIn also integrate early forms of gamification by awarding points and titles to the most active users, and quantifying the amount of personal data uploaded on the websites in order to encourage prolonged and repeated use of the online services [See Appendix: image 36].

In the last year, gamification has received significant visibility, and its promoters have managed to influence policymakers to include it as a keyword of one of the key areas for future investment. The *Horizon 2020* document by the Research and Innovation sector of the European Union, published in early 2014, includes 'advanced digital gaming/gamification technologies' as one of the key areas for research and development. The document states that the European Union will invest in this area, for the following purposes:

> Digital games and gamification mechanics applied in non-leisure contexts is an important but scattered industry that can bring high pay-offs and lead to the emergence of a prospering market. Digital games can also make a real change in the life of a large number of targeted excluded groups, enhancing their better integration in society. This requires, however, the development of new methodologies and tools to produce, apply and use digital games and

[64] Available from http://stackoverflow.com/ [Last accessed 24/10/2014]

> gamification techniques in non-leisure contexts, as well as building scientific evidence on their benefits – for governments, enterprises and individuals. (European Commission Research and Innovation 2014)

Gamification has assimilated the discourses surrounding the use of games for social and marketing purposes. It has been accepted as a common term for identifying research in game design techniques in a non-game context (borrowing the definition of Deterding et al. 2011). However, this assimilation has also brought about a simplification, not only of the terminology but also of the theoretical understanding of video games, their production and their players. I will now discuss what I believe the consequences of this state of events are, drawing on the academic contributions to the debates surrounding gamification.

Critiques of Gamification

Since Jane McGonigal's talk at the TED series encouraged a series of articles in mainstream newspapers about the alleged positive effects of video games, the community of game scholars has felt the need to respond to McGonigal's statement by highlighting some of the limitations of the debate and nuancing most of the over-enthusiastic comments. Of particular concern has been the deterministic naiveté of McGonigal's talk and her followers. Statements such as "games can save the world" are quite obviously disputable with regard to the actual potential of games (digital or not), the limits of the distribution of game products and the geographic specificities of the video game market. More importantly, McGonigal and her supporters assume games to be one clearly identifiable entity that produces specific and controllable effects. From this perspective, it has been argued that gamification and other positive re-evaluations of digital games approach the subject with the same deterministic view as the condemnatory attacks on digital games (Carbone and Ruffino 2012). Similarly deterministic approaches can be seen in the current trend of producing video games for mental and physical health (e.g. the *WiiFit* and *Brain Age* series by Nintendo) or even marketing them as works of art (e.g. *Alan Wake* (2010) by Remedy Entertainment, *Heavy Rain* (2010) by Quantic Dream and *L.A. Noire*

(2011) by Rockstar Games, selected for its aesthetic value at the Tribeca Film Festival). In the articles and press releases that introduce these games their properties are seen as objective qualities, capable of influencing the players or achieving undisputed artistic achievements.

As a response to the emergence of gamification, one of the reactions in the academic world interested in digital gaming has been to propose a more moderate understanding of this newly emerging phenomenon, possibly eliminating the marketing aspects involved. It is from this context that Sebastian Deterding and colleagues have proposed a relatively simple definition of gamification: 'gamification is the use of game design elements in non-game contexts' (Deterding et al. 2011: 2). The above quote has been accepted in the academic discourse in the last couple of years as a good description of the term 'gamification'.[65] However, as I will argue in this chapter, it says little of what gamification does and what it could do, which is a much more relevant question. It is a question that more directly challenges the discourse on the potential effects of digital games, which is what the promoters of gamification insist on.

As reported by Deterding and colleagues, gamification is not the only term used to label the practice of adopting game design techniques in a non-game experience:

> Parallel terms continue being used and new ones are still being introduced, such as 'productivity games', 'surveillance entertainment', 'funware', 'playful design', 'behavioral games', 'game layer' or 'applied gaming'. Yet 'gamification' has arguably managed to institutionalize itself as the common household term. (Deterding et al. 2011: 1)

The paper by Deterding and colleagues helps to define gamification beyond the enthusiastic talk that usually transpires in the uses of the term since McGonigal made it popular in 2010. However, gamification has received a relatively large number of more or less consistent definitions and studies of the origin of the term and its political implications (Nelson 2012b; Fuchs 2012 and 2014; Jacobs 2012; Mosca 2012). This is partly due to the concept's background. Gamification

[65] This has been accepted by the 'Rethinking Gamification workshop' at Leuphana University (May 2013) as the most popular definition of gamification. Outside the academic context, the one-line definition provided by Deterding et al. can also be seen, rephrased, in Zichermann and Cunningham's guide to gamification (2011).

is mostly a marketing concept, developed and promoted by designers and business consultants. In this context a clear and simple definition soon became a necessity in order to sell gamification to existing businesses (and sometimes also to public institutions). What appears to be clear about gamification, after a brief analysis, is precisely the relatively fast narrowing down of what this expression means. In less than a couple of years since it reached popularity it had already received a number of definitions, sometimes in published texts, other times through the development of gamified systems that were introduced and advertised as examples of gamification, thus indirectly contributing to a general acceptance of what this term implies. The term has also been further defined in the academic context, simply replicating the how-to approach of many publications (e.g. the *Gamification* module at Pennsylvania University, held by Professor Kevin Werbach) or, occasionally, articulating what else could be involved in the phenomenon (Fuchs et al. 2014).

There have not been many attempts to further elaborate what could be at stake with gamification, and the present chapter aims precisely to address this point. New definitions of gamification, in fact, would not yet tell us why we should be interested in it and what we could make of it.

Ian Bogost has attempted to address a more nuanced question about gamification, first by saying that, from what we have seen so far, the technique should be renamed 'exploitationware' (2011a) – elsewhere, simply 'bullshit' (2011b) – and second by exploring the potential uses of video games in his text *How to do Things with Videogames* (2011c). His first argument can be summarised as follows. Gamification has little to do with the design of games, as it tends to reduce them to a predictable series of mechanisms to attract players/customers. Such mechanisms include the use of leaderboards, rankings and badges to reward the best players, as well as quick and unchallenging tasks to encourage players and make them feel gratified. However, Bogost argues, game design (or at least good game design) has been trying to complicate such techniques by introducing more varied tasks, demanding a variety of skills from players and possibly questioning the experience of playing through complex narratives. Gamification does not attempt to achieve any of these goals, as it is uniquely interested in maximising the activity of the users, and potentially

turning them into better customers, or unpaid contributors to their business. Therefore, according to Bogost, it should not be embellished by the word game, and should be more correctly called 'exploitationware'.

Bogost also adds that serious games – games with a political or activist agenda, supported by Bogost on several occasions (for instance, in his work on 'persuasive' games, 2007) – is instead a much fairer name than gamification. Serious games combine two apparently contradictory words to describe a challenge to the design of games, through which players are supposed to question their own knowledge and beliefs. The serious aspect serves to distinguish these emerging kinds of video games from more facetious forms of entertainment (2011a, 2011b). Bogost expands his view on serious games in *How to do Things with Videogames* (2011c). Here the reference to Austin's *How to do Things with Words* (1962) is explicit, and so is the attempt to introduce a debate on the potential of video games from a perspective that is possibly more nuanced than the one seen in the context of gamification. This means, according to Bogost, that a better understanding of the potential of digital games entails an expansion of the number of things attainable from them: to be used not only as entertainment tools or as part of marketing campaigns and self-help applications, as proposed in gamification, but also as objects with an artistic value or as elements of social and political campaigns, and much more.

In *How to do Things with Videogames*, Bogost lists and analyses some of the possible uses of digital games as they have emerged in recent times, including games with political content, promotional games displaying in-game advertisements, games used for propaganda or activism, and those with artistic purposes. He also discusses, through several short chapters, how games could provoke 'empathy', 'reverence', 'relaxation', 'disinterest' and 'drill', among many other effects. Bogost argues that we can understand the relevance of a medium by looking at the variety of things it does: 'we can think of a medium's explored uses as a spectrum, a possibility space that extends from purely artistic uses at one end […] to purely instrumental uses at the other […]' (2011c: 3).

Bogost's answer to the debates on the potential of the medium of the video game is to avoid binaries and oppositions between serious and superficial technologies. He proposes instead what he calls an ecological understanding of

the medium, inspired by McLuhan and Postman's theory of media. In this view, according to Bogost, media affect the environment in which they are introduced at a variety of levels, not necessarily to be evaluated in positive or negative terms.

Bogost's response to gamification, and more broadly to the idea that video games can be used for achieving specific effects, contests the institutionalisation and appropriation from the side of the marketing context of the alleged transformations of the medium currently happening through the emergence of gamification. However, it does little to debate where such views originate. Also, and more importantly, it does not yet tell us anything that could help complicate and possibly surpass the binaries he evokes, and therefore does not propose a way of thinking about video games that could be seen as different from what McGonigal, Zichermann and colleagues evangelise about.

The question of what we can do with video games receives a more varied response from Bogost than any of the gamification gurus. However, what persists is the idea that the medium of the video game has a certain impact on its users – an impact that could be more or less predicted and channelled through design. In doing so, it evokes a question of the performativity of games and their agency. However, I would like to point out in the following section that such focus on the agency of games needs to be rethought, as it tends to replicate, as much as gamification does, the instrumentalism underpinning the contemporary techniques of game design. It is evident in the idea that specific elements in the design of a game will help to have a specific effect on the player's behaviour, and that these same elements could be replicated in different contexts by preserving the same effects. This background has proven, I believe, to be rather limiting when trying to address the question of "what can we do with games?" from the perspective of both theoretical analysis and design.

Gamification is in fact consistent with the behaviourist background that underlies the studies on game design. As acknowledged by Jon Radoff, author of *Game On: Energize your Business with Social Media Games* (2011a), game design often builds on the heritage of behaviourism and design concepts such as the 'theory of flow' by Csikszentmihalyi (1990). Radoff also argues that this heritage is visible not only in gamification but in game design more generally:

> Gamification is generally caught-up in one of the game industry's overarching myths – the idea that games are nothing more than Skinner boxes ('push-button, get cookie'), a part of behaviorist psychology which has largely been passed by advances in cognitive and evolutionary psychology over the past 50 years. (Radoff 2011b)

In this chapter I would like to discuss how we could rethink gamification, alongside the discourses originating from the marketing context and not necessarily in opposition to that same context, but also not attempting to offer better solutions for the 'exploitation', as Bogost would put it, of video game players. Mostly, I am concerned here about how the concept of the performativity of video games emerges in the discourses surrounding gamification.

I will be addressing this issue through the contribution provided by Tim Ingold, whose work, though not explicitly related to games or video games, questions the concept of performativity from an anthropological perspective. In the discourses about gamification the focus is on the agency of games: games can 'do something' to their players, they have a certain power to affect players in a more or less predictable way. As Ingold would put it, agency is a term often brought into a debate in order to resuscitate the concept of materiality. In this view, objects have a certain material presence that does something to us; they have a certain agency with regard to the surrounding environment. However, Ingold suggests, while thinking in this way we tend to be suffocated by 'the dead hand of materiality' (Ingold 2011: 28): all that is material stands still, engages with the surrounding environment and is put in motion by a sort of 'magical mind-dust' (Ingold 2010: 2) that is agency. Agency and materiality are not only forms of abstraction that overshadow the nuanced relations between human beings and the surrounding environment, but, as concepts, they also actively produce this distinction. Through Ingold, I will question how this distinction is also replicated in the discourses on gamification, and I will attempt to articulate a different reading of gamification by reimagining the relation between human beings (players and game scholars) and video games.

In the following section, I will take seriously the question of gamification as proposed by both its gurus and detractors, and as rephrased by Bogost, with reference to Austin, as "how to do things with video games". I will discuss how Ingold's anthropological perspective can teach us how to rethink gamification,

and not necessarily against the current proposals originating from the non-academic contexts. I will also argue that a process of rethinking gamification, while maybe not urgently needed in the marketing sector, is instead quite pressing in the debates about the medium of the video game. Rethinking gamification means, after all, interrogating the possibility to intervene with and through digital games, possibly by producing and consuming games through political, ideological and ethical questions.

How to do things with gamification

Performativity has been at the centre of the work of authors such as Michel Foucault and Judith Butler, already introduced in this dissertation. Their perspective introduces a crucial aspect of the theories of performativity: language is considered to be taking part and joining in that very same reality it is constructing. In the ways in which I have described gamification so far, such consideration has not yet been debated. Gamification as a technique is narrated instead as an abstract process that regulates the design of video games in order to affect the players in a predetermined way.

I would like to pose the question, in this part of the chapter, of "how to do things with gamification", borrowing both the phrasing and the theory of Austin and Bogost. The question I want to propose focuses on the performativity of gamification itself rather than of games. What sort of reality does gamification bring about? Also, what is involved in an analysis of gamification that considers it to be part of that same reality that gamification can allegedly affect? I believe this question also brings to light a different understanding of gamification through its unfolding in a specific time and space.

Through Ingold, it could be said that focusing on the performativity and materiality of gamification entails thinking less about games and gamified applications *as objects*, and more *as things*. Ingold proposes that the distinction between objects and things can be crucial when evaluating what is at stake in the debates around performativity. He draws on Martin Heidegger's essay 'The Thing' (1971a) and comments:

> The object stands before us as a fait accompli, presenting its congealed, outer surfaces to our inspection. It is defined by its very 'overagainstness' in relation to the setting in which it is placed (Heidegger 1971a: 167). The thing, by contrast, is a 'going on', or better, a place where several goings on become entwined. To observe a thing is not to be locked out but to be invited in to the gathering. (Ingold 2010: 4)

Ingold follows from this that things are in constant flow, constantly mutating and in contact with each other through their surfaces. Such a process of continuous mutation is intended as a contrast with the notion of agency. According to Ingold, agency acts as a solution to resuscitate the otherwise 'dead' objects by giving them a sort of 'sprinkle' of life. While imagining the environment to be populated by objects suggests the image of an excavated world, similar to a piece of Swiss cheese (2011: 24), Ingold argues, things instead fill the environment and are entangled with one another, in 'a meshwork of interwoven lines of growth and movement' (2010: 4).

The perspective offered by Ingold is more than an attempt to avoid a sort of *horror vacui* of an environment where objects are cut and surrounded by an empty space. There is still, for Ingold, the need to make sense of our own participations, as things ourselves, participating in the world. For this reason, Ingold brings focus to the life of things. He writes: 'In effect, to render the life of things as the agency of objects is to effect a double reduction, of things to objects and of life to agency' (2010: 7).

Life is a crucial concept here for Ingold, and he explicitly mentions Bergson and his *Creative Evolution* as one of the major influences on his work (Ingold 2010: 13). From Bergson, Ingold develops the notion of life as movement and duration. Bergson argues that we, as humans, tend to capture the things around us intellectually, interrupting the flow of life to freeze, control and transform things into forms. However, this process loses sight of movement. The intellectual faculty of our mind is accompanied by the intuitive faculty, which we rarely exercise but which persists and occasionally comes through. Intuition originates from the 'vital impulse' shared by all living species. While intelligence is analytical, in that it divides and recomposes things in order to give us the knowledge we need to satisfy our needs, intuition instead gives us the knowledge

of how things are in constant movement and always in the process of becoming other (Bergson 1914).

Creativity is that which accounts for the continuity of life, the movement of things, and at the same time for the discontinuity of such things, the diversity of matter that we tend to intellectually fixate in time and space. Our task, for Bergson, is to reconnect with the intuitive faculty and participate in the life of things in order to reach absolute knowledge.

What does it mean, then, for us to creatively participate in such a flow of life? It means, first of all, that the very idea of the agency of objects of any sort (words, technologies, human beings, etc.) has to be rethought as being less a transitive action (doing something to someone else) and more a dynamic state of being, a property that allows things to be alive in the world. Ingold critiques the transitivity of agency as an inheritance from the hylomorphic model, as first conceived by Aristotle and then crystallised in Western culture. In this model, Form and Matter are separated from each other, and while Form is in the mind of the agent, Matter is a passive receiver of the action of the agent. Ingold further argues that this model is still clearly traceable in the modern theories of production, such as those of Marx and Engels: in the series of volumes that compose *Capital: Critique of Political Economy* (1990), human labour is defined by Marx as the materialisation of an ideal form previously existing only in the mind of the creator. Such a process of production is, according to Marx, what makes human beings alive, that is, actively participating in the world. Agency is therefore conceived as what makes possible an essentially transitive process, from the human being towards the external world, from Form to Matter.

Why is this model problematic for Ingold, and how can his contribution help us to say something different about gamification? Ingold believes that the hylomorphic model leads to quite a static view of life. It suggests in fact that life is equal to the productive capacity of an individual, but such productive capacity exists separately from the environment, as excavated from an empty space. Similarly, gamification, presented as a design technique, proposes a way to produce games so that they can affect the users, somehow influencing their behaviour, preserving more or less the same effects in mutating contexts. Games are seen in the theories of gamification as objects, in Ingold's terms, that can be

reiterated in a different environment and act on the users, producing a certain effect, transforming a specific Form into Matter.

The possibility of reiterating the same transformations is particularly relevant, I believe, because it is first of all what makes gamification a technique and a procedure that can be applied in different contexts. But it is also what makes it an abstract and fossilised technique: the design of leaderboards, rankings, rewards, tasks and so on appears in the texts about gamification as a process that can be cut and pasted, to borrow an expression from digital culture.

I propose that the abstraction and fossilisation of gamification performatively produces a rather conservative vision of life, as well as of the possibilities of play. The way in which the question of how to do things with games is answered by the experts of gamification tends to operate a reduction in the ways in which we could potentially engage with digital games. The relation between gamers and games, which is placed at the centre of my dissertation, is too easily dismissed by gamification through the quantification of this very relation and through the application of allegedly effective solutions for the engagement of players.

For instance, *Nike+*, one of the best known and most often mentioned examples of gamification, connects to a mobile device and records through GPS the path and pace of a runner. *Nike+* is a system that is designed to receive and record already predicted signals; it rewards precise events that are already expected by the simulation. It works as a system for recording and reviewing runners' performances, and compares them with each other on a local or global scale. The runner/player of *Nike+* is encouraged to comply with a frame of rules that works as a regulatory frame, where only specific events are expected, saved, calculated and evaluated. Through this practice of compliance, the runner/player of *Nike+* is normalised, and regulates him or herself in order to maintain and progress in a process of constant self-normalisation. As Foucault notes (1977), disciplinary practices tend to optimise the body and stimulate its submissiveness. A mobile application such as *Nike+* produces docile bodies while disciplining their sport activity and punishing their eventual failure. Failure here comes to be defined not only as failure to improve the body's performance, but more subtly as failure to produce the expected data, to update the system as

frequently as possible and to provide information about the body. In other words, failure means not telling the truth about oneself. However, doing so in a context where all that can be said is data, which is seen as necessarily true and transparent, failure means not saying anything or not following up on the request to produce information. *Nike+* is not a game to play but mostly to update.

The game *SuperBetter*, designed by Jane McGonigal, works in a similar fashion, while attempting to regulate physical and mental health. The goals to achieve (losing weight, running a marathon, connecting with friends and relatives, and so on) and the tasks offered to reach such goals prescribe a limited set of possibilities for improving one's life. Games such as *Nike+* and *SuperBetter* tend to limit the possibilities of play and can also be seen as conservative images of a way of living. Both games offer a unique path to the achievement of well-being, where what is defined as good for the body is catalogued and presented as necessarily positive.

Gamified applications can be seen as conservative tools, where unexpected and original ways of thinking about a specific practice are ruled out. But also, possibly, they are inevitably so. The struggle to eliminate uncertainty appears in the very origin of cybernetics and digital simulations. This is what Patrick Crogan argues in his text *Gameplay Mode: War, Simulation and Technoculture* (2011), through an analysis of the historical and ideological relations between the video game industry and military developments.

Crogan points out that the study of video games has tended towards an uncritical acceptance of the ideology of cybernetics, as exemplified by Gonzalo Frasca's statement, inspired by Espen Aarseth's *Cybertext: Perspectives on Ergodic Literature* (1997), that digital games should be studied through a cybernetic approach (Crogan 2011: 145). In Aarseth's original proposal this meant the dismissal of a semiotic approach in the study of computer games in favour of a study of the interpretation of 'cybernetic signs', arbitrarily determined by the relation between a coded, invisible level and an expressive, visible level (Aarseth 1997: 24-41). From Aarseth's approach, computer programming determines not only the ways in which cybertexts, including computer games, are structured but also their interpretation: 'the concept of cybertext focuses on the mechanical organization of the text, by positing the intricacies of the medium as an integral

part of the literary exchange' (Aarseth 1997: 1).

However, Crogan argues that the 'intricacies of the medium', as Aarseth puts it, derive from a specific ideology. It is the same ideology that has been framing military research and the study of simulations as systems for the pre-emption of possible future events. I will now introduce Crogan's theory, and look at how it could be useful in the project of rethinking gamification and the study of games I am outlining here.

Gamification and the war on contingency

Crogan analyses the historical relation between the video game industry and military developments, but his reading of this relation goes beyond acknowledging the mutual influence that the two sectors have had on each other since the Cold War. Examples of this influence could be seen in the often-occurring perpetuation of a warmongering ideology, or the use of similar technologies such as military simulations both for training purposes and as commercial products (see the example of *America's Army*, a video game developed by the United States army and also released as a game product). Several authors have discussed these aspects of the medium of the video game but mostly by acknowledging a historical relation or metaphorically suggesting that the game industry participates in the same capitalistic 'empire' from which the war industry originates (Dyer-Witheford and de Peuter 2009; Kline, Dyer-Witheford and de Peuter 2003; Halter 2006). Crogan argues that there is something more involved in this legacy. It is, first of all, not simply a historical background that video games inherit but in fact an ongoing legacy, which he defines as 'military technoscientific' and which casts a shadow on contemporary forms of digital play (2011: xii-xiii). One of the consequences of this legacy is that video games participate in what Crogan calls the 'war on contingency': 'computer games play with the playing out of the war on contingency that has been an animating force throughout the course of the development of computers as simulation platforms capable of modelling the future as virtually accessible to pre-emption' (2011: 36).

Crogan argues that the main purpose of military simulations is to prepare a model of the possible outcomes of a war-scenario, quantifying as much data as possible in order to predict a future intervention. This element of prediction is crucial, according to Crogan. War simulations work as predictive systems and computers, as well as the 'technoculture' that derives from the use of digital machines, are grounded in the obsession for controlling possible future events:

> The predictive, hypothetical force of computer simulation is in no small way a legacy of the military technoscientific merger with the modern rational industrialization of planning, control, and regulation in the military and military-entertainment complexes. (2011: 155)

From this perspective *Nike+* and *SuperBetter* can be seen to be conceived to record signals that are inevitably already predicted, and this makes them necessarily conservative in their regulative power as they cannot open up to unpredicted inputs and unexpected forms of play. However, the same could be said of all forms of digital gaming, as they all take part in replicating the same logic of pre-emption of military simulations.

Alexander Galloway has similarly stated that digital games take part in what he calls the 'algorithmic culture'. In his reading of the game series *Civilization* (1991-2014) by game designer Sid Meier, he argues that the simulation is an excellent example of how digital games can embody 'the total logic of informatics itself' (2006: 101). Video games more generally are, according to Galloway, 'allegories of our contemporary life under the protocological network of continuous informatic control' (106). As such, they bring about social transformations, where ideology itself comes to be reshaped by informatics. The allegorical move of the critic, Galloway states, should therefore take the form of a playact, an enacted text. From this standpoint he argues that forms of subversion and critiques of the ideology of video games, which he names 'countergaming', have rarely if ever taken the form of a critique of gameplay, which is instead needed as a form of intervention in digital culture in order to potentially reveal the logic of 'algorithmic' culture. He calls for 'radical action' as opposed to conventional gaming, and for a political, intellectual and artistic gesture that could emulate what the avant-garde of cinema directors such as Jean-Luc Godard brought into the critique of cinema (2006: 107-126).

If we accept Crogan and Galloway's analyses of the historical and ideological background of digital games, then gamification appears to fit in perfectly with what we could name, combining Crogan and Galloway's terms, the ongoing war on contingency under the protocological network of continuous informatic control. From this perspective, we can look at gamification as consistently relying on a logic of pre-emption and control, while also introducing a more explicit question about the performativity of games, that is, about the possibility of directly influencing players' behaviour through the modelling of specifically designed simulations. What I believe is interesting is the emergence of the demand, from contexts that are not strictly speaking involved in the video game industry, for designing game-like scenarios for affecting citizens and customers in (more or less) predictable ways, influencing practices of everyday life such as habits of consumption, physical health and also political behaviour (as in the case of games for change and games with an agenda).

While such emergence could be ascribed to the algorithmic culture and explained as part of it, it is still unexplained how we, as gamers and game scholars, could make sense of such culture without replicating that same ideology – and whether there is a need to do so. Both Galloway and Crogan have answers to such questions, and their proposals involve forms of artistic investigation. Galloway and Crogan both agree that critique is needed, although not necessarily in oppositional terms. Crogan argues that we should instead think of digital gaming through the 'material and sociotechnical dynamics that make it possible, and in a way inevitable, in the context of the tenacious forgetting of war's co-constitutive relation to technoculture' (2011: 145).

Crogan offers to re-evaluate the concept of theatricality, as formulated by Samuel Weber and defined as 'the problematic process of placing, framing, situating rather than as a process of representation' (quoted in Crogan 2011: 141). He looks at the example of *PainStation,* an artistic installation by collective //////////fur//// art entertainment interfaces, and *Tekken Torture Tournament* by Eddo Stern and the C-Level art group [See Appendix: images 37 and 38]. In these two examples, the video games *Pong* and *Tekken* are modified to cause real physical pain to the players. In *PainStation*, the player who wins the game has the option of causing pain to their opponent (in the form of a whip that beats the

player's hand, an electric shock and other similar painful options, which were increased in number in the second edition of the installation, *PainStation2*). The game ends when one of the two sides releases his or her hand from the *PainStation*. Similarly, *Tekken Torture Tournament* converts the virtual pain of the fighters in the video game *Tekken* to real electric shocks for the human players, who are wired to the game hardware. Crogan argues that similar interventions 'incite participants to think about gameplay and game consoles and their historical relation to warfare and the history of computing' (2011: 141). The theatricality of such performances makes them 'projective, rather than reflective, aesthetic, or representational', and 'it works toward achieving a certain effect rather than taking that effect as given' (141). More importantly, theatricality is oriented towards the future, towards possible and not yet materialised forms of engagement with technologies.

Crogan's attempt is potentially highly relevant in imagining alternative questions to the 'war on contingency'. His proposal is to counter, from an academic and artistic perspective, the:

> overarching tendency of the program industries to standardize and predetermine the nature of access and utilization of their products. Nevertheless one can play, and design and co-create […] or becoming the bugs, artifacts, mods, critical and creative readings and appropriation, and other accidental becomings that alter what we can do with games, what games do with us, and what they give us to think about what we are doing with them now and tomorrow. (Crogan 2011: 174-175)

Crogan's contribution to the recurring question of how to do things with games, and of what they do to us, which I have argued is also the basis of the discourses surrounding gamification, is useful and relevant for a variety of reasons. First, Crogan highlights how the logic of the 'war on contingency' subsumed by the military-industrial complex is not only important in the development of forms of digital entertainment but is also present in the ways we (gamers and scholars) tend to make sense of these entertainment forms.

Second, he proposes that one possible way to think outside such *weltanschauung* is to rethink the physical presence of the players and the materiality of games and game technologies. He does this by presenting examples from the artistic context where the concept of theatricality, as formulated by

Samuel Weber, manifests itself.

I would like to expand on these suggestions and connect Crogan's analysis of the medium of the video game with Ingold's proposal for an anthropological rethinking of the concept of agency. I believe that these two perspectives, distant from each other in the objectives they aim to achieve, can contribute by saying something different about gamification.

Towards a different narrative of engagement

The issue of participation is, I believe, crucial. As I have argued, one key point of gamification, and of the behaviourist approach to the design of games, is the iterability of the techniques for the production of games that are supposed to be effective (or 'felicitious', if we want to borrow Austin's terminology) in their influence on the player's behaviour. The possibility of "cutting and pasting" specific design solutions, while preserving the same effects in mutating contexts, assumes a detachment of the techniques, and the games that are made from them, from the environment in which they enact. Thus, video games are supposed to work as objects, as Ingold would put it, excavated from the environment.

Bogost's critique of gamification is still explicitly grounded in the idea that games are objects. In *How to do Things with Videogames*, Bogost proposes an ecological understanding of media, but media are here still understood as objects with a sparkle of agency, so that they can have varied effects on us. We as users and observers, however, remain essentially separated from these agential objects. We do not participate, nor do we engage (to borrow a verb from the discourses surrounding gamification) in the presence of such objects, apart from the merely intellectual process of observation and analysis. In *Alien Phenomenology, or What It's Like to Be a Thing* (2012b), Bogost proposes an analysis of how objects, or things (the two terms indiscriminately used, and rather un-problematically), experience the world surrounding them. In his attempt to reflect on what experience could be like outside an anthropocentric view and how this could lead to different morals and ethics, Bogost does not

eliminate the essential alien quality of the objects/things he uses as examples. To interrogate ourselves on the 'ethics of the spark plug, the piston, the fuel injector, or the gasoline' (Bogost 2012b: 75) when looking at the engine of a car can indeed be a different question than seeing how a car engine is entangled with human activities. However, it is not yet telling us much about how the plug, piston, injector and gasoline *happen to us*, how come they have been divided as such, as separate and abstracted objects, and how such a process of cutting the environment makes sense to us, what is at stake in it, and how it could be otherwise. In other words, we do not yet know from such an analysis of aliens how we are participating in the analysis itself, how we are in contact – physically, intellectually or intuitively – with the engine of a car, or any other system.

Ingold, instead, focuses on the essentially anthropological (but not anthropocentric) question of being alive as participating in an environment of things. In Ingold's view, it could be said that Bogost argues mostly about objects: even if multiplied in number, the instances Bogost describes – including video games – are cut from an environment, abstracted and interrogated for their inevitably alien nature. The reason I draw on Ingold rather than Bogost in rethinking gamification and the study of video games is because Ingold's perspective can be seen as proposing a different narrative of engagement, one where the alien condition of the surrounding environment is seen as only one of the many possible forms of making sense of the world around us (and definitely as the less challenging for our faculties). I will now discuss how such a narrative develops from a reflection on materiality and agency.

Living and playing in a world of materials

What I have so far addressed as a problem of rethinking our engagement with games is formulated by Ingold in different terms, as a problem of understanding life. The meanings of being alive, and ways of bringing things to life, are the main concerns of Ingold's anthropological endeavour. He argues that the question of life is inherently connected to the physical presence of things in the environment, and that this question is hindered by the theories of materiality.

Ingold argues that materiality, a concept derived from a sort of 'academic perversion' (2011: 20), is based on a virtualisation of the occurrence. Occurrences have no materiality, as much as they do not have a boundary that separates them from an empty environment, if not given by a process of abstraction. Ingold draws on Gibson's theory of perception to suggest that it is in the problem of the boundary that materiality demonstrates its inconsistency. If we consider objects to be in contact, physically, with the external environment, to be immersed in different materials, then the boundary appears to be artificial. However, the problem for Ingold is not really in the artificiality of the boundary, but rather in how such a boundary influences our understanding of the world and our presence in it, and what it overshadows.

In fact, according to Ingold, to talk about the materiality of things amounts to strangling things with a dead hand, and losing sight of the narrative side of their properties. To explain this concept, Ingold argues that materials, rather than materiality, should be at the centre of our attention: 'materials do not present themselves as tokens of some common essence – materiality – that endows every worldly entity with its inherent "objectness" rather they partake in the very processes of the world's ongoing generation and regeneration [...]' (2011: 26).

Shifting the focus to materials, rather than materiality, is what allows Ingold to re-evaluate the human presence in the environment, an aspect he finds to be articulated, in the theories of agency, in a distinction of human vs matter. He takes the example of a stone, which can become wet by being dropped in water. After a certain amount of time, water will evaporate and the stone will be dry. The appearance of the stone has indeed changed, and so have its properties. The wet stone will feel and sound different to the dry one. What can we say then of the materiality of the stone? Has the dry stone more 'stoniness' than the wet stone? Ingold argues:

> There is no way in which its stoniness can be understood apart from the ways it is caught up in the interchanges across its surface, between medium and substance. [...T]he stone has actually changed as it dried out. Stoniness, then, is not the stone's 'nature', in its materiality, nor is it merely in the mind of the observer or practitioner. Rather, it merges through the stone's involvement in its total surroundings – including you, the observer – and from the manifold

ways in which it is engaged in the currents of the lifeworld. (Ingold 2011: 32)

If the observer is also considered to be part of that same 'lifeworld' of the things around him or her, then the distinction in quality and hierarchy between subject and object comes to be disputed. Also, materiality appears through this example in its artificiality: it is a concept that replaces, by oversimplification, discourses on materials and our approaches and contact with them. Ingold ultimately proposes a different narrative of engagement, one that does not have much to share with the narrative that has been emerging in contemporary video game culture so far but that could tell us something about how we engage, also, with digital games. What he offers is a different way of thinking about our own immersion in the world, as thinkers and doers, scholars, producers and consumers. These practices, however, are thought of less as transitive actions and more as what results from a co-presence of live materials.

The agency of objects and the essentially transitive acts of causing, affecting, doing things to human beings that populate the environment are substituted by the Heideggerian concept of 'dwelling' in 'Building Dwelling Thinking' (1971b). Dwelling, an intransitive verb, is not directed towards an object and should not be taken as the direct consequence, or as the opposite, of the act of building (as, for instance, consumption could be seen in relation to production). Dwelling is rather a way of being, which is understood as becoming rather than as something permanent. It helps us understand ways in which we make sense of the surrounding environment not as static points, standing in one place, but as wayfarers. Wayfaring and movement are the dynamic metaphors that Ingold suggests as models of the ways in which we inhabit the environment and as alternatives to observation and perception (2011: 9-14).

What does it mean to think about digital games through the ways in which we *move along them*, rather than what they do to us (or us to them)? Also, how can this perspective help us to add something new to the existing, but rather conservative, narrative of engagement with games and game technologies that we have been fed by both marketing consultants and game scholars?

Following Ingold, I propose some questions for moving in an alternative direction in the study of gamification and video games in general. What if we

consider gamified systems and video games to be part of that same world it is claimed they are affecting? What are the implications of letting them join in the environment at the same level as human beings? What are the consequences of thinking of video games as materials rather than looking at their materiality? What does it mean to dwell in an environment where video games co-exist with us? Finally, how could that offer an alternative perspective not only to gamification but also to the war on contingency and the logic of pre-emption?

I formulate these questions as open precisely because I do not intend to propose an answer to gamification, or to the issue of the performativity of games. I do not think this view is intended to replace, or surpass, what gamification gurus are currently asking themselves in relation to the use of game design for marketing and social change. It is instead a separate perspective, largely inspired by the questions emerging around gamification, although definitely not consistent with those same questions. As an alternative, it will not work as a further technique to think and make video games but it will propose references and parallel modes of thinking.

I think that what calls for some alternative modes of thinking is the rather unproductive dead-end into which gamification and its critique have confined themselves. Drawing on the introduction to this chapter, the statement 'movement is life', presented by Nike in its advertisement for *NikeFuel*, is interpreted by the sport company as if being alive could somehow be a problem: 'life doesn't come with convenient ways of measuring movement', says Nike's advertisement. *NikeFuel*'s response to this problem is that each singular activity of the body should come to be quantified and counted by the application. By doing so *NikeFuel* disregards movement as a process of knowledge, as wayfaring (in Ingold's terms), and applies instead a notion of movement as homogenous and divisible into homogenous unities. In this sense, movement is here spatialised, as the notion of scientific time introduced by Bergson in his *Time and Free Will: An Essay on the Immediate Data of Consciousness* (2001). Bergson proposed that to account for duration we cannot limit ourselves to the scientific time but must also allow an intuitive understanding of time and space. Scientific time, the kind of time we measure and quantify, is expressed through numbers. As such, it is based on the idea of a homogenous space as it implies the presence

of a unit of measure that is juxtaposed to the next unit, as if temporal units were linearly disposed. Spatialised time also brings the notions of determinism and causation, as individual moments are seen as one being the effect of the other, following one from another in a cause-effect relation.

The production of a 'single universal way to measure all kinds of activities [… to track] your active life' (Nike 2013)[66] is another way of regulating movement, and also performatively produce, in a Foucaldian sense, a notion of life as measurable and traceable through data. By tracing, measuring and quantifying, *NikeFuel* and gamification in general freeze movement and life through the separation and invention of fixities, through what Bergson would define as an intellectual approach, and replicating the notion of time that Bergson identifies as belonging to ancient Greek philosophy (and Zeno's conception of time and space in particular). Bergson's contribution is highly relevant in the context of this chapter because it is ultimately concerned with the possibility of freedom within such a notion of time. Bergson's philosophy can therefore provide an essential contribution to the understanding of how to rethink gamification, and also of what is at stake in this process of rethinking.

For Bergson, a different notion of time entails a different notion of free will (as the title of his text suggests). Time as duration means reconsidering our involvement in time. While Zeno and Kant's philosophies place the human outside time, in a position where time can be measured and quantified, to relocate ourselves within the duration of time, as Bergson proposes, means rethinking our engagement with time and the possibility of moving within time. Because of this, duration involves the possibility of mobility, and mobility means freedom: free will is possible in Bergson's philosophy as long as it comes to be equivalent with movement.

Through Ingold and Bergson (who is in fact one of the main sources of Ingold's thought), I have so far tried to trace possible reasons to rethink the narrative of engagement as it is replicated in the discourses surrounding gamification, and also possible ways for doing so. Engagement might have to do with time and duration, with movement and materials, and ultimately with life

[66] Nike (2013) 'What is Fuel?' *NikePlus.com*, http://nikeplus.nike.com/plus/what_is_fuel/ [Last accessed 8/11/2014]

and freedom. I believe most of these aspects have tended not to be considered, so far, by either gamification gurus nor game scholars. But what would it mean to intervene in and within video games, and the narratives about them, while considering these aspects?

In the final part of this chapter I will attempt to map some possible ways for such forms of intervention. I will do so through the work of Sarah Kember and Joanna Zylinska, as delineated in their text *Life After New Media: Mediation as a Vital Process* (2012). I believe this text provides a valuable contribution to the questions I am posing for at least two reasons: first, through the notion of the cut within processes of mediation, and second, by foregrounding the ethical necessity of cutting well as part of the process of doing media studies as a form of invention and critique. Kember and Zylinska propose to focus our attention on the study of mediation, rather than media, precisely by drawing on Bergson's concepts of duration and intuition. Mediation is concerned with becoming with and being in the technological world, and is intended to contrast a study of media as a study of fixities within the processes of mediation. Moreover, Bergson's notion of duration is combined with Derrida's idea of 'différance' (1976), which takes account of the cuts and interruptions within processes. It is through cuts that duration comes to be temporarily fixed, and Kember and Zylinska argue that the intrusion of an element of difference within mediation could and should be 'creative' in order to take account of the vitalism of media (2012: xv-xvii).

I will discuss further at the end of this chapter how creativity could be a central issue in the redefinition of game studies. I now intend to offer some possible forms of interventions that exemplify what a different way of doing things with games could be like. In these examples, taken mostly from the art context, our engagement with video games is understood through a different configuration, which queries, rather than merely replicates, the dualities and separations that tend to frame the processes of understanding of digital games. These proposals investigate the materials that video games are made of, and the significance of dwelling and playing in a world of materials. Yet they also delineate temporary fixities, cuts in an ongoing process of mediating our presence in such a world.

Gazira Babeli and *Game Arthritis*: game studies by different means

The works I would like to introduce are a piece by the artist Gazira Babeli (an avatar in the game *Second Life*) and a piece made by Matteo Bittanti and the collective IOCOSE. In these investigations, conceived and presented mostly within the context of art galleries and festivals, I believe there can be found a suggestion of what else game studies could be, and of the implications of finding an alternative.

The work of the artist Gazira Babeli that I would like to introduce is a piece she made in 2006, entitled *Come to Heaven* [See Appendix: images 39 and 40]. I will propose to look at this performance as a potentially different perspective on the relationship between digital games and their materiality, the ways in which games are played and how they can be understood to reach unexpected results. I suggest that thinking about video games in the terms used by Gazira Babeli entails, possibly, looking less at the performativity of games and more at games as performers. In the example I will now introduce I believe this happens in quite a remarkable way. I will propose that this artistic investigation explores the materials of which video games are made, and our co-existence with these materials, in a way that is radically alternative (although not intentionally, considering its date of publication) to the ways in which the question of performativity is currently debated with regard to gamification. I will also draw some conclusions about how this and the project *Game Arthritis* could be seen as examples of a creative study of video games.

Gazira was a code performer and avatar in *Second Life* – her artistic career was intentionally stopped a few years ago so it is appropriate to talk about her in the past tense, as a dead artist. Her work investigated the possibility of performing in a digital online environment such as *Second Life*. In *Come to Heaven* (2006), one of the pieces I find to be most relevant to her career, Gazira lets her avatar (her body in the digital simulation) fall from a very high point in the sky of *Second Life*. While falling, the 3D model of the avatar tends to lose its

integrity and generates a series of unpredictable glitches.[67]

Gazira's work centres on one essential property of digital simulations. That is, digital simulations, by participating in the 'war on contingency' (as proposed by Crogan), will replicate the same script with identical results regardless of the spatial and temporal context where the script is performed. Gazira's intervention consists of allowing her avatar to automatically repeat the same script, which forces the avatar to fly up to the highest point in the digital simulation and then freely fall down to the ground. She repeated the same script on different computers, with different hardware and at different moments in the day (therefore with different Internet connection speeds and traffic).

The outcome of her work is a series of still images of the falls. The performance stresses the graphic engine of the game and the graphic capabilities of the computers where the same code is performed (or, rather, performs). Gazira highlights the unpredictability of the engine itself, which mixes the textures of the 3D model in different ways each time it is run. At stake here is not only a way of playing with the logic of the script. Gazira, more significantly, questions the iterability of the code, which makes it reliable and worthwhile, through the material from which the computers are made.

Gazira's crucial move is that she does not play the video game *Second Life* but rather sets it up to perform itself. She is not producing or consuming the game. Gazira's intervention is not, simply, a form of re-appropriation of the game product or a form of active consumerism. Indeed, she had to program the script beforehand, take the screenshots and so on, but the noteworthy part of the work is when the hardware performs such a script, when the game plays itself and makes itself visible for the materials from which it is made. It becomes crucial, in Gazira's concept, to document and report not only the screenshots of the performance but also the exact hardware that has been performing in each instance. Graphic cards, CPUs and RAMs are the performers, communicating with the servers of *Second Life* in California, and unpredictably generating graphic deformations while overheating and crashing. As Gazira comments: '... millions of meters away, at a very high speed. The effect obtained on the graphic card of the

[67] Documentation of Gazira's *Come to Heaven* is available online from http://www.gazirababeli.com/cometoheaven.php [Last accessed 24/10/2014]

computer is hard to anticipate and it depends on the creativity process of the card itself. Yes, cards go bananas...' (Gazira Babeli 2006: online).

Letting cards go bananas is, potentially, one of the many ways to investigate how the narrative of pre-emption, which underlies the computer script, can be narrated otherwise. Gazira Babeli's work does not offer an answer, it does not crystallise into a technique for doing things with games, rather it offers a temporary perspective on what else scripts, and video games, are, what they are made of, and how our ideas about them can be challenged by inquiring into such material presence. Gazira offers what Crogan, through Weber, would define as a 'theatrical' gesture, which questions our participation in the video game *Second Life* and looks at what this participation is made of and how it happens rather than, too simply, framing the answer on a producer-consumer binary.

Another example, which similarly queries the ways in which we dwell and co-exist with video games, is *Game Arthritis. Game Arthritis* is an art project presented at the Venice Biennale in 2011 by Matteo Bittanti, adjunct professor at the California College of the Arts, and the collective IOCOSE, of which I have myself been a member since its inception in 2006. *Game Arthritis* (2011) is a photographic documentation of a 'systemic study of video game induced diseases' (Bittanti and IOCOSE 2011) [See Appendix: images 41 and 42]. It investigates the topic of the alleged effects of video games, particularly from the angle of medical and scientific discourse. The project is inspired by, and directly references, a series of published papers which, until the early 2000s, claimed that video games would affect an entire generation of teenagers by altering their bodies due to prolonged use of video game interfaces. From a Foucauldian perspective, game arthritis and other differently named disorders ('3D optical disorder', 'PlayStation thumb', 'Wii shoulder dislocation', and so on) could be seen to have been brought about by authoritarian statements, such as articles in medical journals on the evidence of their emergence, and reinforced by mainstream newspapers and video game magazines. However, game arthritis and other disabilities are also symptomatic of a deterministic narrative that permeates both the scientific and mainstream discourse. According to this view, video games can harm people – a narrative not necessarily dissimilar in its logic

when reverted through a positive connotation (as in Jane McGonigal's "video games will save the world" slogan). *Game Arthritis*, the art project, displayed, in 2011, what should have been the scientific evidence of the studies published in the early 2000s. No evidence has ever been found, despite the diseases being analysed in peer-reviewed scientific journals. The photographic documentation shocks the viewer with its disturbing images, which should appear familiar, as this is what we have been told video games can do to our bodies, and yet unfamiliar at the same time, as an actual image to prove the alleged effects of digital games has never been provided. Also, the images of *Game Arthritis* do not match the current trend of describing video games through positive and celebratory narratives as an art form, or as good for health and effective in preparing the professional class of the next generation (as enthusiastically argued in 2004 by Beck and Wade in the first consistent study). It proposes what appears to be a sort of conspiracy narrative, according to which the game industry has been hiding evidence that would have proved the concerns of the scientific community.

*Game Arthriti*s summarises, through a series of images, a potential narrative of our physical relation with the hardware of the medium. At the same time, however, it disputes our tendency to abstract such a relation, allowing deterministic discourses to become institutionalised interpretations. *Game Arthritis*' move is to ridicule such abstraction by proposing examples of players actually affected by their continuous contact with the materials of which video games are made. Yet it is precisely by switching the focus from an abstract discourse to the contingent embodiments of which the various game arthritides are made that game arthritis, the disease that officially existed until about a decade ago, is revealed to be a rather uncanny and probably biased narrative.

Game Arthritis is not just about the properties of the materials from which video games are made; it is mostly about the narratives that we (again, both scholars and gamers) tend to formulate to make sense of our engagement with such materials. The focus is on the human, on the ways in which we participate in an environment populated by things, and how we tend to abstract them as objects and then resuscitate them by giving them agency, or 'a sparkle of life' (Ingold 2011). In *Game Arthritis* the question is about (and the joke is on) us.

When we start thinking about the properties of the materials of video games as narratives, we can also imagine stories that are intentionally false. However, their fakeness sheds light on what video games are for us and what else they could be. I believe a similar approach could also be adopted more extensively in the study of games rather than being exclusively undertaken in the artistic context. This is what I would like to call creative game studies. I will now explain what the creativeness of such a form of scholarship entails and what its implications are.

Conclusion: creative game studies (or how to do things with gamers' games)

In this chapter I have discussed the emerging narratives of engagement of video game players, as exemplified in the current trend of gamification. While also present in the debates around the design of games for change, for political activism and propaganda, the notion of performativity takes the shape of a regulated practice in the discourses around gamification. Gamification is proposed as a technique for doing things with games. My analysis has brought me to argue that the notion of performativity usually proposed in the discourses surrounding gamification tends to oversimplify the issues of agency and materiality. However, alternative interpretations of such notions have been presented in the academic context. Borrowing a more nuanced understanding of performativity could possibly provide the foundation for rethinking gamification. Moreover, as gamification tends to replicate existing models in the design of games, also often replicated in the academic study of the medium, rethinking gamification can also be seen as potentially involving an alternative notion of game studies.

The alternative I would like to outline here starts from reconsidering our own engagement with video games, as both gamers and scholars. Through Ingold and Heidegger, I have argued that a first point in the process of rethinking gamification and game studies is to counter the theories of agency with the concept of dwelling: in this view the observer participates in the same environment that is populated by the observed things. However, the transitive

acts of observing, as well as producing or consuming, come to be disputed in this theory. They are instead substituted by an intransitive process of living within and 'wayfaring', as Ingold suggests. Participation and co-existence of gamers and games in the same environment have been presented as alternative modes of thinking about the narratives of engagement that pervade the discourses surrounding gamification. I have discussed some examples, mostly from the art context, where these alternative modes of thinking about video games have been articulated through visual projects. In these works, as I have argued, the narratives of participation propose to reinterpret the notions of instrumentalism that underpin the leading theories in the design of games, including gamification: video games are, in these examples, no longer used for a specific purpose but understood as things that have a life of their own and that live with us.

At this point, I believe that some conclusions can be drawn regarding the study of video games. The field of game studies has often been concerned with the boundary between theory and practice, and the analysis of games as opposed to the design of games. Experiments in game art, such as the works by Gazira Babeli or the ensemble Bittanti-IOCOSE, show us that this separation is difficult to maintain. Working with games and thinking about their properties can take different forms: game art is, often, game studies by other means. It is from here that I would like to plan a form of creative game studies.

I use the adjective creative to highlight the productive and performative potential of the scholarly interventions that could compose such an approach to the study of video games. Creativity is here intended, as Kember and Zylinska have proposed, drawing on Bergson and Deleuze, as the 'condition under which something new is produced', as formulated by Deleuze in his dialogues with Claire Parnet (quoted in Kember and Zylinska 2012: 180).

Kember and Zylinska discuss creativity in the context of their analysis of the concept of performativity in media studies. They are particularly interested in how Foucault, Butler and Derrida think about performativity, after Austin, as a process of invention. Performativity is seen by these authors not simply as the possibility of language to affect reality but as a process that involves and frames the speaker as well as bringing about certain realities. Kember and Zylinska propose from this to consider a form of 'socially engaged, critical creativity',

borrowing an expression used by Angela McRobbie (in Kember and Zylinska 2012: 177). The performative aspect of such engaged creativity would bring about 'creative media'; it would aim at becoming a paradigm for inventing new media (189) and creating the conditions for their emergence (188) rather than aiming at a distant analysis.

The inventive property of critical analysis has been acknowledged by other authors, but Kember and Zylinska nuance their proposal for cultural engagement by looking at its ethical dimension. The authors explain how Brian Massumi, particularly in his text *Parables for the Virtual* (2002), has also proposed to embrace inventiveness in the humanities, intended as the possibility of bringing about realities through critical thinking. However, Kember and Zylinska notice how invention requires a process of making sense, on the part of its author, unless we intend to appreciate invention for its own sake (2012: 180-182). This is where critique is required.

Critique is understood by Kember and Zylinska through Foucault and Butler. In a post-Kantian move, critique is seen by Foucault not only as the ability to evaluate and judge but also as a method for questioning authority. Critique is therefore an ethical activity, not only because it is based on the relation with a form of otherness but also because it requires, as Butler argues, a decision. Such a decision can take the form of a recomposition of states of being, ultimately elevating critique to the status of a normative practice. Critique is therefore seen by Kember and Zylinska as a creative and ethical process that should result in a 'good' invention, an invention that is not simply complacent about its own existence but also adds in a meaningful, anti-authoritarian way (2012: 183-184).

Creative game studies (CGS) should embrace the ethical and normative dimension of criticality, as illustrated by Kember and Zylinska. CGS will be critically performative, in the sense that it will participate in the process of the invention and production of something new while evaluating such invention. CGS will also inquire, as I have been attempting to do throughout this dissertation, into the intricacies of the narratives that game magazines, the game industry and gamers themselves tend to replicate and reinforce. It will propose its own narratives, temporary (and sometimes even explicitly false) but always revealing of a different way of engaging with video games.

CGS will be anti-authoritarian in at least two ways. First, in that it will question the ways in which we are presented with fossilised interpretations of the dynamics of the practices that compose video game culture. In the previous chapters I looked at how crystallised narratives emerge not only from the game industry but from gamers themselves. I analysed how emerging practices of engaging with video games and their technologies, such as console hacking or independent game development, tend to reinforce the discursive formations of video game culture and neglect, relatively quickly, the ethical demands that would be otherwise required by putting into question those same discourses. Rather than replicating distinctions such as producer and consumer, independent and mainstream, or terms such as ownership, democratisation and freedom, CGS will inquire into how such expressions have been framed, how they came into being and how else they could be.

Second, CGS will be anti-authoritarian because it will question and confront the war on contingency. It will avoid assimilating its language and ideology (as Crogan suggested in his critique of Frasca) and also merely opposing it, in a naïve and self-rewarding war against the 'games of Empire' (Dyer-Witheford and de Peuter 2009). It will instead critique and create narratives for engaging with digital simulations in general, and digital games in particular.

This second reason also expands on Caroline Bassett's argument about the origins of human-computer interaction and how social and cultural studies did not take part in its original development. The use of computer science and cognitive psychology to 'explain the user' has been bringing about models for the organisation of information that have been replicated from cybernetics to the development of new media (2007: 56-63). It is only with Haraway's *A Cyborg Manifesto* and Lyotard's *The Postmodern Condition* (both written between the end of the 70s and early 80s), Bassett argues, that computers begin to be understood within the humanities and social sciences, that is, outside the models of first-wave cybernetics. According to Bassett, in Lyotard and Haraway 'particular forms of cybernetics are vilified but are also understood to produce grounds for play' (2007: 72).

It is unfortunate that this kind of play has so far been overlooked by the theories on the design of video games. In the seminal *Rules of Play: Game Design*

Fundamentals by Katie Salen and Eric Zimmerman, a textbook adopted in academies by the majority of video game development programmes, the definition of game is taken a-problematically from communication and system theory (2003: 71-83). After providing an overview of various definitions of games and play, taken from very different theoretical backgrounds, the two authors decide to define 'game' as a 'system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome' (80). When the authors discuss the keyword 'system', they find it problematic to understand what sort of relation a system has with the outside. They therefore conclude that:

> there are two types of systems, *open* and *closed*. […] What makes a system open or closed is the relationship between the system and the context, or environment, that surrounds it. The 'matter and energy' that passes between a system and its environment can take a number of forms, from pure data [….] to human interaction. (Salen and Zimmerman 2003: 53)

The difficulty of defining how such systems should exist and take place in an environment and be opened, or closed, to their exteriority can also be seen in the leading theory of the 'magic circle'. According to this theory, games operate within an environment that is separated from the spaces occupied by the practices of everyday life. The magic circle is a concept often attributed to Salen and Zimmerman's textbook, as a reference to Johan Huizinga's seminal *Homo Ludens* (1955). In fact, as an expression 'magic circle' appears in both works; however, as a concept it is not fully embraced by their authors. Eric Zimmerman explained in a recent article how the magic circle should not be intended as much more than a design tool for thinking about how games 'generate meaning' (Zimmerman 2012). The notion is used only sporadically by Huizinga – whose contribution, on the contrary, inquires into the numerous intricate ways in which play and culture appear to be inseparable, and are thought by the Dutch author to be one and the same thing. Zimmerman explains in the same article how, in the study of games, scholars have rarely, if ever, fully embraced an obviously limited concept such as the magic circle. However, I argue, it is also true that, in the study of digital games, it has rarely been investigated what it really means to study

games as taking part in that same environment in which they are played.[68]

I have proposed in this chapter that embracing this perspective could lead to a more radical reconsideration of concepts that tend to underlie both the study and the design of games. These concepts include the very separation between study and design, production and consumption, more or less magical circles and their surroundings, as well as the concepts of the performativity, materiality and agency of games. Through Crogan, Ingold, Kember and Zylinska, I have also argued here that a creative approach to game studies would be a way to bring video games back to life – an endeavour that is probably required with a certain urgency, given how rapidly the strangling propositions of gamification evangelists have been spreading throughout and beyond video game culture.

[68] There are, indeed, notable exceptions. Giddings and Kennedy (2008) explore similar directions in an ethnographic study of their own performance while playing the video game *Lego Star Wars*. The authors look at their own performance as an event in which both players and game continuously negotiate their agency, in a cybernetic loop in which no one is ever completely in control. They conclude that players are often trained and 'acted upon' by the game (28). The authors argue that 'in studying the event of gameplay we are assuming that the videogame "text", the videogame technologies, and the players are all in play, all objects of study, as are circuits within and between them' (18).

Conclusions

Why we need creativity now - the end of gamers, the end of games

In this dissertation I have studied the relation between gamers and games, and analysed how this is narrated through different discourses. I have argued how we can intervene, as scholars and gamers, by rethinking existing narratives. At the beginning I have asked myself what is at stake with gamers' games. Ultimately, I argue that there is a re-evaluation of the humanities in the study of video game culture. A study of gamers' games requires a critical intervention that is at the same time theoretical and practical, thus deconstructing the distinction between the two. The project of creative game studies, as outlined in the last chapter, is concerned neither with gamers nor with games or any other term that is supposed to label things within a structure of relations, but with the relation itself, as unstable, mutating and problematic as it may be. In the conclusions of this work I will outline the main theoretical contributions that I have so far brought into the discussion and present some further arguments and examples.

In chapter one I explored how a study of gamers' games can be carried out. In light of the current debates on game studies, too often concerned with the foundation of new definitions and explanations of what video games are and can do, I have instead argued that we need to find ways to understand digital games through a study of *relations*. I looked at deconstruction (in the formulation of Derrida) and post-structuralism as theoretical projects that question what keeps opposite categories comparable to each other and similar groupings distant. By looking at the ways in which gamers and games are put in contact with each other through discursive performances, I argued that the boundary between the two becomes problematic to identify. From this theoretical problem, one more follows: the very process of identification of the boundary that should separate gamers and games becomes constitutive of that same boundary. I argued that the

scholar is implicated in a study of gamers' games as author, at each new reading, of a temporary configuration that identifies both gamers and games in their difference. For this reason I turned to the concept of the 'parasite' by Michel Serres (1982), and to the notion of the performativity of discourse (mostly drawing on the work of Foucault and Butler). I referred to these authors while trying to look at the instability of structural organisations of discourse and at how these constantly decentre through the production of new discourses.

In the theoretical framework outlined at the beginning of my dissertation scholarly interventions appear to be always already material: effectively bringing about distinctions, separations, definitions and, at the same time, their own undoing. Thus, the stories on the history of the medium can be read again for the implications they have in the present: the framing of the historical changes of the medium do reinforce the current processes of boxing of technologies and their consumers. Through a genealogical reading of specific moments of the history of video games (the supposed invention of the first video game ever, *Spacewar*, and the excavation of the cartridges of *E.T. the Extra-Terrestrial*) I have re-evaluated the role played by narratives in the invention of facts about the medium and their users. Chapter two has served to ultimately ask, in a Foucauldian fashion, what the conditions are for saying the truth about video games. Also, I argued that those same conditions can be re-fashioned for the formulation of alternative narratives that re-interpret our ongoing relationships with the medium.

Chapters three, four and five offered precisely those alternative narratives. In chapter three I looked at the series of hacking of PlayStation3 and PlayStation Network and explored different modes of understanding and evaluating the role of the hacker. My argument was that these products and services do not even need to be opened and unboxed to be modified: these are in fact porous technologies, leaking networks that are continuously re-framed through the production of discourses about what they are. The series of hacking of Sony's products was a particularly clear case in which several official voices, with authoritarian roles, were called to define and establish the boundaries of PlayStation3 and its online portal. The hackers are hybrid mediators in a network of material-discursive nodes (Latour 2005, Michael 2000, Suchman 2007) and can act as parasites (Serres 1982) of the allegedly closed boxes of video game and

technological products. In chapter three I argued that the invention of reconfigurations of video game technologies can happen from a variety of sources, and not only from those which are in a position of power (as, in this case, Sony Computer Entertainment, some of the most influential hackers and, indeed, the scholarly accounts of the events). Those who have been playing with PlayStation3 and its porous boundaries could continue doing so imagining new ways of relating to the console and to each other, welcoming practices of sharing and mutual assistance in the production and consumption of video games. What is left to be questioned is the value of those practices, and the implications of the claims of freedom often used to support forms of hacking.

Chapter four further looked at the politics around practices of production and consumption, while making a case for the role that ethics play in the evaluation of those practices. The emergence of the notion of independence in video game culture brings to question how individuals define themselves within the territory of independent game production in relation to other independent or non-independent developers. Independence soon appears as a 'floating signifier' (Laclau and Mouffe 1985), or a blanket too short to cover all the different modalities of independence. Thus, game developers ask themselves questions about who they are and what they do, and the answers they provide can make the difference. The individualisation of game developers can turn into narcissism, or even into solipsism, feelings of depression and desperation (as seen in some scenes of *Indie Game: The Movie*). However, through confrontation with the other differently independent developers and designers, independence works as an inconsumable force that raises the ethical question of how to take care of the alterity which it necessarily evokes, of the other self-proclaimed independent or those outside the independent territory. Ethics can be the driving force of the narratives of independence that circulate within video game culture, thus eliminating the individualisation of the developers in favour of a practice of making games *in relation to* others.

The narratives of independence in video game culture participate in a broader series of stories in which gamers and games relate to each other in complex ways, possibly influencing and engaging with each other. In chapter five I ultimately argued that a new narrative of engagement is the purpose of a study

of gamers' games. In this chapter, through the work of Ingold (2010, 2011), Heidegger (1971a, 1971b) and Bergson (1914, 2001), I explained how the study of games is another way of *doing things with games*, but I also argued that such a scholarly project needs to be creative if it intends to be *critical* and *anti-authoritarian*. I defined these two qualities of creative game studies as the capacity to bring about realities through its own interventions and questioning the fossilisations in dualities and oppositions of the discourses on game culture. Creativity is, in the final analysis, the concept I offer to the study of gamers' games and which can bring to a re-evaluation of the humanities in this field. In the rest of the conclusions I want to further stress how and why creativity is needed *now*, and how a creative study of games can provide paths for future research.

Why we need creativity now

The stories surrounding the medium of the video game are often about changes. Reconnecting to the cases discussed in the introduction, and to the numerous others outlined in this dissertation, the medium is often presented by industry experts and game journalists as undergoing a series of revolutions. The production of games is allegedly becoming easier and more accessible to many, games might soon become part of the education programs in schools and are now used to discuss social problems and to solve health issues. Other stories that have been mentioned in the present work include the now accepted adoption of video games by artists and in art institutions, the use of video games to deliver political messages, the involvement of gamers in the production of content of games and, when this possibility is denied, the organisation of gamers into groups who decide to modify and manipulate the games they buy. All these trends are often described as changes towards a new age of gaming, one where the categories and labels of the past are going to be replaced by new ones. The history and contemporary condition of the medium is often seen by industry experts as in a constant process of evolution through major revolutionary moments.

Radical changes are thus the norm in the medium of the video game. The introduction of a new game console, for example, is often described as belonging to a new generation of products. In the jargon of console manufacturers, the release of consoles can be divided in historical ages, often associated with the kind of processor used: from the 8-bit and 16-bit era of Nintendo historical consoles we have processed to Sony's PlayStation, the most famous 32-bit console, and then to Nintendo64 (named after its 64-bit processor) and so on until the contemporary generation of PlayStation4 and Xbox One, usually referred to as the eight generation or cycle of consoles (the amount of bits is now considered less relevant and generations are conventionally numbered in a progressive order).

In this history of evolutions and revolutions, I decide to turn to creativity in the study of video games and their players. The reason for this is the dead end to which the categorisations operated by (r)evolutionary discourses tend to relegate the medium. As a succession of consoles, trends, ages and models of production and consumption, the narratives on the history and prospected future of the medium offer a discontinuous and yet repetitive analysis. In these views, one event, invention or product follows the other in an orderly fashion (and will be followed by a new one rather soon). The presentations of such orderly successions rarely take into account the ideologies of progress associated with it. More importantly, these stories often take the timely progression of technology as granted and as narrated by neutral voices.

In this dissertation I have tried to question where these stories originate, how and by whom they are narrated. The apparent linearity of the narratives of conflict, independence and engagement that I have looked at in this work lose their integrity when confronted with the multiplicity of voices that overlap with each other in defining, explaining and describing the phenomena behind them. The order that results from these descriptions has been understood as always in relation to a temporary and located form of intellectual approach to media, one that separates and differentiates through spatial and temporal categorisations: in these views, producers are separated from consumers as much as one video game product will follow another, and gamers and games are seen to influence,

affect and manipulate each other from separate positions in an imagined and abstract spatiality.

Why is creativity an appropriate destination in this research project, and how can it take account of the tendency to understand the medium of the video game through discontinuous successions? In Bergson's *Creative Evolution* (1914), creativity is defined as that which can take account for both the discontinuity of evolution and its products and the continuity of life. While intelligence allows an analytical and spatialised approach to the world around us, keeping us external to the same world, intuition lets us reconnect with the vital impulse and place ourselves *within* evolution, as part of it. Intuition has been seen in this dissertation as a strategy for countering categorisations and dualities (such as gamers and games) whenever these are presented as given. Through intuition I argue instead that we (scholars and gamers) can question the origins of these separations and offer new narratives of them, new temporary categorisations.

Creativity is also a good concept for evaluating scholarly interventions. It brings us to consider the production of narratives as always necessarily being part of the stories on and of media. The creative interventions in the study of games that I encourage in this conclusion need to reconnect with the duration and temporality of the narratives of media. This means understanding that interventions happen in a specific time and place and that these can be separated from the temporality of their happening only by giving them the aura of neutrality of the essentialist and ontological analyses.

Creative interventions are needed *now*, in at least two senses. First, we need creativity in this specific period in which the academic study of video games is allegedly becoming less useful, or maybe entirely irrelevant, in the preparation of students to get a job in the industry. Creativity is the concept that makes the study of the humanities relevant in the academic curricula for those who want to *invent* new video games. The attacks to the humanities that have been perpetuated in the last years from several political actors in Western democracies and, more recently, as I will soon discuss, by the proponents of the GamerGate controversy, are representative of a widespread feeling of hate for anything that is not seen as being immediately useful and spendable. Creativity is thus needed precisely as a mode for questioning where the assumptions on

usefulness originate, from which political and ideological background and as part of which general plan for the precarisation of labour. Precarisation which involves both lecturers and students, with the former often evaluated as not necessary to make the game industry work, and the latter being precarised by the high fees required to get access to university in the hope of becoming part, one day, of the category of the useful ones. Re-evaluating the humanities in the study of digital games through the notion of creativity is a needed intervention, given the current political context. Higher education might easily prepare students to work immediately after graduation in the game industry, but this will be useful only in the short term. In fact, it is not a great achievement if those same students are not challenged by the continuous question of how to be *good* game makers – thus, knowing not only how to do their job but also, possibly, how to reinvent it.

Second, creativity is needed *now* in the sense that the creative study of games must take responsibility for the moment in which it *happens* and for the events it originates. Being inserted in time and having its own duration, it cannot expect to understand what games are, how they work and with what consequences (as in the ludological and procedural approaches) but needs to acknowledge its being part of the medium. Exceptions and inconsistent discourses will always occur and ruin the theorisations of ontologies of games. This does not mean we should stop trying to understand games, but welcome the ruptures and events that decentre the structures of theoretical discourse. In the end, studying video games creatively also means asking ourselves how to be good hosts and guests (*hôte)*, in the Serres parlance, of the diverse modes in which play happens. As discussed in the introduction, this will indeed lead to a certain 'anxiety', of the kind Derrida proposed to be necessarily emerging when being 'implicated in the game, [and] from the very beginning at stake in the game' (1980: 248). But this is a problem that should not be escaped, and that will certainly make all of us, gamers and scholars, feel more alive.

The end of gamers, the end of games

There are more good reasons for *staying alive* within a creative study of gamers' games. In fact, recent stories disseminated from the game industry have been suggesting that both terms, gamers and games, and the categories they designate, might be about to die. The death of gamers and games has been narrated by several authors and mostly presented as a consequence of the now wide distribution of video game products. The diversification of game products (from big-budget developments to mobile applications made by a single developer in a day), the multiplication of devices and formats (home consoles, PCs, smartphones, social networks and so on) and the varied audience sectors (families, women, children and over-60s) have allegedly abolished video games and their consumers as an identifiable category. This is what we are told, for instance, by Ian Bogost (2011c), who concludes his book saying that:

> If videogame playership is indeed broadening, then videogames will no longer fall under the sole purview of the games industry. There'll no longer be a single court in which the legitimacy of games will be tried. There'll no longer be an oligarchy of videogame industrialists – gods to whom all creators and players pay homage. Instead, there'll be many smaller groups, communities, and individuals with a wide variety of interests, some of them occasionally intersecting with particular videogame titles. […A]s videogames broaden in appeal, being a 'gamer' will actually become less common, if being a gamer means consuming games as one's primary media diet or identifying with videogames as part of one's identity. […] Soon gamers will be the anomaly. If we are fortunate, they'll disappear altogether. (Bogost 2011c: 153-154)

Before Bogost, Jesper Juul (2009) advocated that the demographics of video games are changing to include different sectors previously not considered. This is leading to the rise of the casual gamer, who is not an avid consumer but only occasionally engages with digital games.

This change is also bringing about the end of games as we know them. In some contexts, video games appear to be increasingly substituted by apps; for instance, in the field of gamification app often replaces, as a term, video game, probably as a more friendly expression for those who might not be familiar with the world of PC and console gaming but use smartphones in their daily lives. In the HSBC advertisement, discussed in the introduction, the imaginary game *Sticky Weasel* is never called a video game but always an app. Furthermore, social

networks and Facebook in particular have incorporated games in their offering, blurring the experience of socialising with that of playing.

Moreover, when in May 2013 Microsoft presented the new Xbox One console, the stress placed by the presenters on stage on how the console will be just like television or bring home a TV-like experience attracted the criticism of many traditional customers and fan communities of Microsoft products.[69] Microsoft representatives seemed hesitant to pronounce the words gamers and games, as if this could restrict their target audience. The merging of television and online services into home consoles (including Sony's PlayStation4) can be seen as part of a trend where the previously essential hard-core market is now becoming less important, in favour of mixed categories of consumers interested in different forms of digital entertainment. Sony itself, when promoting its PlayStation4 console, attempted to contrast its competitor Microsoft by addressing its marketing to a more conventional audience, adopting the slogan 'This is for the players', thus avoiding the word gamers and choosing a broader term for whoever might be interested in an entertaining experience.[70]

The disappearance of the words is significant of the fact that gamers and games now have a negative connotation. Both are seen as being associated with a male teenager, no longer appealing to the contemporary audience. In recent months gamer culture has been considered to be definitely dead, and for good, because of the GamerGate controversy. GamerGate originated when game designer Zoe Quinn was accused by online detractors of having a conflict of interest with Nathan Grayson, a journalist for the game magazine *Kotaku*. The controversy escalated in a series of personal attacks against Quinn, who was in her turn supported by several scholars and journalists who defended her position. One in particular, Anita Sarkeesian, who released in the same period a series of videos accusing the game industry of objectifying women in games and in work placements, took a stand in favour of Quinn. GamerGate soon became an attack against women and feminists, seen as threatening the male-dominated culture of video games. GamerGate culminated in death threats against both Quinn and Sarkeesian and the publication of their private addresses and contact

[69] Kelion, L,. (22nd May 2013) 'Xbox One: Web Reacts to Microsoft's Multimedia Console', *BBC News*, http://www.bbc.co.uk/news/technology-22620039 [Last accessed 8/11/2014]
[70] The campaign was commissioned in 2013 to the agency 180Amsterdam.

details. As part of the controversy, the work of academic scholars who supported Quinn and Sarkeesian, particularly within the Digital Games Research Association (DiGRA), has been analysed by GamerGate supporters in order to create lists of enemies to denigrate within academia. The movement of self-professed "social justice warriors" against the alleged overabundance of women in gaming culture has been active for several months, mostly in online communities such as 4chan and on Twitter.

As GamerGate reached its lowest point in the denigration of women, the hypothesis that gamers might be about to disappear seemed to receive further confirmation. Leigh Alexander on Gamasutra (28 August 2014) titled an article 'Gamers Don't Have to Be Your Audience. Gamers Are Over'.[71] Dan Golding, academic and blogger, wrote a post on the same day about the end of gamers. As Golding puts it: '[gamers] have astutely, and correctly identified what is going on here. Their toys *are* being taken away […]. Videogames now live in the world and there is no going back. I am convinced that this marks the end. We are finished here. From now on, there are no more gamers – only players' (Golding 2014). Both articles, influential in the following days on social networks, depicted a sad representation of gamers: a minority that seeks confirmation for its aggressive and oppressive behaviour against a new emerging and wide audience of players, which is apparently making gamers disappear to the point that they are no longer relevant.

The GamerGate controversy has brought to light something that was generally well known about video game culture, that is, the overarching masculinity that dominates in the industry and among many consumers. This and other similar stories regarding the inclusion and representation of women in game industry have not been properly discussed in this dissertation. However, I argue that a creative approach to game studies can also intervene on these occasions – an endeavour that could be carried forward into future research. A creative study of games takes into account how categories such as gamers and games, men and women and even the boxing of media into identifiable

[71] Alexander, L. (28 August 2014) 'Gamers Don't Have to Be Your Audience. Gamers Are Over', *Gamasutra.com*, http://www.gamasutra.com/view/news/224400/Gamers_dont_have_to_be_your_audience_Gamers_are_over.php [Last accessed 8/11/2014]

technologies (video games, television, smartphones and so on) are brought about through discourse, and how the production of these discourses entails an ethical demand for hospitality. Creative game studies incessantly asks itself how to be good hosts and guests of the actors invented through the narratives that make sense of video game culture.

Within this perspective, I also argue that ethics becomes a crucial element while attempting to be hospitable. Paraphrasing a slogan used to ridicule the supporters of GamerGate, it can be said that *actually, it's about ethics in game studies*.[72] Ethics offers an unresolved question about the understanding of ongoing and conflicted relations. Through ethics we can assess and evaluate the temporary fixities that will inevitably be created through our scholarly interventions, while relating ourselves to a series of unresolved relations. Academics are in fact parasites, as many denigrators of the ivory tower of academia might say, but of the good kind: I argue that our duty is to become the third destabilising actor in relations of dualities, letting structures implode while opening them in order to welcome further *hôte*, as Serres would put it.

GamerGate, and other examples of the possible end of gamers and games, should not be used to simplify the issues at stake. If gamers and games belong to the past, then we might as well be concerned about what else they are becoming, or what is replacing them. It is possible that new denominations are now becoming widespread (players instead of gamers, and maybe apps instead of games) but who is deciding about the new words to be used? Who is affirming that gamers and games are dead, and who was dissatisfied with the previous condition?

Claiming that gamers are over can hardly represent an inclusive approach towards those who, for example, currently identify with the hard-core community but equally disagree with the aggressive stance of the "social justice warriors". The GamerGate controversy ends up denouncing an aggressive

[72] The statement "actually, it's about ethics in game journalism" has become a meme while GamerGate has been circulating online. It worked as an ironic comment on those who attempted to defend the attackers of Quinn, Sarkeesian and the feminist movement. In fact, those supporting the attacks claimed that the scandal was about game journalism and its oft-debated relations with game designers, particularly the independent ones, and had nothing to do with the presence of women in game culture. The claim was seen as an absurd pretence to defend an unjustifiable behaviour that was blatantly offending and threatening women (and only women).

behaviour that might equally be re-appropriated by the new audiences (or whoever speaks for them), particularly if it is seen as a winner-takes-all scenario where a new majority is supplanting the previous one. Not coincidentally, I believe, many of the claims of the end of gamers have been supported by market research statistics from various organisations and institutions, all equally showing that female gamers are now the majority, or close to becoming so. Moreover, Microsoft and Sony are attempting to move in a similar direction to that taken by Nintendo with its Wii console in 2006, that is, appealing to a diverse market that will guarantee a more solid base of consumers with varied tastes. For the main publishers, GamerGate also represents an excellent occasion to finally appeal to a wider and more profitable market while denigrating the criticism received from hard-core gamers. Moreover, the defence of the rights of women to be represented in video games in a respectful way, and to take part in the industry with fair salaries and the same rights as men, cannot be justified by the emergence of a market sector: it should be achieved regardless of the number of women involved, and not because of them supposedly becoming a majority.

In this and other similar situations a creative study of video game culture is crucial and can help us understand what makes the difference between oppression and inclusion, aggression and hospitality. A creative study of GamerGate introduces critical intervention as a form of hospitality towards the actors involved in the controversy, letting them speak and unfold their narratives before making a cut, in such a multitude of voices, through the invention of a new story. This act of invention will avoid becoming itself an aggressive attack in which old categories are replaced with new ones. Looking at the multiple ways in which gamers define themselves and others entails taking into account a multiplicity of different voices, rather than their fossilisation in categories or even in market sectors. Listening to gamers' games also means dismissing neither.

As argued by Gilbert (2008): 'every group identity is a provisional and partial fiction. What is more problematic is the assumption that it is only through such group identities, rather than through complex processes of mutual interaction, that collectivities can come into being at all' (159). I maintain Gilbert's proposition that reflecting on the complexities of these processes of

interaction is one of the main objectives of cultural study. Of course, decisions will need to be made. The angry masculine gamer claiming to be oppressed and marginalised is not the same as the woman who is harassed while playing online or working in a video game company. But what matters is explaining why it is not the same (and being a growing market sector cannot be, I believe, the main reason).

In this context I argue that narratives constitute a crucial tool. Narratives have been theorised in this dissertation as performative discourses that are capable of describing and bringing about realities. Formulating narratives is a way of making choices, of 'cutting' (Kember and Zylinska 2012) one or a few configurations out of the many possible. In the debate over the end of gamers and games we need to operate choices in between the major narratives that are pronounced by institutionalised voices, and look at how categories have been made, who or what is instead marginalised and how else these same categories could be reconfigured. Similar questions have been posed in the work of Michel Foucault, particularly in regard to how relations of power operate with and are replicated through discourse, and at the discourse theory of Laclau and Mouffe for its struggle to understand the differences within discursive formations without reducing them to political categories.

While gamers and games might be dead according to many commentators, gamers' games instead, seen as processes of mutual relations, are alive and well. Looking at gamers' games (rather than the two separately) is a fruitful perspective when trying to understand the many mutations and contaminations operating within video game culture. In this dissertation I have been taking the first steps towards a methodology for the study of gamers' games, one that aims at re-evaluating the role of the humanities in the study of the medium of the video game and the importance of theory for understanding, making and *living with* games. In other words, these are the guidelines for a new game, a game which can and will be improved in the future, but which I find to be already much more entertaining than those we have been playing with so far.

Appendix: images

[Image 1] Sony Computer Entertainment, *Little Big Planet* (source: Sony Computer Entertainment)

[Image 2] Sony Computer Entertainment, *Little Big Planet* (source: Sony Computer Entertainment)

[Image 3] Sony's Net Yaroze (source: Sony Computer Entertainment)

[Image 4] Sony's Net Yaroze: development kit and manuals

[Image 5] Valve, *Half Life* (source: Valve)

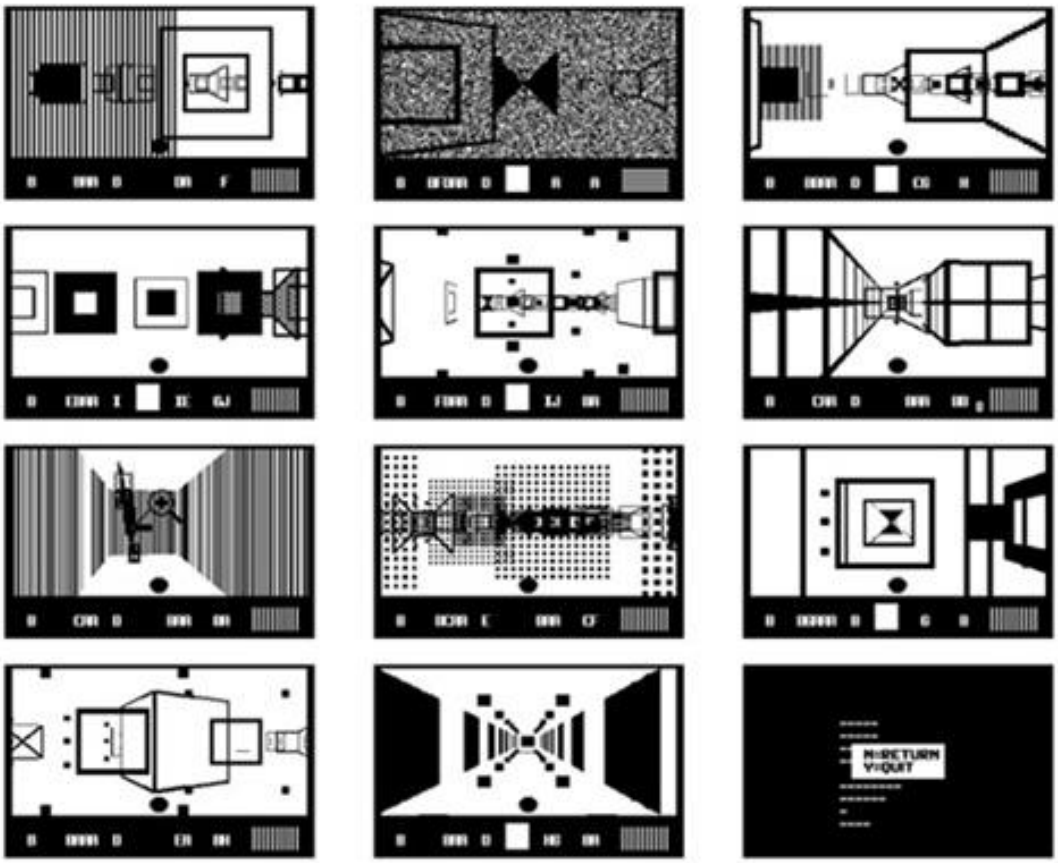

[Image 6] *Counter-Strike*, modification of *Half Life*

[Image 7] Linden Lab, *Second Life* (source: Linden Lab)

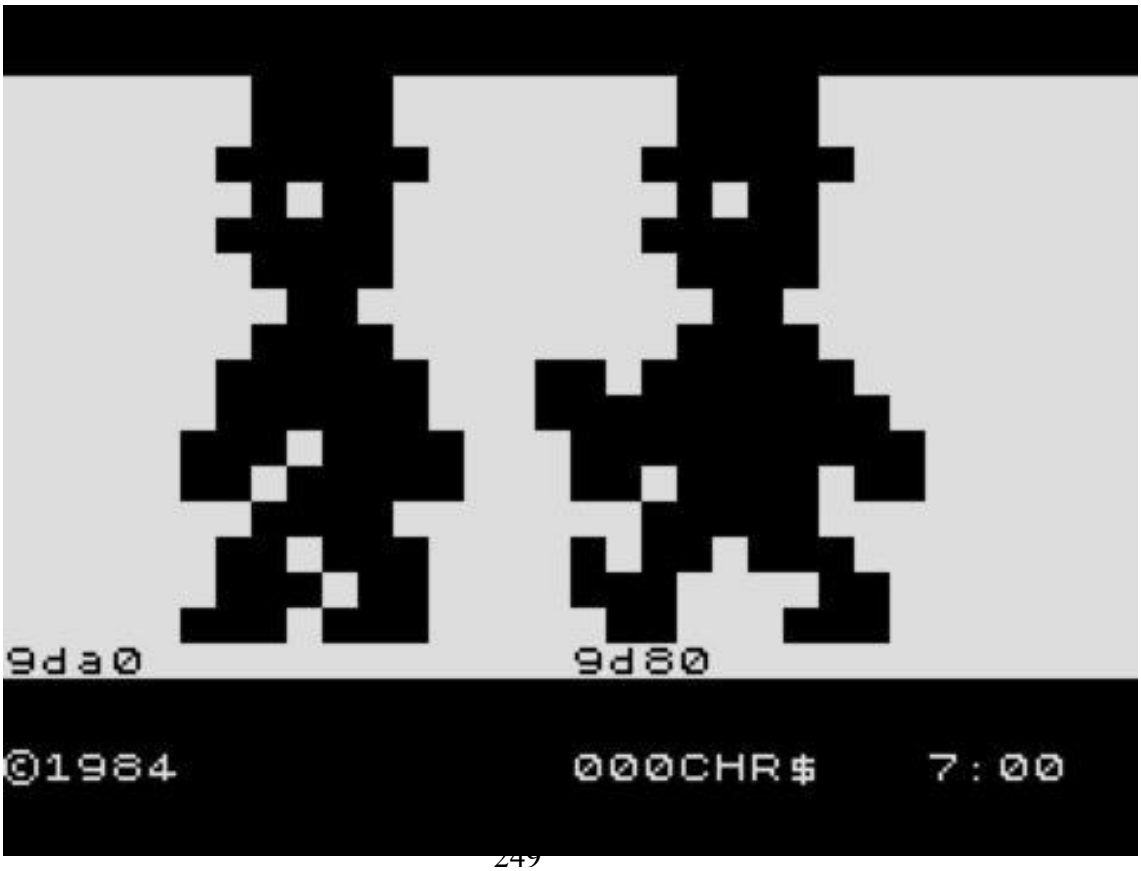

[Image 8] Mojang, *Minecraft* (source: Mojang)

[Image 9] HSBC, *In the Future* campaign – *Sticky Weasel* (source: JWT Dubai)

[Image 10] HSBC, *In the Future* campaign – *Sticky Weasel* (source: JWT Dubai)



[Image 11] JODI, *SOD* (source: Jodi.org)



[Image 12] JODI, *Jet Set Willy @ 1984* (source: Jodi.org)

[Image 13] Miltos Manetas, *Super Mario Sleeping* (still from video) (source: miltosmanetas.com)

[Image 14] Miltos Manetas, *Super Mario Sleeping* (still from video) (source: miltosmanetas.com)

[Image 15] Alan Kotok, Stephen Russell and Shag Graetz playing *Spacewar,* 1962 (source: Computer History Museum, Mountain View, CA)

[Image 16] Dan Edwards and Peter Samson playing *Spacewar*, 1962 (source: Computer History Museum, Mountain View, CA)

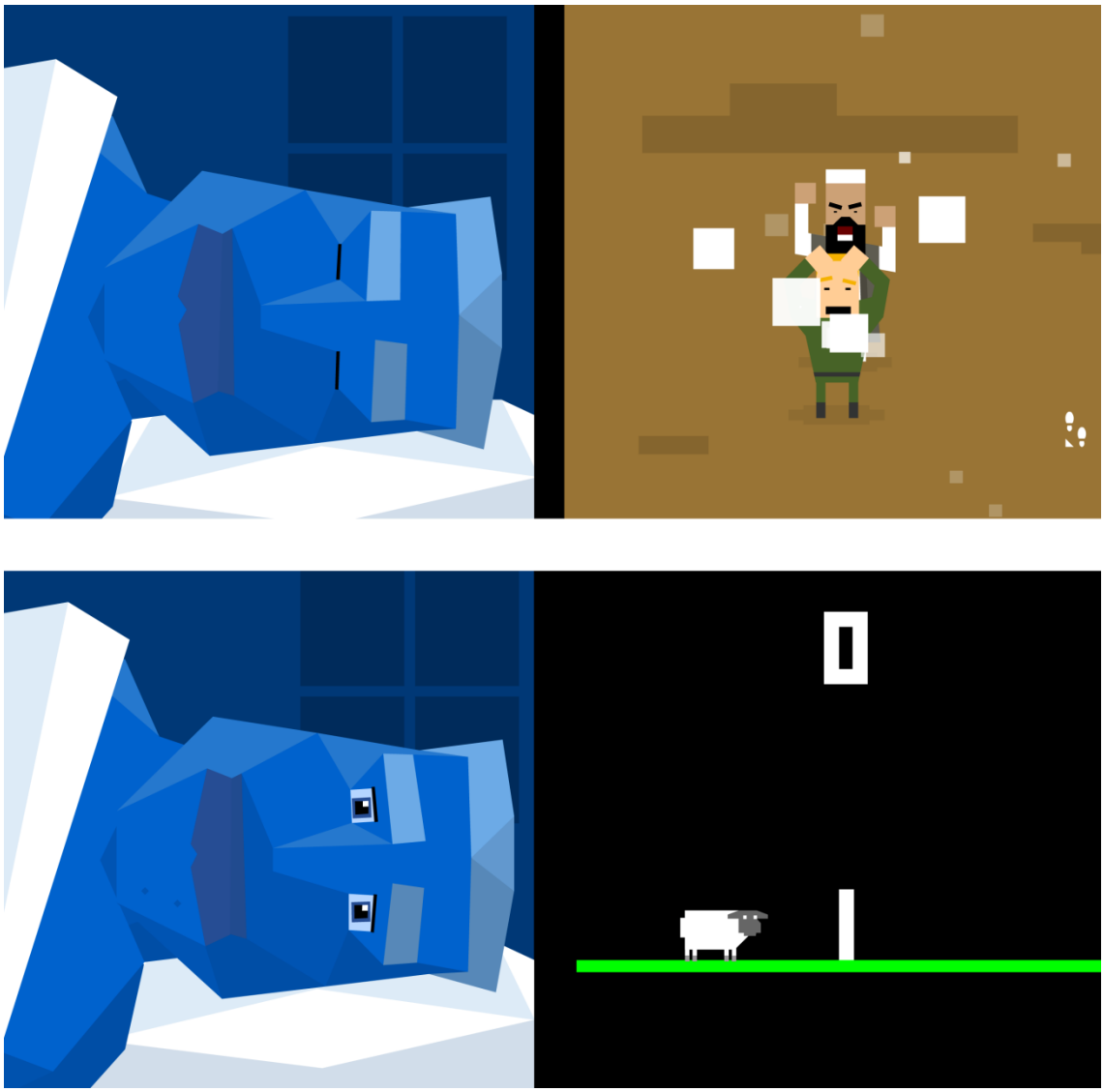
[Image 17] Atari's *E.T. the Extra-Terrestrial* excavation (source: ArsTechnica.com)

[Image 18] Atari's *E.T. the Extra-Terrestrial* excavation (source: ArsTechnica.com)

[Image19] Molleindustria, *McDonald's Videogame* (source: molleindustria.org)

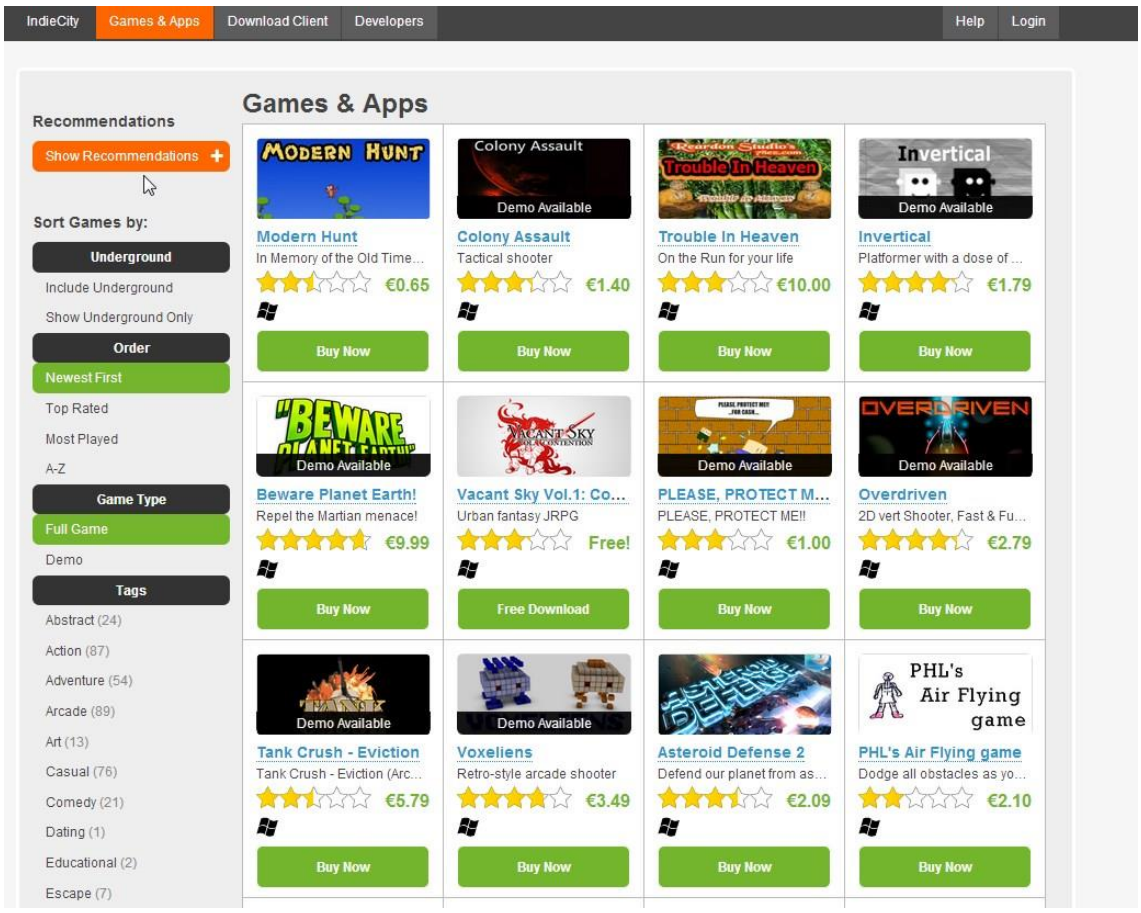
[Image 20] Molleindustria, *Oiligarchy* (source: molleindustria.org)

[Image 21] Molleindustria, *Operation Pedopriest* (source: molleindustria.org)

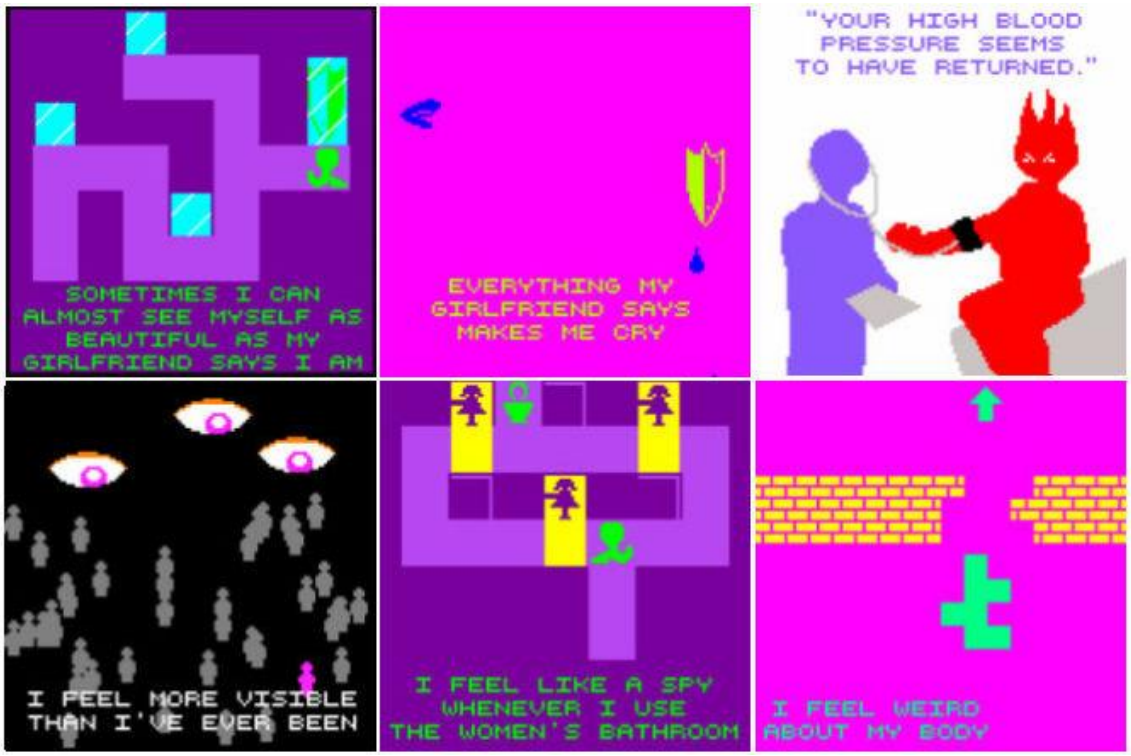


[Image 22] Molleindustria, *Unmanned* (source: molleindustria.org)

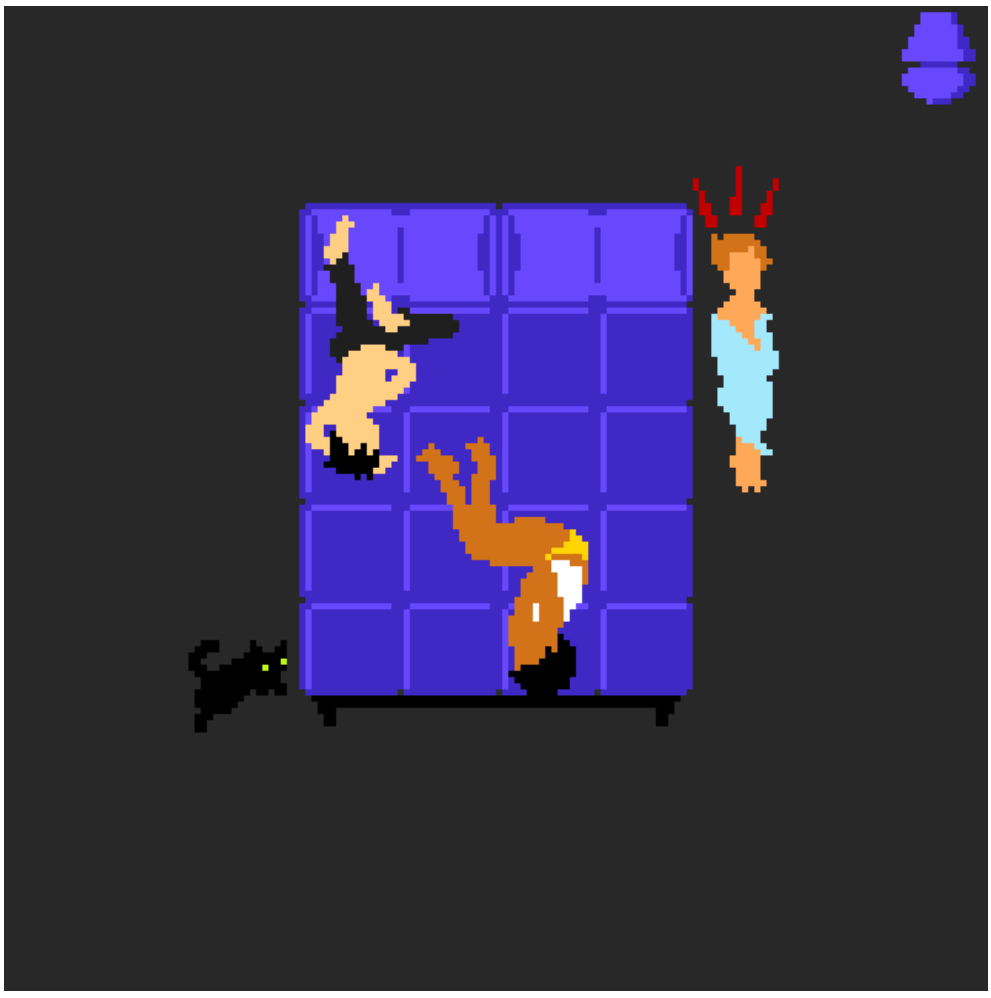
[Image 23] Steam indie channel (source: store.steampowered.com)



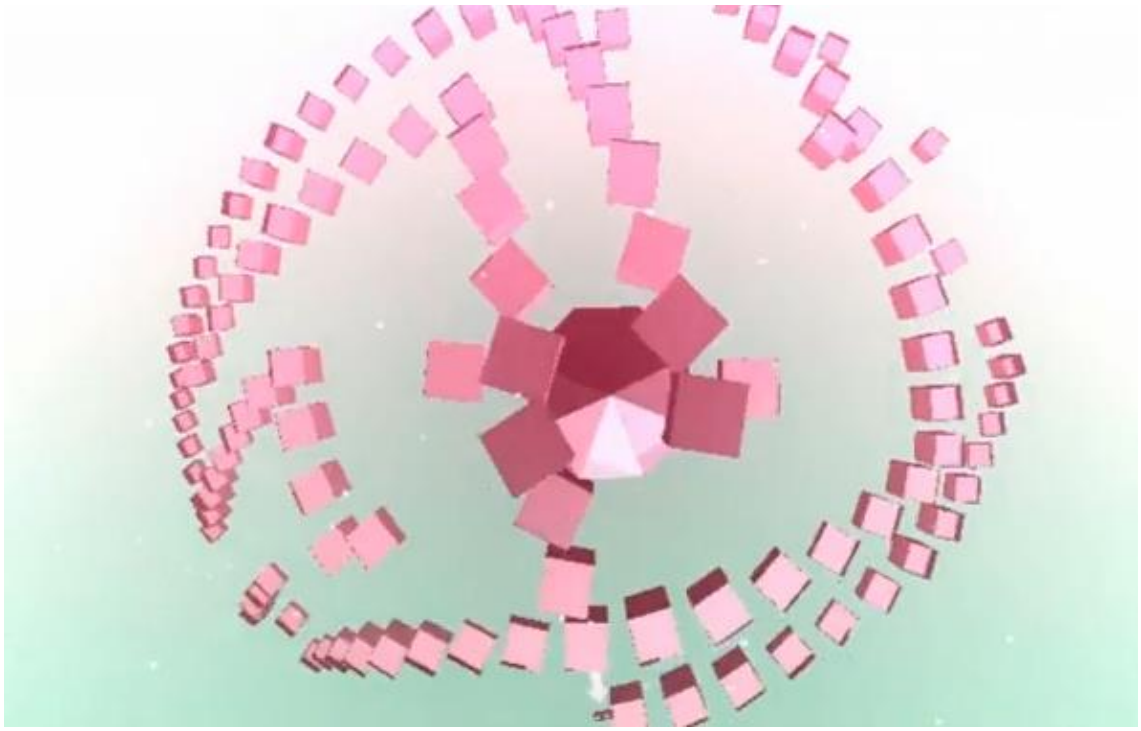
[Image 24] IndieCity homepage (source: store.indiecity.com)



[Image 25] Anna Anthropy, *dys4ia* (source: auntiepixelante.com)

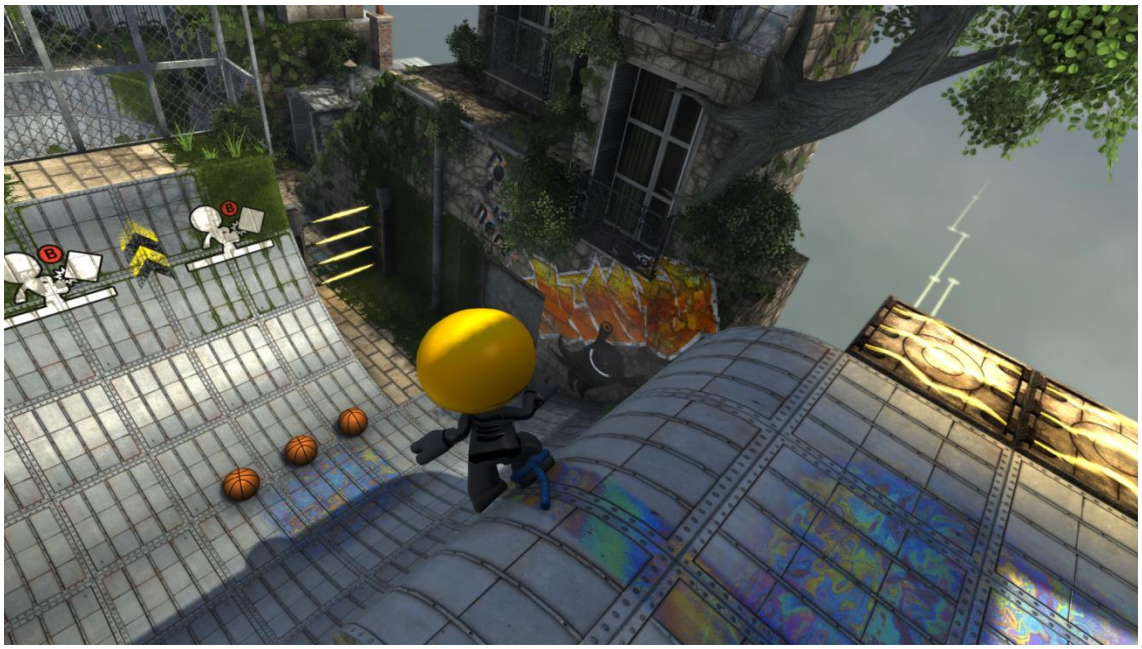

[Image 26] Anna Anthropy, *Triad* (source: auntiepixelante.com)

[Image 27] Cactus, *Tuning* (source: cactus-soft.co.nr)



[Image 28] Cactus, *Tuning* (source: cactus-soft.co.nr)

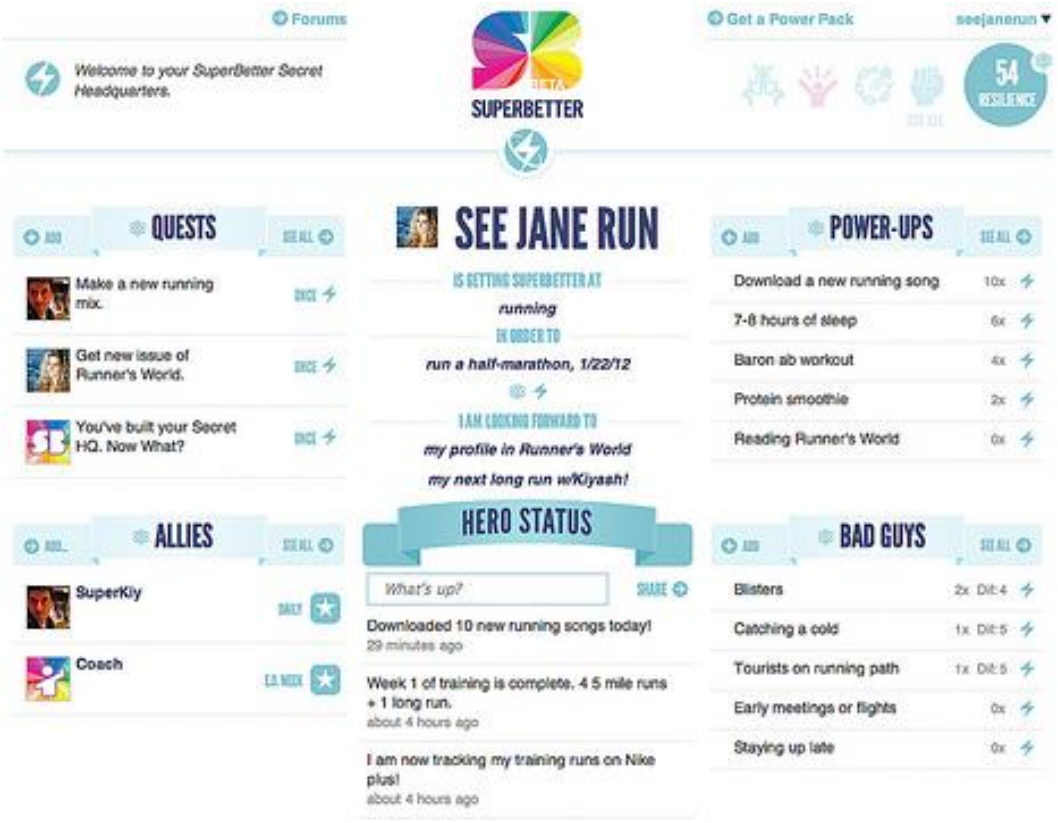
[Image 29] Frecle, *Youropa* (source: Frecle)



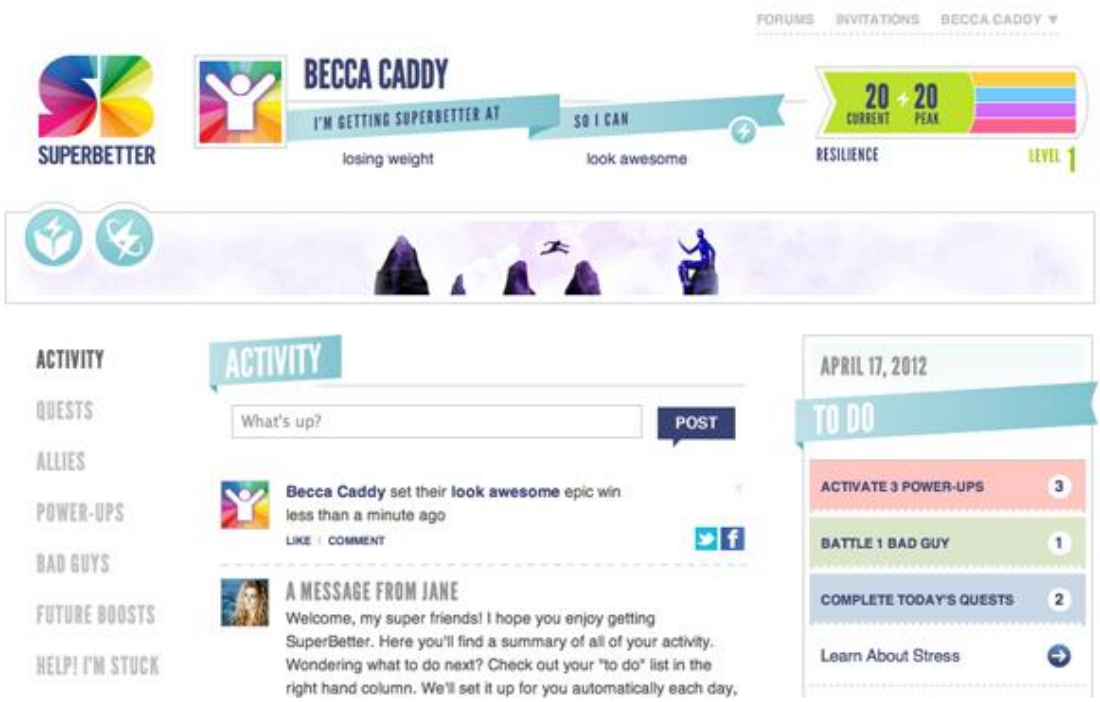
[Image 30] Frecle, *Youropa* (source: Frecle)

[Image 31] Nike, *Nike FuelBand* (source: Nike, Inc.)

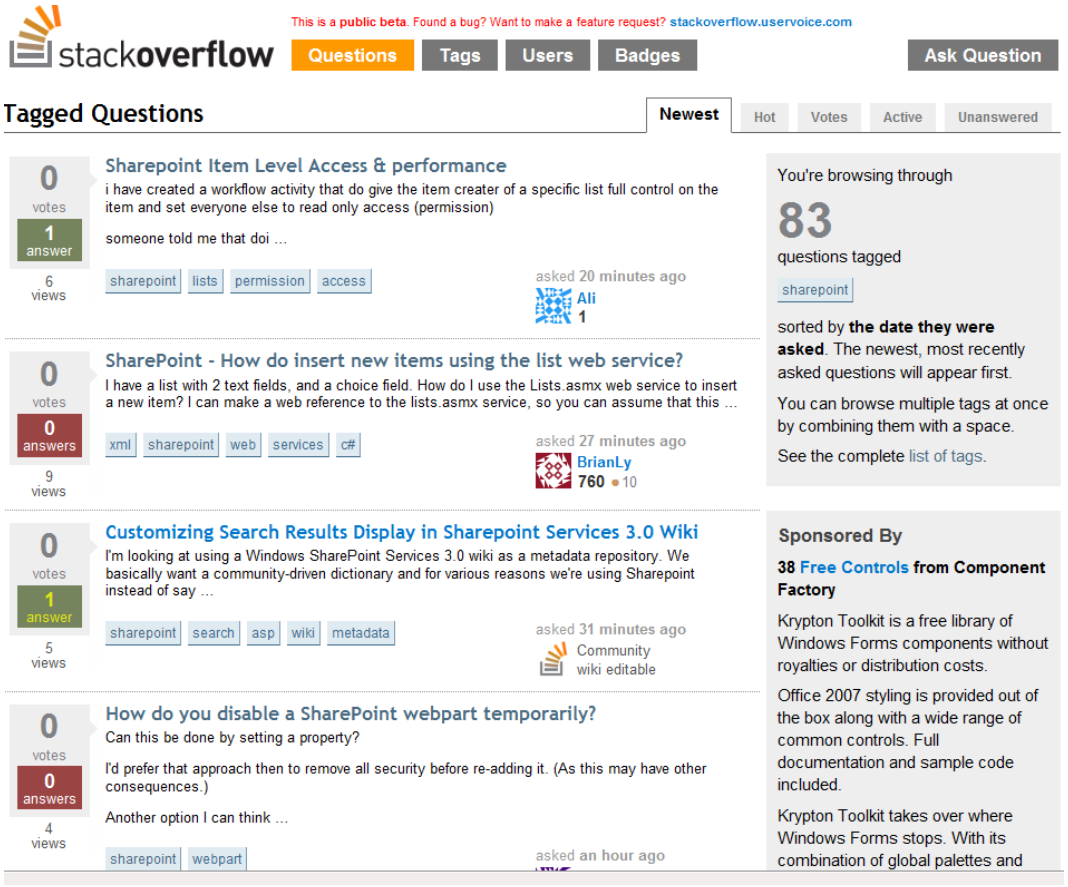
[Image 32] Nike, *Nike+ running app* (source: Nike, Inc.)



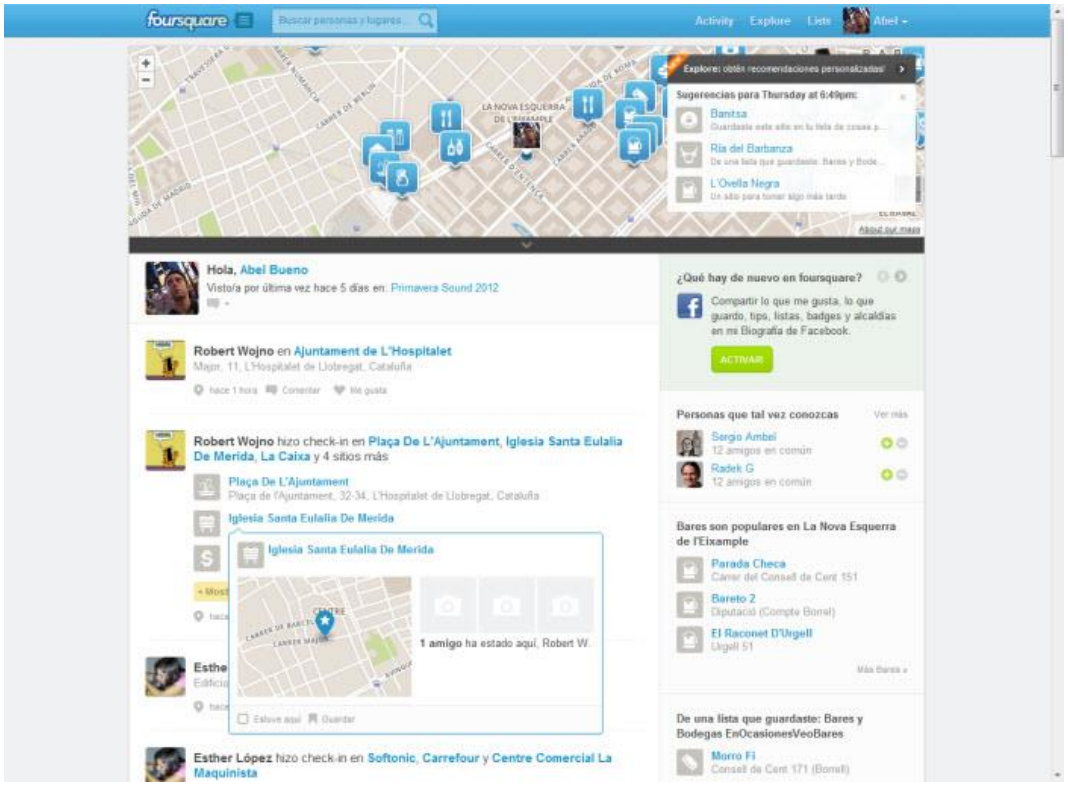
[Image 33] Jane McGonigal, *SuperBetter* (source: Superbetter Labs, Inc.)



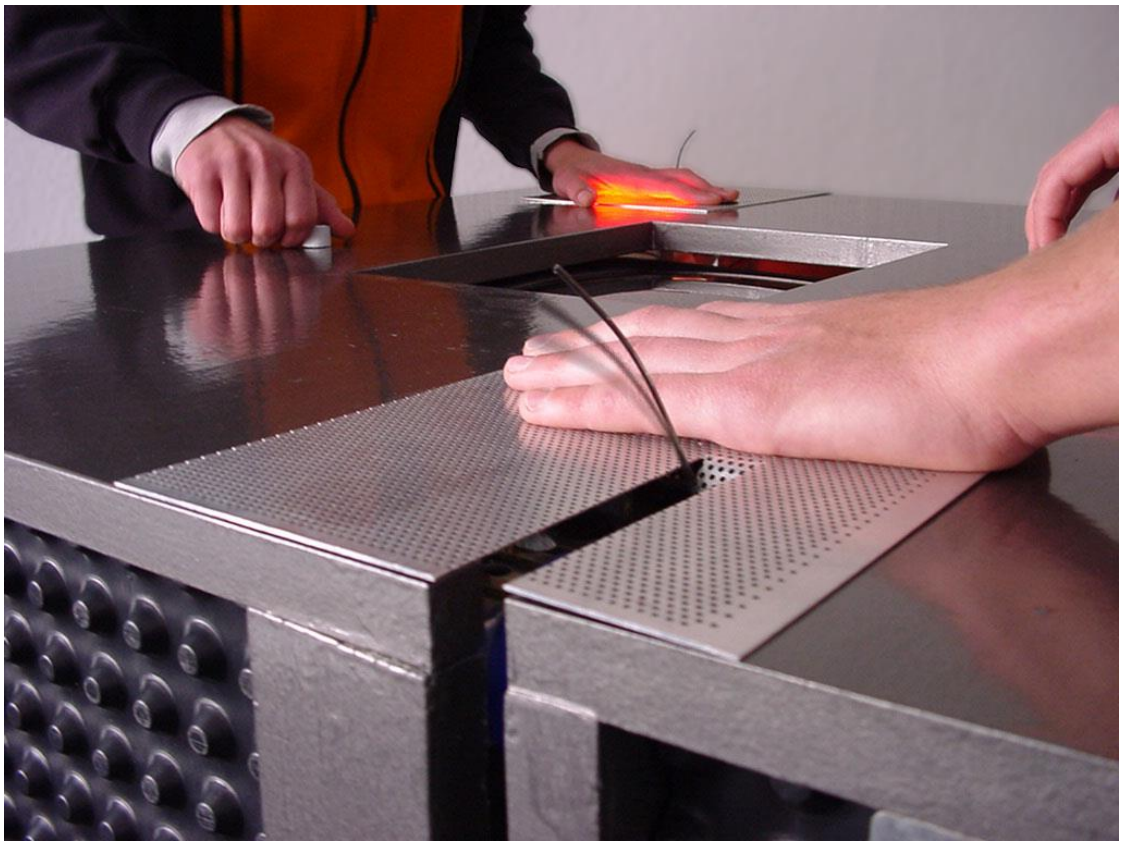
[Image 34] Jane McGonigal, *SuperBetter* (source: Superbetter Labs, Inc.)



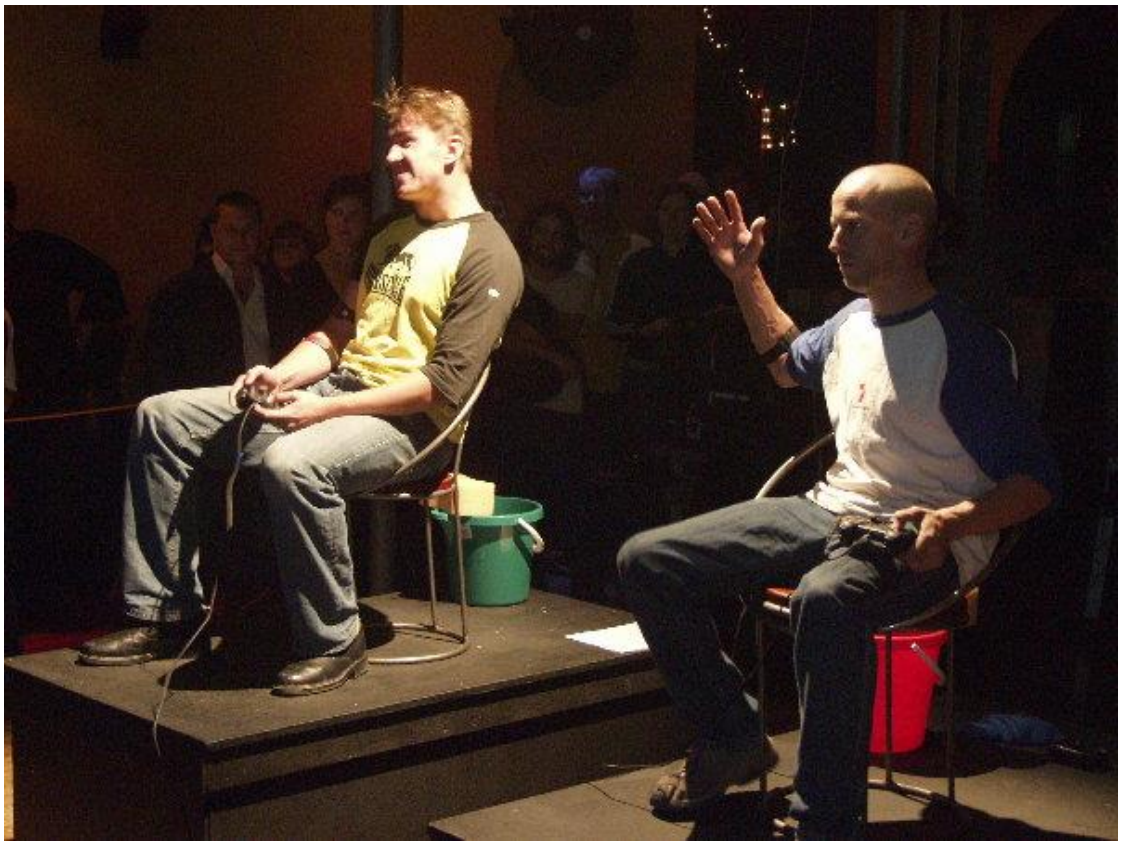
[Image 35] StackOverFlow, website homepage (source: stackoverflow.com)



[Image 36] FourSquare, website (source: foursquare.com)



[Image 37] //////////fur//// art entertainment interfaces, *PainStation* (source: fursr.com)



[Image 38] Eddo Stern and C-Level, *Tekken Torture Tournament* (source: eddostern.com)

[Image 39] Gazira Babeli, *Come To Heaven*, painted on NVIDIA GeForce 7600 GT at sunrise, lambda prints (source: gazirababeli.com)

[Image 40] Gazira Babeli, *Come To Heaven*, painted on NVIDIA GeForce 7600 GT at noon, lambda prints (source: gazirababeli.com)

[Image 41] Matteo Bittanti and IOCOSE, *Game Arthritis - Nintendo Arthritis,* C-print (source: gamearthritis.org)s

[Image 42] Matteo Bittanti and IOCOSE, *Game Arthritis - 3D Optical Disorder,* C-print (source: gamearthritis.org)

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