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Introduction: Art and Game Obstruction

Lars Kristensen

This book is a compilation of essays gathered during the summer school, Art and Game Obstruction, held in 2015 at Skövde Kulturhus. While some of the essays have been produced after the final exhibition, the majority of them were initiated during the school. The collection functions as documentation of the academic course and the art exhibition that ran during the summer months, where eleven Master’s students and various teachers and tutors came together to discuss, experiment and play under the rubric of art, games and obstruction. All the contributors featured in this volume were, in various capacities, involved in the making of the course, and the collection aims at reflecting this. There are three points that this introduction will address before handing things over to the contributors, namely the cross-disciplinary qualities of the course, the marginality of studying computer games as art or technology and the concept of obstruction as a theme for making art games.

Academia has always had a difficult relationship with the computer game. At the heart of this ivory tower problem lies a question: How should games be studied? As technology and digital computing? As texts or as performance? The dispute over whether game-making is part of the arts and social sciences or part of computer science and software development was bridged when Skövde Kulturhus came up with the idea of making an exhibition about art and games. Not only did they approach Högskolan i Skövde, the local university, which has successfully established a programme in computer game development; the Academy of Valand, the fine arts school in Gothenburg, was also invited to participate. Together we developed a ten-week summer school where students would be artists/game-makers and the museum hall the laboratory in which they would harness their skills. The summer school was envisioned as being a cooperation between students of computer game development and fine art – two very different academic traditions colliding in the museum space.
In a very literal sense, the summer school format jumped a divide that can be seen as formative for the establishment of game studies as an academic discipline by provoking the question: How do we come together to make games for and in an art context? It is important to highlight that these questions are not new and did not arise with the development of computer games – the long relationship between art and games goes back at least to surrealism and Dadaism in the 1920s, where artists used games in their art practice. Digital games have already lured artists into playing with game mechanics: we can see this recently, with video artist Bill Viola, or much earlier, with cartoonist and filmmaker Theresa Duncan.

Despite this history, it was apparent from the beginning that the two academic institutions involved in the summer school had different approaches to game-making. Högskolan i Skövde is largely a place where games are studied as part of technological development, firmly grounded in the study of computers and its digital manifestations, while the Academy of Valand in Gothenburg focuses on the education of artists of various creeds and where games are seen as a vehicle for expression. The game-making culture in Skövde is very much associated with incubator growth and the cultivation of entrepreneurial students, while at Valand computer games are used in teaching fine art students destined for the creative industries or a limited exhibition circuit.

Despite the widely held objective to promote cross-disciplinary activities, academia, as an educational institution, is in fact horrible at blending research areas and lousy at working for the promotion of anything that lies outside its primary field. One institution and its members will often defend their territory rather than admit lacking expertise or being at fault in insufficiently covering of their field. This is how academia works – it divides labour between research fields and seeks to maintain this division. However, game-makers will not prosper from such territorial defending. Making computer games is a process that requires multiple skill sets; while one individual can make a game, a good game requires input from more than one person or sphere. Our objective was to demonstrate this with the summer school, and to do that we needed to take the game-making out of the academic institutions, away from the game industry and into the art space. We wanted to liberate the students from predefined concepts of what a game is or is supposed to do. Also, we wanted the students to seek inspiration, to borrow skills and expertise from each other and to experience how collaboration could enrich their game-making.

The more we got into the process of organising the summer school, the more we also realized that, despite our differences, we do share interests, specifically, an interest that arrives from a shared sense of being on the margins in relation to other, more established traditions and disciplines. Studying games as art is quite marginalized, as it is viewed with skepticism from older disciplines, such as painting or sculpting, and game-making as part of the game industry is far more than just learning 3D modeling or computer programming; it takes knowledge of game history and theory to be good at making games. Intriguing computer games do not come out of a digital vacuum but from an awareness of literature, art history and popular culture. Studying games as technological development is about getting beyond predefined sets of game mechanics to explore and experiment more abstractly and conceptually with forms and expressions in games. By the same token, the art school is far from a computer-free zone, and many artists hone their skills working with game concepts such as interactivity and playability. In short,
as organisers, we needed each other more than our respective disciplines professed. This necessity was translated into the summer school, where we sought to promote cooperation and collaboration between the two camps.

Furthermore, we had critical theory of technology in common, which teaches approaches to technology as grounded in socio-economic relations. Inspired by both social construction of technology (i.e. human action shapes technology) and deterministic views of technology (i.e. technology shapes human behaviour), critical theory of technology argues that design and digital interfaces respond to human needs and concerns while also interfering with everyday modality. Since we are experiencing game technology, we can also influence the design of the game. The look and feel of a computer game is subjected to democratic processes and we influence how games impact upon us by creating new games and by deconstructing existing games. The history of game design teaches us that the reification of a game is a process of many different influences and idea. The video game Pong (1972), for example, needed additional sound effects, mechanics and a score count to be successful. Even the tagline: ‘Avoid missing ball for high score’, can be seen as an instruction that made the game enchanting (Donovan 2010: 23), but it was not rationality or efficiency that governed these design choices; rather, it was how the game felt and how it was experienced. Historicism opens up a process whereby game and players are critically aware of the mechanics that move them, the aesthetic choices that make them feel and the available actions that they can engage with.

According to philosopher and sociologist Andrew Feenberg (1999, 2010), this opens up technology and its design to democratic processes beyond rationality and over-determination from economic gains. In Grundrisse (1973), Karl Marx writes about the concrete, and how something concrete is always assembled from many diverse determinations. This is the case with technology: it appears concrete and reified but is in fact constructed with many different intentions in mind. Game technology is diverse, and to exclude some games over others would be to de-democratize the use of this technology. To avoid the formation of the concrete, the reified object, Marx urges us to take the concrete as a point of departure – to observe and formulate new questions and determinations. There is no better place for this than the art space, with its flexibility and movable boundaries. Hated as well as celebrated, the museum space is a place where observation and conception can be made; thus, it is a departure point for us to influence the reification of game technology.

We wanted art and technology to meet outside the traditional classroom, in full view of an audience, because, if academia is rigid and unwilling to bend its disciplines, the spaces in which we educate people are even more inflexible, with formats and forms that hinder rather than allow for positive knowledge exchange. Any student walking into a lecture hall today will immediately grow sleepy at the prospect of an hour of uninspiring PowerPoint slides accompanied by a dull commentary about the importance of theory or practice. In this way, our educational environment has poisoned any young interest in intellectual discourse. This is aggravated further when educators are pushed by funders, whether state or private, to design courses that are relevant to industry, business and society, where employability and utility determine the value on exams. This, however, rests on a false assumption that education is the preparation for a life in the factories, and that students are empty vessels in need
of being filled before entering ‘real’ economies. The summer school was an attempt to oppose this trend by freeing students to experiment through play and game-making, to discover new abilities and possibilities in cooperation with one another, in systems based on simulating industrial structures. It was about creating a context for innovation and a space for testing fixed notions of what games are and what they can do. As organisers of the summer school, we believe that the game industry needs a strong independent sector that seeks to push boundaries, and that the art space is an excellent place for performing this form of critical play. Capital will always be capital that speculates in the futures of consumers, but freeing our imagination from profit-seeking matrix-thinking drives game design toward greater social engagement. As many of the contributors in this collection testify, games can open doorways to imaginations where the gamer is neurologically rewired and socially transformed.

At the outset of the summer school, we were adamant that we needed a central theme for the course, a theme that could steer the process of practical game-making as well as our educational focus. The theme of obstruction was chosen for a specific reason: obstruction is the driving phenomenon in game-making. The programmer sets up a system of logic based on problem-solving obstructions for the computer to follow, and the game designer constructs ludic and narrative regulations that obstruct the gameplay. Obstructing gameplay motivates the player to achieve through failure; the player who tries but fails will try again, and try harder. However, we can also see game obstructions as pathfinders that circuit our human brain. In this way, obstructions become triggers of imagination in the player. This is what the surrealists believed, using forms of games as an intricate part of discovering new levels of consciousness; a consciousness where game and play formed mind maps that could lead to divine or sublime experiences. Our intention with choosing the theme of obstruction was to hinder and obstruct the students in their game-making in order to release the imaginations of the game-makers and encourage them to envision new possibilities.

The chapters in this book are divided into three parts, reflecting the structure of the course. The first section, ‘Academia and Theory’, starts by introducing a theoretical discussion of games and art, which in particular centres on definitions of what a game is and what it can do. This rather academic, some will say nitpicking, exercise was important in order to establish a common ground from which we could experiment further. However, the discussions that we had during the first week of the course make an appearance in many of the texts here. Evidently, it is a discussion that engages as well as challenges ideas and conception, as it addresses not only the question of how art and games should be approached, but also how game-making can be used in academia as a practice of learning.

The second part of the collection, ‘Artists and Curators’, reflects the entry of the students into the art space. Here the texts concern the exhibition and transformation of this space by the game-makers, as well as the process of curating game-art and the two week-long workshops held by Julian Oliver and Brody Condon. It was vital to create a space that was open and inviting to the students, while also having events that made the students work in groups rather than individually. The art space was flexible, but also a daunting space to work in, and it did challenge many of the students to re-evaluate their assumptions about art and art-making.
In the last section, called ‘Papers, Practice and Statements’, the individual projects are accounted for. The contributions in this section vary in length and in mode of address to the reader, but this very well illustrates the diversity of the participants and their aims and objectives. Some authors have opted for a more direct address, taking the form of strong, passionate views on the merger of art and games, while others are more poetic in their resolve to break through the debate, some choose to be descriptive about the process involved in their game-making and some apply a more academic and research-paper approach. This diversity in form and content perfectly reflects the plurality of voices that the summer school managed to produce, as well as the great variety of projects.

References
Part 1

Academia and Theory
This essay offers a short introduction to the meaning and role of obstructions in different spheres of human life, from everyday existence, via philosophy and politics, to art. Let’s begin with the definition of ‘obstruction’ given by an English language dictionary. From it we learn that to ‘obstruct’ is to block (a road) with an obstacle, to make difficult, to impede a clear view. The use of ‘obstruction’ and ‘obstacle’ in this definition suggests that obstruction is a more serious or complex entity than an obstacle, and is intentional, while an obstacle might be neutral.

In everyday life we dislike obstructions, or, more precisely, we do not like when they befall us. A life full of obstructions is a life full of struggle and misery. At the same time, not everything about them is negative. Some people appreciate their pedagogic value, as encapsulated by Friedrich Nietzsche’s famous maxim, ‘What does not kill me makes me stronger’ (Nietzsche 2003: 33). This means that to gain skills essential for survival and progression in life, we must learn how to overcome obstructions, for example learning to read, swim, use a computer or persuade a resistant customer to buy a product we wish to sell. The skill of overcoming obstructions is linked to achieving maturity or even humanity. Moreover, (some) people draw satisfaction from obstructions encountered by others. This is because success is often relative – one person’s success is another person’s failure.

In ancient Greek philosophy, obstructions tend to be seen negatively, as something preventing humans from leading a peaceful and happy life. The very purpose of philosophy is to teach people to attain a tranquil life free of pain and fear, where obstructions do not matter. Such is the goal of, most
importantly, Cynicism and Epicureanism. We find a similar approach in non-European philosophies and religions. Nirvana, a term used in the context of the Buddhist and Hindu philosophies, refers to the imperturbable peace of mind achieved through renouncing desire. Such an approach to obstructions might be explained by the way concepts of time have changed throughout history. Ancient people were less preoccupied with progress, or with accomplishing something in a specific period of time.

At the same time as advocating peace of mind, ancient Greek philosophers recognised that intellectual problems might not find satisfactory solutions. It is impossible to completely remove doubt. This conviction is captured by the term ‘aporia’, associated with Plato’s early dialogues. A well-known example of this conviction is Meno, in which Socrates and Meno try to come up with a satisfactory definition of ‘virtue’. Their discussion leads them to a number of statements which contradict a common-sense approach to virtue yet seem rational, bringing Meno to a crisis, as conveyed by such words:

O Socrates, I used to be told, before I knew you, that you were always doubting yourself and making others doubt; and now you are casting your spells over me, and I am simply getting bewitched and enchanted, and am at my wits’ end. And if I may venture to make a jest upon you, you seem to me both in your appearance and in your power over others to be very like the flat torpedo fish, who torpifies those who come near him and touch him, as you have now torpified me, I think. For my soul and my tongue are really torpid, and I do not know how to answer you; and though I have been delivered of an infinite variety of speeches about virtue before now, and to many persons – and very good ones they were, as I thought – at this moment I cannot even say what virtue is. And I think that you are very wise in not voyaging and going away from home, for if you did in other places as do in Athens, you would be cast into prison as a magician.

To these words Socrates replies:

As to my being a torpedo, if the torpedo is torpid as well as the cause of torpidity in others, then indeed I am a torpedo, but not otherwise; for I perplex others, not because I am clear, but because I am utterly perplexed myself. And now I know not what virtue is, and you seem to be in the same case, although you did once perhaps know before you touched me. However, I have no objection to join with you in the enquiry. (Plato 380 B.C.E.)

These words point to a certain tradition or even definition of philosophy, as conducting enquiry which has no end, which leads from one obstruction to another, more fundamental obstruction. Philosophy, from this perspective, consists of dealing with obstructions that cannot be overcome, only probed. If they are solved, then they move from the philosophical arena to the field of science.

The approach to obstructions is a factor dividing the main political ideologies of capitalism and socialism, developed in the nineteenth century. The proponents of capitalism, as theorised by Karl Marx, perceive the development of humanity in terms of a continuous struggle to create surplus value which can be used as capital, namely as a means to create more surplus value for investment.
This leads, on the one hand, to reducing the cost of producing commodities and, on the other, to finding new markets in which to sell them. With the passage of time this is more difficult to achieve due to the increased physical areas and aspects of human life integrated into capitalist production (Marx 1965, 1967, 1974). Such a situation leads to a capitalist crisis when products cannot be sold and consequently are destroyed: firms go bankrupt, unemployment goes up and the economy contracts. This obstruction is typically overcome by state intervention, as was observed during the 2007-8 economic crisis, or by war, which allows to start from ‘ground zero’. Many theorists of capitalism perceive crisis as a good thing, as it allows individuals and societies to be more creative by overcoming obstructions, for example through producing new commodities. Overall, this obstruction is needed for humanity to progress (Schumpeter 1976). The corollary is that a by-product of this progression is the creation of a huge sea of human misery, including poverty and the social exclusion of those who are unable to overcome obstructions. Moreover, even the winners in the capitalist ‘game’ experience a fair amount of anguish when trying to deal with the obstructions. On the other hand, supporters of socialism, most importantly Karl Marx, strive to achieve an equilibrium where obstructions are eliminated or at least minimised. This happens through abolishing the division of labour and the abolishment of alienation of a worker. Under such economic conditions the remaining obstructions are to be overcome collectively and in a way that serves the whole community rather than only a section or particular individual.

Both Nietzsche and Marx recognised that life in their times (namely, under capitalism) resembled the Darwinian world of continuous struggle, in which only the strongest survive. However, they assessed this situation differently. As James Birx (2000) observes, for Nietzsche natural selection is a ‘vitalistic force that increases the quality of life forms throughout progressive biological evolution. He held that nature is essentially the will to power. Evolving life is not merely the Spencerian/Darwinian struggle for existence but, more importantly, it is the ongoing striving toward ever-greater complexity, diversity, multiplicity and creativity’ (Birx 2000). Marx regarded the Darwinian capitalist world as unnecessarily cruel, and advocated abolishing it and introducing socialism (Marx and Engels 2008). As a prophet of socialism, Marx has much in common with the ancient Greek philosophers, for whom material progress was of little importance – what mattered more was intellectual and emotional development.

Obstructions are also at the core of narrative art. Novels, films, television series and computer games are full of obstructions to be overcome by characters or consumers of these arts. Identifying the types of obstructions serves as a way to divide them into specific genres. For example, war films focus on obstructions pertaining to wartime, such as destroying enemy defences, while melodramas concern obstacles encountered in private life, such as getting a divorce. A more profound division between films in relation to obstructions is suggested by Paul Schrader, who contends that ‘American movies are based on the assumption that life presents you with problems, while European films are based on the conviction that life confronts you with dilemmas – and while problems are something you solve, dilemmas cannot be solved, they’re merely probed’ (quoted in Elsaesser 2005: 44). These words are somewhat ambiguous, but they suggest that American and European films (or rather a specific type of European film art, known as arthouse or auteur cinema) present obstructions of different types. The former tend to be external; the latter internal. Such a division can be mapped onto Robert Bechtold Heilman’s division of literary characters into tragedies and melodramas. Heilman maintains that
The identifying mark of the tragic character is dividedness: he is caught between different imperatives, each of which has its own validity, or that he is split between forces or motives or values... In melodrama, on the other hand, character is viewed as essentially undivided... the complicating elements are eliminated or made ineffectual; there is an impression of unity of being and singleness of direction. (Heilman 1968: 89)

Heilman describes drama as ‘polypathic’, as it arouses a multitude of contrasting feelings, while melodrama is ‘monopathic’ – the emotion it awakens is strong and points in one direction. Not surprisingly, tragedy and melodrama are used for different purposes: the first serves to depict timeless conflicts; the second is topical to a particular period of history (ibid.: 92-101). Schrader and Heilman suggest that ‘American’/melodramatic and ‘European’/tragic art forms are based on different ontologies. The first presupposes a human world which can be optimised because, when there is a problem, there is also a solution, even if the solution does not satisfy everybody. Such a worldview is conveyed by a specific structure of Hollywood films, which favour an individual protagonist and a linear narrative. The viewer is supposed to identify with the objectives of the protagonist, regarding them as best not only for the character, but also for the entire universe in which he or she operates. To that end, his or her opponents are not of the same moral and intellectual calibre, and so can be seen merely as obstructions to his or her victory, and their plight is of little consequence. The transparent story is reflected in the use of transparent spaces and establishing shots, which create clear cognitive maps. Likewise, camera movement and editing serve seamless story-telling. An example of such a melodramatic film is Gladiator (2000), by Ridley Scott. Jill Nelmes, who uses it to explain the rules of Hollywood story-telling, writes that the film has ‘a goal-oriented, cause-and-effect plot structure’ and ‘promotes love over hatred in its depiction of a man who rises above revenge to do his duty and is rewarded with eternal happiness’ (Nelmes 2012: 104). Nelmes also points to the fit between the type of obstructions encountered and the dominant ideology: ‘The narrative...promotes democracy over tyranny, and its repetition of Marcus Aurelius’s lament that ‘there once was a dream that was Rome’ aligns Maximus with the American ‘dream’, and Rome’s projected republican future with contemporary Western conceptions of ‘democratic freedom’ (ibid.: 104). It is worth mentioning that similar rules as those found in Hollywood cinema were obeyed by Soviet and Eastern European cinema during the period known as socialist realism. In it, as Peter Hames observes, ‘positive’ heroes must, at least morally, triumph over ‘negative characters’. The enforcement of this requirement gave rise to a standardised plot in which an inevitable happy ending was preceded by nominal conflicts between ‘negative’ and ‘positive’ characters’ (Hames 2005: 30).

In tragedy, by contrast, we usually have an antagonist of the same stature as the protagonist, so our sympathies are divided. The protagonist is also internally divided; he does not know which road to choose, and whichever he chooses, he will have regrets. We can think about Either/Or (1843) by Søren Kierkegaard. In films adhering to the tragic mode, the cause-effect chain is broken, which is reflected in the spatial organisation of the film, for example in the use of the trope of the labyrinth, favoured by Hungarian director Miklos Jancso. In his films a labyrinth expresses the impossibility of the protagonist understanding his or her situation, which inevitably affects his or her ability to overcome the obstructions.
The quality of narratives tends to be measured by the types of obstructions encountered by the protagonist and his/her attitude towards them. The more versatile the obstructions are and the more inventive the protagonist is in dealing with them, the more interesting the story becomes. When the obstructions are similar to each other, like killing the same type of forces, the narrative is seen as formulaic and boring. However, there are filmmakers, predictably coming from the European arthouse tradition, who resist the pressure to organise films around overcoming obstructions. I would like here to mention three notable examples. One is Jean-Luc Godard. In Godard’s early films we see many obstructions characteristic to genre cinema, but they are played down by the director, as if they were of little interest to him. A well-known example comes from his debut film, *A bout de soufflé* (1960), when Michel Poiccard kills the policeman who was chasing him and runs away. The scene fits the genre of gangster or police film, but Godard makes it short and shown without explanation, giving the impression that it is not important; *A bout de soufflé* is not about the protagonist overcoming obstructions, but something else. Similarly, in *Pierrot le Fou* (1965), the story of a runaway couple is interrupted by them breaking into singing or documentary-style interviews with extras. Perhaps the most radical example of Godard resisting the ‘terror of obstructions’ is presented in *Vivre sa vie* (1962). Susan Sontag argues that the director uses in it a mode of proof, rather than analysis:

Proof differs from analysis. Proof establishes that something happened. Analysis shows why it happened. Proof is a mode of argument that is, by definition, complete; but the price of its completeness is that proof is always formal. Only what is already contained in the beginning is proven at the end. In analysis, however, there are always further angles of understanding, new realms of causality. Analysis is substantive. Analysis is a mode of argument that is, by definition, always incomplete; it is, properly speaking, interminable. (Sontag 1994: 198)

Sontag maintains that Godard in this film refuses to give us ‘any explanation, of an ordinary recognizable sort, as to what led the principal character, Nana, ever to become a prostitute’ (ibid.: 199). His refusal to explain is reflected by the ‘extremely arbitrary decomposition of the story into twelve episodes – episodes which are serially, rather than causally, related’ (ibid.: 199).

By using the mode of proof, Godard does not dispose with obstructions, but nips in the bud our pleasure of observing how the character struggles with obstructions. This is because the pleasure is based on the assumption that things might be different from what they are. If things are what they have to be and there is only an arbitrary succession of events, rather than chains connected by the will of the protagonist, then we lose the pleasure that narrative arts normally afford us. This does not mean that *Vivre sa vie* is a bad or boring film. On the contrary, it is a masterpiece and part of its allure lies in making us reflect on the nature of causality. Godard in *Vivre sa vie* thus takes a position comparable to that of the philosopher David Hume. Hume argued that we cannot prove that two events, A and B, which occur together, are necessarily connected (Hume 2009). We are only inclined to see their connection, prompted by habit, rather than the laws of nature. Godard, so to speak, tries in his film to kill this habit of connecting things, of seeing A as obstruction and B as overcoming this obstruction. The achievement is the more remarkable as he uses a rather simple, even formulaic story of
a young, impoverished woman who cannot borrow enough money to pay her rent, and then becomes a prostitute and is eventually killed in gang warfare.

My second example is *A torinói ló (The Turin Horse*, 2011) by Béla Tarr. The film, which begins with the information that the horse in the story is the one which kicked Friedrich Nietzsche, leading to a deep mental crisis befalling the famous philosopher, in a sense illustrates Nietzsche’s previously quoted maxim, ‘What does not kill me, makes me stronger’. However, Nietzsche’s words are typically used to encourage effort by suggesting that those who fight will eventually win (like the gladiator in Scott’s film). The emphasis is on ‘making me stronger’ rather than ‘killing me’. Tarr, by contrast, focuses on the other side of the equation: dying. The narrative revolves around a man and a woman’s inability to reach the town (the titular Turin), despite numerous efforts, epitomised by their attempts to force their old sick horse to pull the cart. Every new obstruction, such as an intrusion of unwelcome guests, weakens the characters, diminishing their chance of reaching Turin. In the end the couple stay at home, each day eating a meagre meal of one potato, waiting for death. The film shows that contrary to what mainstream cinema tells us, there is a limit to the human fight against obstructions. Most people are unable to overcome serious illness, poverty or social marginalisation, and we will all die. The film’s cinematography and editing, with its affinity for long takes, and repetition of the same situation filmed from the same perspective, underscores Tarr’s non-Hollywood approach to obstructions. It suggests that most obstructions are not spectacular, but mundane, yet deadly.

Finally, I want to consider *De fem benspænd (The Five Obstructions*, 2003) by Lars von Trier. Before embarking on this project, the Danish director demonstrated that creating obstructions, not only for himself but also for fellow filmmakers, is his passion. The Dogme95 movement, which he initiated, consisted of ‘10 vows of chastity’, which pronounced what directors aligning themselves to this movement were not allowed to do. In *The Five Obstructions* the director constructs obstructions for only one director, a fellow Dane, Jørgen Leth. Von Trier invites Leth to rework his 1967 film *Det perfekte menneske (The Perfect Human)* five times. *The Perfect Human* presents a man and a woman leading lives seemingly free from problems, a kind of mirror image of the couple in Tarr’s film, who experience nothing but problems. They engage together or separately in simple activities such as eating, dancing, smoking a pipe, shaving and putting on make-up, lying in bed and falling to the floor, all against a white background. The background isolates the characters and gives the impression that they do everything effortlessly and gracefully, and even defy gravity. The voice-over at one point pronounces: ‘there are no boundaries’. The only obstruction which eventually befalls the ‘perfect man’, as conveyed by his words, ‘In the middle of my heart there was a small white spot. I do not know what it is supposed to mean’, appears to be imaginary, maybe a sign of hypochondria, a consequence of boredom experienced when living a perfect life. Needless to say, Leth’s film, in common with Godard’s and Tarr’s, belongs to the avant-garde fringe of European cinema. However, von Trier’s attitude to this tradition is ambivalent. On the one hand, he is charmed by it, but on the other he is aware that presently it is more difficult than in the heyday of arthouse cinema to achieve popularity or even critical recognition by avoiding obstructions. Von Trier wants to have his cake and eat it, on the one hand paying tribute to artists ignoring the ‘obstruction fascism’ imposed on them by Hollywood and, on the other hand, forcing an avant-garde artist to bow to the requirement of packing his film with obstructions.
Some of the obstructions imposed on Leth in *The Five Obstructions* are technological; others are of an intellectual or moral nature. Among the technological ones is a requirement to shoot the new film using only twelve frames in each shot. Leth is initially put off by this demand, but when the new version of his film, shot in Cuba with Cuban actors, is finished, he confesses that the editing rule was a ‘paper tiger’, even a blessing, as the ultra-fast editing, exceeding what we find on MTV, underscores the dynamism of the Cuban ‘perfect hombre’, contrasting with the slower rhythm of life of the characters in the Danish version of the film. Naming a rule related to editing a ‘paper tiger’ can be regarded as a summary of the Danish attitude to technological obstructions in cinema: they frighten filmmakers, but ultimately turn out to be easy to overcome. Von Trier subsequently asks Leth to film in the most miserable place on Earth, and requires that Leth himself plays in the film. This obstruction, in a sense, reverses the situation of many documentary filmmakers who show in their films places of military conflict and exploitation, but do not appear in them, thus remaining separated from the misery they depict. Leth decides to go to the red light district in Bombay, but rather than isolating himself from the people he meets there, he includes them behind a translucent screen. They are both present and absent in his film, and they balance between the position of actors and spectators. Finally, von Trier asks Leth to remake his film in any way he wants, in total freedom. This version, shot in Brussels, which can be labelled as ‘The Perfect Human Forty Years Later’, is in my view the least original of the five. It supports the idea, discussed throughout *The Five Obstructions* by von Trier and Leth, that surprise and originality occur when one tries to obey the rules and fails, rather than when one has no boundaries to his or her artistic freedom.

There is no narrative art more preoccupied with obstructions than video and computer games. Indeed, their focus on obstructions is the reason why their status is relatively low in comparison with earlier arts such as literature and cinema. Another factor in this status of computer games is their relative young age. Commentators frequently pour scorn on creators of computer games for their relentless search for more unusual and deadly obstructions, a requirement which clashes with a demand to prolong the life of a successful game. The case in point is *Final Fantasy*, a game with many sequels and spin-offs, which in the ‘Honest Trailer’ programme, available on YouTube, was described as entertainment for people who do not understand the term ‘final’. The difference between computer games and their predecessors lies also in the position of the consumer. While the cinema viewer only observes the character fighting the obstructions, the consumer of games has to face them herself, often through an avatar. The majority of computer games can be described as ‘melodramatic’ in their approach to obstructions. Their characters pursue well-defined goals and psychology takes a back seat to action. The majority of games focus on obstructions similar to those encountered by capitalist society, defining the success of the player in terms of neoliberal success (Dyer-Witheford and de Peuter 2009). S/he has to constantly accumulate goods, with gold and elixir being the privileged possessions, reflecting the value of money and youth, which are not directly translatable to each other, but connected. The second requirement is to destroy his or her enemies and fortify his or her houses, in expectation of an attack from enemy forces, which can be seen as an allegory of a permanent ‘state of war’ (Hardt and Negri 2006: 3-62) and obsession about security (Harvey 2005: 64-86), pertaining to the post-Cold War world order. Moreover, in principle, computer games can go on forever, reflecting the fact that (unlike socialism) capitalism has no defined goal but can progress indefinitely, accumulating
and dispossessing more and more on the way. At best or worst it can achieve a state of delirium, as represented by the images of exhausted game players with faces covered in spots, who cannot stop playing, circulating online. Only a minority of games, known as serious games, games for change or social impact games, are arguably informed by more socialist values, such as eradicating poverty or racism (Flanagan 2013: 243-49). As far as I am aware, we are still awaiting a computer game in which the contest is between capitalism and socialism.

Conclusions
Obstructions are such an obvious part of our lives that it is difficult to discuss them without risking banality, particularly in conclusions. Hence, I hope that readers forgive me for stating what might seem obvious to them, namely that obstructions experienced in everyday life affect those examined and represented in philosophical systems and art. Likewise, imaginary and theoretical obstructions affect the ones we see in reality. However, the character of this mutual influence is relatively mysterious and probably remains the ultimate obstruction for human intellect.

References


Video Game Image: The aesthetic character of digital gaming

Graeme Kirkpatrick

Introduction
This paper introduces, in summary form, some ideas from my 2011 book, Aesthetic Theory and the Video Game. It begins by setting out why I think an aesthetic approach is the correct one to take to the analysis of video games, contrasting the aesthetic approach with one that examines games as if they were unusual kinds of text, or ‘interactive movies’. This focuses the discussion on what I take to be distinctive about video gaming as a cultural practice, namely, gameplay. To get anything from video games we have to play with them and this involves embodied action that, I argue, is best understood in aesthetic terms. When I close my hand around a controller I do not do this in order to release a meaning further down the line but in order to have a sensation that involves my hand, what I can see and hear, and potentially other properties of the situation as well. An adequate theory of gameplay must account for the specific appeal of this kind of action, and aesthetics is where we find such a theory.

Having described the feel of gameplay as the central category of gameplay aesthetics, the paper brings this to bear on the idea of the ‘video game image’. We are used to thinking of the latter in terms of the visual properties of digital games – how good the resolution is, for example. However, just as video games are not visual media, so the video game image cannot be understood in terms of its visual properties alone and how these differ from those of painting or cinema. Rather, video game images involve our whole bodies in a way that is distinctive to them. This has implications for our understanding of how meaning works in video games, which cannot be the same as in cinema, for example. The centrality of play profoundly alters and limits the modalities of and capacities for signification associated with the medium. I conclude with some thoughts about why this matters and
how it might affect attempts to use video games as an expressive medium, perhaps in conjunction with other artistic practices.

1. Why aesthetics?
The word ‘aesthetic’ in everyday English tends to be used to invoke the visual. If we admire the look or appearance of a TV show or a piece of furniture, we are likely to describe the thing as ‘aesthetically pleasing’. This is not the philosophical meaning of the term, however. Aesthetic theory was invented in the eighteenth century in an attempt to set rules for ‘art’. Its key terms were play, form and beauty. ‘Aesthetic’ here pertains to the feel of things, what they are like to use and work with as well as what they look like. A painting or a scene in nature might be considered beautiful because of the contrasts of colour and proportion, or because of the lines that confer a sense of order and pattern. This goes beyond visual appearance, to a range of qualities apprehended by the senses. Aesthetic analysis attempts to understand the structuring of experiences, including visual components of experience where that is relevant, to produce an effect (or effects) on the human sensorium.

A key idea here is ‘feel’: video games are not visual media exclusively, in fact, they aren’t even primarily visual media. Some games have even been developed without a visual interface – or with diminishing reliance on visual elements (for example, Nintendo’s 2006 game Sound Voyager) – but they still work as games. Computer games do, however, work on our sensorium and they do so in distinctive ways to produce unusual kinds of feeling, not in the sense of emotions but in the sense of complex sensations. Some designers are very alive to the issue of feel, but generally it gets overlooked in game design, for a variety of reasons. Steve Swink sums the situation up well in this comment:

> ...game feel is the tactile, kinesthetic sense of manipulating a virtual object. It’s the sensation of control in a game. In digital game design, feel is the elephant in the room. Players know it. Designers know of it. Nobody talks about it and everybody takes it for granted. (Swink 2009: xiii)

Swink emphasises the design of interfaces and control apparatus that enhance and toy with our sense of control over the game object. Events that play with this, making us feel as if we are in control, only to drop us down again or make us experience a wide variety of sensations and physical tensions, are the ones that have greatest impact.

2. Gameplay as embodied performance
An obvious analogy to draw in our analysis of gameplay would be with dance. In both cases what we do when confronted with a difficult sequence of actions is the same: we keep trying to match our actions to the requirements of the script. Eventually, the feel of our movements becomes sedimented in our performance, traced out by repeated bodily action and lodged in the body as something we no longer have to think about. Ballet dancer Colleen Dunagan describes the process of learning a new sequence in the following terms:
Frequently, in order to learn a new dance movement, I find myself having to translate or transform the whole into a series of smaller actions that are familiar to me. Often in doing this, as I watch a demonstration of the movement, I assess the action in terms of what it feels like in my head. Developing a mental ‘image’ of the physical sensations assists me in analysing the step in terms of its similarity to other actions within my repertoire of physical possibilities. (Dunagan 2005: 30)

This is the same process that we go through to master challenges encountered in video games, especially games with action or fighting scenes. When you master a sequence in a game it involves this process of decomposition – I press ‘X’, then triangle, then twist this way, and so on. During these moments I focus more and more closely on timing each button press and each twist of the wrist to coincide with what is happening on the screen. It is important to notice that in this process players often forget what the on-screen elements actually represent.

Mirror’s Edge (2008) by Dice is a good example of these processes, partly because, like a lot of games, it has a ‘training’ area outside the game proper in which players are introduced to a set of moves that will be useful when they are playing the game. In these scenarios your character, Grace, appears to be in a subway station, or climbing boxes in a yard, or whatever and must learn the correct series of moves to climb the boxes, or get from one situation to the next. However, to learn each sequence, players must ‘see past’ the ‘skins’ – the surface coverings, so to speak – and apprehend the underlying structures that define the scenario. In this way they are prepared to recognise the game’s environments as manifestations of recurrent shapes or forms that cue or call for a specific learned response from their hands and the controller.

Aside from the training sequence, which introduces this principle of a certain abstract reading of the game’s visual interface, Mirror’s Edge is also exemplary because it reinforces that principle with red lines, which are used to trace out Grace’s route through the urban environment that is the game’s fictional layer. Players must hone in on this form and employ the sequence of hand movements associated with each scenario in order to progress.

Dancers combine these kinds of movements, normally into a well-rehearsed, fluent series of actions that ‘flow’. This is true for players as well: once they get the sequence it is re-established with a kind of unity, and they often find that what took them hours to master is just something they can do – almost like riding a bike – once it has been mastered. Unlike dancers, players aren’t rehearsing when they play and fail in games: there failure is part of the pleasure, or better, it is part of the feeling structure that we relate to positively when we commit to playing the game.

The reason this painful activity is appealing is, I think, because failure is often very funny. When I throw the controller across the room I am ridiculous to myself and to anyone else who is present. This is amusing. The underlying dynamic is as described by Henri Bergson in his analysis of laughter and what causes it:
The victim... of a practical joke is in a position similar to that of a runner who falls, – he is comic for the same reason. The laughable element in both cases consists of a certain mechanical inelasticity, just where one would expect to find the wide-awake adaptability and the living pliability of a human being (Bergson 2008: 13).

According to Bergson, what makes situations like practical jokes amusing is the conjunction in them of the human and the machine-like. The vital, nuanced responsiveness of the former transforms into the clumsy routine of the latter, making it appear empty and false. The more rehearsed a movement is and the more confident someone seems in their performance of a task, the more absurd and comical it is when they fail. This reflects the fact that a whole illusion – of smooth, accomplished performance – is punctured by the moment of failure.

Computer gameplay is composed out of such movements to and fro between smooth execution of routines and crashes, when we often ‘die’ in the game. As players, we learn the game’s routines a little bit too well, so that when we come to new sequences we think we have it. The game lifts us up and then it lets us fall. This humour has a vital corrective, even disciplinary element to it – we laugh at ourselves, which is pleasurable, but it also hurts a bit and prompts us to do better. This is essential to the aesthetics of gameplay: the experience is a structuring of sensation that includes these kinds of junctures by design.

3. The Video Game Image

To sum up, gameplay is embodied activity structured to produce certain kinds of feeling or sensation. We have to learn the movements that are required of us in order to perform the game. When we fail, there is humour, and this is integral to the experience and its appeal: even those games that employ other, non-funny moods and atmospheres, like ‘horror’ or ‘war’ games, typically include humorous failure as one of their ingredients. It is very rare for anyone to feel a great sense of sadness or tragedy over in-game death.

Notwithstanding this, most games are designed with considerable attention to their visual properties and these elements of the game normally include things that we tend to associate with story, or meaning. It seems obvious that Mirror’s Edge is about Grace getting across the city, in much the same way that Casablanca (1942) is about Victor Lazlo’s escape to the United States. At the same time, our experiences with these two objects do vary and the place of the story in those experiences is also different. This is not to say that the place of visual narrative is always the same in films, or games, only that its place in games is systematically and pervasively different than in other media.

This brings us to the idea of the video game image as an aesthetic concept. The image, like the game itself, is not an exclusively visual element. We need to understand how visual parts of the game apparatus intersect with what I have been presenting as the core dynamics of gameplay.
Aesthetic theory already recognises that ‘image’ is not an exclusively visual concept. Jacques Ranciere shows how the cinematic image involves a range of tensions in the body of the viewer, produced by things that in some ways detract from what we can take to be the ‘image’. Other aesthetic practices also include what he calls ‘super-imposition’ of one element over another. The effect of these super-impositions is that, when dealing with aesthetic objects, things are never what they seem to be. These formal discrepancies are integral to perspectival painting, to photography, and even to non-visual artistic phenomena like music.

A camera movement anticipates one spectacle and discloses a different one. A pianist attacks a musical phrase ‘behind’ a dark screen. All these relations define images. This means two things. In the first place, the images of art are, as such, dissemblances. Second, the image is not exclusive to the visible.

The role of super-imposition has specific implications for how we interpret meaning in games. The video game image is a combination of the visual and aural elements of gameplay with the distinctive structuring of sensible experience associated with gameplay. (Ranciere 2007: 7)

At this point it is useful to refer to the ludology/narratology dispute from the early part of the last decade in the then new discipline of game studies. I think an aesthetic approach to the definition of video games necessarily joins with ludology in repudiating positions that originate in established fields of enquiry because of the way that they all assume meaning is always to the fore in human practices. There are three elements to this approach, which I call the three dogmas of narratology:

1. The meaning content of games is determined by their ostensible stories, and these can be discerned in the manner of filmic representation, or descriptions in a book.
2. The visual has a kind of priority in this determination of meaning, because it is the primary means by which players are ‘cued’ into a fictional world.
3. This cuing calls on players to ‘commit’ to that world, by which route they achieve presence there and participate in its illusion.

I think we are all familiar with this attitude. It is derived mainly from disciplines like film studies and cultural studies, often themselves relatively new, which place emphasis on encoding/decoding of texts in social and cultural contexts. I think video game analysis is resistant to this kind of approach because games do not cue the kind of interpretation (however ‘situation-specific’) that other media do. The real importance of the ludology/narratology dispute lies in flagging up the difficult relation computer games have to meaning. The issue is not properly addressed by ludology either, however, because pointing out that video games are games casts no light on the role of the images that are specific to their meaning. It is obvious that this is integral, yet different from the role of images in other media.

If we want to understand the significance of games (including the real meaning of individual games) we need to grasp the way that the elements of embodied performance intersect visual images in them; the way that the viewing of their images is traversed by tensions that we don’t see but which
are nonetheless essential to what they communicate. Memorable moments of video gameplay are most often centred on sensations, or complexes of sensation that are completely novel to video games. When you ‘shoot’ the monster or ‘run’ through the woods, your experience consists of a special superimposition of manual procedure, embodied sensations and visual representation. The sense you make of it is not determined by the on-screen narrative. Most importantly, the experience is not ‘like’ something else: it is commonly asserted yet rarely true that games are simulations and, we can add, if they were then few of us would play them.

Video games in this sense are all abstract rather than representational. This seems counter-intuitive; after all, there is nothing specifically abstract about most video game screens. Things in games generally look like the things that populate a narrative in a film. But this conundrum is the same as the one we find in the surrealist paintings of Rene Magritte. The painting ‘The Treachery of Images’ (La trahison des images 1928-9) seems to be a realistic depiction of a pipe. But is it? As Michel Foucault pointed out in his book on Magritte, the text inserted into the picture causes reverberations that undermine this seeming. The writing resembles a pipe in its form. The pipe comes to resemble a letter. An oscillation is established into perpetuity. Just as earlier, abstract expressionist works asked questions about representation by foregrounding paint, the materiality of the work, and willfully eschewing representation altogether, so, despite first impressions, Magritte’s work opens up the same question and never answers it.

In video games we encounter similar reverberations in our experience of their visual contents. The picture says there are some people in a murky environment; it appears to be a picture of this. But the appearance of the green button at the bottom of the screen communicates a lot of contrasting and even contradictory information. First of all, it says that you are not a spectator: the movement of your thumb or finger as you press the controller buttons will determine whether they live or die. What seems like a representation is in fact a choreographic script. Like the Magritte, it invites reflection, this time on what to do next. Unlike the Magritte, this reflection translates directly into a highly specific form of embodied action.

As you try to make the characters run, other game events will also occur and, partly as a result, you may take a few attempts to learn the relevant steps. You will be thwarted when you lose control and the characters repeatedly suffer a gruesome fate, until you get it right. It may be that this episode becomes a ludic challenge you share with fellow players, perhaps taking turns to see who can finish it first. Towards the end of this process, you will barely be relating to the scene as a scene at all but rather perceiving an object with a set of affordances, or just a sequence of steps to be learned, each to be activated at just the right moment. And to learn this you will make yourself the butt of repeated jokes as you fail miserably and get killed. The oscillation here defines the video game image, and this is how meaning is placed in abeyance by video game action, which nonetheless remains completely dependent on meaning.

4. Expressive powers of video games
Part of my point in making this argument about the specifically aesthetic character of games is to try
and capture what games cannot be or do, without ceasing to be video games. This is not intended to be a dogmatic point but rather to clarify the terms on which we can use games to express meanings and achieve things that artists in particular want to achieve. Although video games are aesthetic, it is not clear that they are an art form.

Of course, there are definitions of art that insist anything can be art. You can place a urinal in an art gallery and this transformation will occur. However, even if it’s true that you can place a video game in a gallery in this way, the converse is not true: even the most playful artworks are definitely not games on the definition I am advancing here. That is because the video game image is specific to video games and not found in other media. Artworks may use computers, be interactive and even require us to move around in front of them, but if they use controllers to create the kinds of sensation that result from the kinds of superimposition specific to gameplay, then they will be video games. Put simply: it is very unusual to die in a work of art.

This conclusion has implications for what we should and should not attempt to do with games, because the specific aesthetic structure of the video game tends to qualify its expressive power. We can experience strong sensations with games – of movement, of acting upon, of triumph and of being ridiculous – but this power of structuring sensations is bought at the price of being able to articulate them to meaningful messages. It seems to me that creative employment of video games should be faithful to the kind of aesthetic object a video game is.

A number of consequences flow from this. First, ‘serious games’ and games that try to educate and inform are unlikely to succeed, because games don’t transmit meanings very well. I think propaganda games like Molleindustria’s *McDonald’s Videogame* (2006) illustrate this quite well. Players are supposed to learn how awful McDonald’s restaurants are but the game is a good game – it structures the sensations of the player effectively, rewarding success and punishing failure – and so they end up trying really hard to avoid death and make their restaurant more profitable!

Does this mean that the aspiration to create virtuous video games that communicate positive messages is itself forlorn? I don’t think so. As with any medium, the way to succeed is to recognise the strengths of your material. Video games structure sensation and this can be used to communicate in a similar way to music: when you listen to music you do not ask what it’s about, you respond to it and participate in shaping an experience. Reflection on this experience can be meaningful but there is no literal message in the music; even operas notoriously have very poor stories because the story level is not where the interest or the meaning, lies.

Viewed in this way, the best games would be less repetitive than the ones that are currently mass-marketed, and contain more surprises and challenges. Games like this are expensive to make, of course, because more attention has to be given over to the coding of individual segments and sequences to make them different from others. Games and works that use games in their overall structure should also, in my view, be less concerned with creating ‘social’ interactions and focus more on promoting laughter and humour. This is because social interaction, in MMPGs and other on-line games in
particular, is also mediated through text and literal meanings and, insofar as it succeeds it undermines the structuring of sensation that gives the game object its distinctive appeal.

Returning to Ranciere, he writes that when I encounter an art object I don’t know what anyone else makes of it, I only know that everyone else also asks that question. With games, on the other hand, I don’t tend to ask myself, ‘what do others make of it?’ but rather, ‘are they better at it than me?’ This pertains to the ludic structure emphasised by ludologists, and it does seem as if the aesthetic properties I have identified here lend themselves particularly well to agonistic kinds of performance. This, however, is something games could explore further and I see no obstacle to video games that are built up through webs of pleasurable, surprising sensations, which we play with by learning their moves, yet not particularly competitive and more concerned to promote reflection on the part of their players.

References


Artgames: Playing with Material Boundaries and Staking Claims

Lissa Holloway-Attaway

Introductory Reflections: The ‘Great Art vs. Games Debate’

First we listen…

I remain convinced in principle, video games can never be art. Let me just say that no video gamer now living will survive long enough to experience the medium as an art form.

—Roger Ebert (‘Video Games Can Never Be Art’, Roger Ebert’s Journal, 2010)

The point here is that if you want to see videogames considered seriously as true art, all you have to do is not die. Videogames are right on the cusp of being recognized as something that might be art sometimes. Another 75 years and all videogames will be considered art, even those porn games for the Atari 2600 where eight pink blocks meant boobs.


The question of whether games are art implies that art is a valued and important category – the exclusive club that every cultural producer desperately wants to enter. That makes games the nerdy kid at the front entrance, held back by the velvet rope from getting inside with the all of the beautiful people. But what’s happening outside is much more interesting. ‘Art’ is no longer the highest classification by which all culture should be valued. We are
living in an era where – to give one example – design as a category has far more cultural juice than art. Games should not aspire to be art! That’s backwards. Art should aspire to have the cultural reach and relevance of games.

— Eric Zimmerman (‘Games, Stay Away from Art. Please’, Polygon, 2014)

These three vocal contenders in the ‘Great Art vs. Game Debate’, Ebert, Sjöberg and Zimmerman (a film critic, a game critic and developer, and a game designer and game researcher, respectively), offer a basic framework to consider the complex disciplinary, philosophical, aesthetic and cultural intersections when Art and (Video) Games are considered together. Collectively, they also provide a basis for thinking about ‘What is at Stake?’ in the underlying arguments that seemingly pit each category against the other as discrete material entities. For each of them, there is an essentialist belief in time (and by extension linear progress) as an influencer of definitions. Ebert claims that not enough time has passed and suggests it never will to allow the ripening high-culture influence of Art to emerge from the low-culture ‘chicken scratch’ he sees as the essence of Video Games (Ebert 2010). Unlike other established creative fields, games haven’t (and won’t ever) measure up: ‘No one in or out of the field has ever been able to cite a game worthy of comparison with the great poets, filmmakers, novelists and poets’ (Ebert 2010).

Sjöberg, perhaps more tongue-in-cheek, suggests longevity is the key, and as long as the current generation can just hold out and ‘not die’, videogames will, like all expressive forms, eventually be seen as Art. He creates a timeline to demonstrate that the more time has passed, the more likely all artifacts, including ‘videogame ads, videogame controllers and those stress balls with the names of videogame publishers on them that you get at trade shows’, will be seen as Art (Sjöberg 2010). Artifacts that are 2000 years and older fall into the ‘everything is Art’ category, and so Sjöberg claims that if we can all ‘make it to the year 4000’, the question of which is which will be moot (Sjöberg 2010). Despite the satire in Sjöberg’s response, he nonetheless affirms the ways in which time, distance and hierarchy often alludes to the status of the elite Art object vs. the lowly popular culture video game (case form intentional). What may have been a mere vessel to carry water in ancient Greece becomes in time a priceless decorated urn, a Fine Art artifact, with an uppercase ‘A’ and the addition of the F-word for good measure.

Zimmerman also acknowledges the velvet rope that keeps the ‘nerdy kid’ who represents video game culture outside of the ‘valued and important category’ of High Art. The spheres are separate, and definitely not equal. In the course of his article, Zimmerman dismisses the Art vs. Games issue as trivial and claims it is based on asking the wrong questions: ‘Games and Art. Art and Games. Do you feel your eyes rolling involuntarily to the back of your head?’ (Zimmerman 2014). But, his suggestions for rephrasing the principles of the debate do nothing to undo the implied barriers between the marked binary terms (where Art wins as the dominant aggressor). He maintains the velvet rope, so to speak, and instead just suggests we replace the word Art with the word Design. In this way, Zimmerman releases us from the aspirational desire to see Games rise to the level of Art. Instead, he asserts, we must ‘rescue them’ from becoming art; we must resist the urge to elevate them, and instead we must hold
them back, keep them close to us; we must not perform ‘cultural necrophilia’ by forcing them into the status of Art objects, we must just ‘play some games instead’ (Zimmerman 2014). As objects of Design and as materials only to be played with, to be ‘explored, manipulated, or inhabited’, we save them from the high status of Art and free ourselves from the battle that games can never win (Zimmerman 2014). And yet, in this configuration, Art is still exalted. Even if we roll our eyes and refuse to go there, we have done nothing to dismantle the distances between the terms or topple the aural material hierarchies. Even if we resist and just play games instead, we are only conscientious objectors and have done nothing to stop the big war. We may have crossed into Canada, but the border to the US is still there, a threat to freedom and a reminder of cultural difference.

Then we act...

In the spirit of Obstruction, then, the theme of the workshops and exhibitions that frame this volume of reflections, I offer another alternative to the Great Art vs. Game Debate, one which problematises boundaries by recognising them as dynamic, culturally situated, and materially and discursively intra-active and relational. As such, I draw inspiration from the feminist posthumanist materialist traditions where phenomenal delimitations (similar to the bounded categories Art and Video Games, as referenced above) are ever shifting and where knowledge emerges not through a pre-determined definition of what is or is not an art-thing, or a video game-thing. Rather, as was enacted in the Obstruction experiment (and indeed it was, in its form and production) and in the range of trans-disciplinary artifacts and experiences produced, I argue for an ongoing process of discovery and exploration that challenges the artificial boundaries, set up to fail, in the ongoing Art vs. Games debates. In my ideal cultural imaginary, that is my call to action for future intervention: we will continue to perform iterative interactions among varied materialities (human/non-human, cultural/natural, proper/improper and beyond) and set agencies in motion to see what might happen. Already initially enacted in games for change and within experimental art and activism games movements, particularly those inspired by the traditional avant-garde, these emergent and complex techno-socio-cultural artifacts will be inherently political and ethical in their transdisciplinary engagements and their challenges to simple boundaries of obstruction that might discreetly oppose them.

They/We will remain purposefully disloyal to traditions (cultural, disciplinary, political, creative), and instead they/we will experiment with what I here conceptualise as artgames. These destabilised material entities—neither pure art, nor game, but both together, and more—have no allegiance to identity, hierarchy, time, progress or status. The diverse phenomena that I imagine to comprise artgames are complexly material in their agency and in their relationality. They may be inspired by traditional or established principles (of aesthetics, game design or user-experience, for example), but they are not loyal to them as they seek to create, develop and inspire cultural innovation and social revolution. They reverberate in the networks of materiality they sustain, and have ethical dimensions, as well as enact profound social change. As outlined in what follows, I draw primary inspiration from Karen Barad’s agential realist approach and Stacy Alaimo’s work within trans-corporeality, as well as from the work of others, like Brian Shrank and Mary Flanagan, who work more precisely within avant-garde art and game design approaches (Alaimo 2008, 2010; Barad 2003, 2007; Flanagan 2009; Shrank
Collectively, they outline a position and perspective to understand the deeper issues when we connect art to video games, and back again, and to discover ‘what’s at stake?’ in this strategic and critical transdisciplinary fusion. These approaches are intended to be an enticement for a call to action, as well as a documentation of what is already there and yet to be discovered when we attempt to align art with video games.

However, I remain speculative and provocative in my claims and my call, rather than prescriptive and conclusive in outlining all the precise actions this revolution may require. If I am to be true to the emerging dynamics of Barad’s agential realist approach, to the trans-materialities of Alaimo’s constructions that resist concrete form and stasis, and to the experimental nature of avant-garde aesthetics, then I/we must remain open. We must investigate the multiple paths that may unfold in the quest toward disruption and to the challenge, and to the challenging of, ideological obstructions.

Transdisciplinary Intra-Activities and Posthuman Politics: artgames and/as disruptions

At the heart of the intra-actions I propose is a desire to widen the circle(s) within which we conceive of art and games as disciplinary and political categories. By drawing on the disruptive principles engaged by trans- and post-perspectives, we are able to reconfigure a range of ideological constraints, including what we see as the cultural impact of artgames, as well as to affirm the extended site of the player-body as multi-dimensional. According to the agential realist approach developed by Karen Barad, we can understand materiality as non-reductive if we are able to see/perform/engage it in a dynamic process of material becoming (Barad 2003; 2007). Seen intra-actively (a neologism for Barad that intensifies and multiplies inter-actions—as within binary Art/Game debates) the matter comprising the phenomena of the world is in an emergent state of becoming that serves to negotiate and transform representational discourse and practice. Art and video game artifacts, for example, are not then defined by and comprised of their clear technical, aesthetic and/or cultural materials. Rather, the quotidian and intersectional dimensions evident in the production, play, engagement with and analysis of such phenomena consist of human/non-human, natural, cultural, creative and a myriad of other forces at work at the center of any encounter. The impacts transform and emerge when seen and enacted through differing material constellations, and never come to mean any one clear thing. Rather, in Barad’s configurations, knowledge production is onto-epistemological (as opposed to rational and cognitive) and embodied in the multiple and affective material agents who circulate it. Because knowledge is not pre-determined, experimentation is key to discovering new processes and new impacts. From this perspective, artgames, experimental by nature, may release new visions and align in politically surprising and open ways.

And so we must act.

The agencies deployed by such intra-activities are further (de-)materialised in the posthuman (or more-than-human-only) bodies that they circulate and ascribe. As forms of disruptive resistance, artgames do not and will not easily fall into human and non-human categories. The user or player of an artgame is not set apart from the technical apparatus, the affordances for interaction or the affective
flows released in the experience of playing. Nor are the consequence of game play confined to in-game worlds. The real challenges they pose when they ask us to play with them is to suspend our disciplinary understanding of the body of the work as some thing we can recognise; instead, we must see their extended influences across a range of sectors, and certainly beyond the Art vs. Game sectors used in the (not-so-) great debate. In this way, we might deploy the work of those like Nina Lykke, who has classified a theoretical process within critical studies of the posthuman that she terms feminist corpomaterialism (2010). This is a broad term that describes the ways in which feminist approaches to bodily materiality and corporeality work to undo essentialist definitions of the body—as gendered, human and with biologically ascribed characteristics, for example (Lykke 2010). Extended in the work of Stacy Alaimo (2008, 2010), trans-corporeality further conceives of understanding human bodies as mutually constitutive with their environments. These kinds of (non-) human embodiments are ‘entangled territories of material and discursive, natural and cultural, biological and textual’ (Alaimo 2010: 238). For Alaimo, the material world includes ‘human actions and intra-actions, along with intra-actions of man-made substances, all of which intra-act with natural creatures, forces, and ecological systems as well as with the bodies of humans’ (Alaimo 2010: 259). What might happen then if we make/see/play artgames in the vast ecosystems that they bring to life?

And so we must act—some more.

We must then further these transformations by researching and developing artgame ecosystems, trans-corporeal networks for exchange and impact, that motivate players to enact social change and/or to reflect and critique cultural ideologies through play. In her book Critical Play (2007), Flanagan defines the core characteristics of this form of reflective play and reveals that its aim is to move beyond a view of games as only relevant for entertainment purposes: ‘Critical play is characterized by a careful examination of social, cultural, political, or even personal themes that function as alternates to popular play spaces’ (Flanagan 2007: 6). Flanagan recognises games as complex ‘cognitive and epistemological environments’ that may support users’ advancement of meaningful actions if designed within a ‘critical game-design paradigm’ (ibid.: 6). Drawing on the traditions of avant-garde art movements (for example, Futurists, Dadaists, Surrealists, Fluxus, Situationists), Flanagan reveals strategies for considering games as ways to disrupt traditions, evoke political reflection and promote social change. Through a deeper understanding of Art and Games as processes that cross boundaries and effect change, her work, along with feminist posthumanists and trans-corporeal materialists, brings us closer, and then deliberately further, from a failed debate discourse on art as games and games as art, as though we could isolate them into bounded entities and reflect on them – ever.

Brian Shrank in his Avant-Garde Videogames: Playing with Technoculture (2014) also explores the connections between avant-garde art movements, politics and games, and offers methods for considering the complexities of user-play and the relationships to cultural systems at the center of many games. For Shrank, the term technoculture as used within media studies is based on the understanding of the deep convergence and interdependence between culture and technology, between humans and machines. Thus, avant-garde videogames, for Shrank, are powerful vehicles to engage users in the affordances for change:
Each game becomes a microcosm of technoculture itself. Games teach players how to engage and optimize systems as well as how to manage their desire in a contemporary world. This makes the world of games a principle site to expose, unwork, and rethink the protocols and ritual that rule technoculture. (Shrank 2014: 4)

Following Flanagan, Shrank and the many others who believe that games create deep, compelling and complex environments for players to engage with culture and radically transform it, I urge us to develop innovative content, as the participants in the Obstruction experiment have done, but also to recognise its deep material relation to culture (whatever that is). We must also design theoretical models and design infrastructures and systems to support and engage social impact (Raley 2009; McGonigal 2011). We must develop complex material ecosystems and open up the affective and fluid dynamics and mutual relationalities that emerge in artgame play when trans- and post- ideologies circulate. Importantly, Flanagan and Shrank provide overviews for the development of activist principles within games and are extensive in their review of multiple game types, outlining the connections to avant-garde movements and by extension their political impacts. Thus, they provide us with an initial map to inspire future work, but we must continue to complicate these dynamics and find our new avant-garde impulse in this respect and context. (How ironic would it be for us to look backward in order to move forward and advance, again?) We must continue to explore posthumanist perspectives that engage users through strategic game-design and the principles of critical play. Through a process of iterative development and experimentation with aesthetic and narrative content and with game play and design focused on social issues, we can explore the complex networks that artgames support. It is imperative to understand the complex and fluid dynamics at the boundaries between human subjects, technical devices and culture, so that we are not merely reductive and rhetorical when we investigate these intersectional politics.

And so we must act—like activists, like posthumanists, and more.

What is at Stake? (Besides Everything)
The deployment of such intra-active, processual and dynamic work is one requiring deep thinking, radical design and transformative reflection. To undertake this work, where the core objective is no less than social change, even in localised ways (as with this experiment with Obstruction), requires nuanced and focused objectives and a clear understanding of why we should be so moved toward action and activism. I believe that to truly enliven and engage the posthuman ecosystems, to release the affectual forces, and to design with an experimental purpose and motivation for discovery (not for proof of pre-determined results) inspired by avant-garde politics means we must consider the stakes. And they are high. In my estimation, the task is no less than an engagement with knowledge production at its epistemological and ontological material core. We must understand the relata (to borrow once more from Barad), the relational components that comprise the phenomena of artgames, and activate them responsibly.
And so we must intra-act. With everything. And Ethically.

What is at Stake? Markets and Academies...
To intra-act is by its nature an ethical undertaking. In fact, Barad overtly claims an ethico-ontological-epistemological dimension in her approach (Barad 2003, 2007). An agential realist approach calls for accountability in the experiments with knowledge it disrupts and releases. The varied matters of each intra-action, the situatedness of object-subject relations (as they become undone and complexly positioned), of innovative contexts for research and development, and the attention to difference must be explicitly non-deterministic. There is no guarantee of success, so they must be iteratively responsive and enacted with care. This constitutes a leaving behind, an exclusion of tradition, and a brave and bold move forward: ‘exclusions foreclose any possibility of determinism providing the condition of an open future’ (Barad 2003: 826). At the same time, if we are to provide for a future ‘that is radically open at every turn’, we cannot fall into constructivist beliefs and simply wait for intelligible cultural forces to produce or to act upon matter, as though it were inert and awaiting our more knowledgeable interventions (Barad 2003: 826). We cannot depend on overly simplistic accounts of what is inside or outside the bounds of certain phenomena, or of an art thing or a game thing. For Barad, this means sustaining a site of ‘exteriority within’ our artgame experiments to combat and challenge constructivist idealism (Barad 2003: 825). We must exclude tradition (and traditional practices) as we think we may know them, as bounded epistemological categories, but we might still be open to ontological and ethical forces of pure being associated with traditional conceptions that might still effect change, or not. In short, we must truly experiment.

So then what are the domains we might consider when moving forward, advancing in so many directions at once? It is impossible to account for all of them here, and it would in fact be counter to my own open call for action and intervention. I can, however, suggest a few arenas for exploration, some broadly defined contexts for investigation to get us started: 1) markets and 2) academies:

1) Markets. The advent of video games in culture has already stimulated a radical transformation in creative culture industries, with an understanding that the entertainment they afford is richly complex. Video games are designed to maximise human/computer interactions, and they draw users into content that immerses and engages them in ways unique among other media, connecting them to cultural processes, inciting and enticing them into cooperative roles through complex ludological, aesthetic and narrative forms (Bogost 2007; Flanagan 2009; Juul 2001; Kirkpatrick 2011; McGonigal 2011, Shrank 2014; Raley 2009). Since the 1980s in particular, the growth in markets and consumer use has radically increased, along with the increased possibility for social impact. Video games are one of the strongest growth markets in media industry worldwide, and the Electronic Software Association, for example, estimated that by 2015 video game revenues would have reached 111 billion EUR in global markets. In the US, one of the largest game development and consumer markets, the gaming industry is growing at a rate four times faster
than the general economy. Markets in Europe are similarly expanding, and Sweden has firmly established itself as one of the global leaders in game development, and according to the Game Developers Index 2015 (based on statistics gathered from 2014), Sweden continues to increase substantially as a growth industry, with, for example, turnover from game development increasing by 35% to reach 930 million EUR in 2014. The total value of Swedish game developer acquisitions in 2014 was 2.75 billion EUR. There are currently 213 Swedish game companies, which is an increase by 25% in one year alone. The market size alone, not to mention the potential revenues, means that it is both necessary and possible for innovation to develop. And develop they have.

Game companies, such as thatgamecompany, founded by alumni from the University of Southern California’s (USC’s) Game Innovation Lab (GIL), have created experimental games, such as Journey, Flower and Flow, that have not only been fundamental in illustrating how a video game can be related to art, but how it can embody a disciplinary and aesthetic complexity that defies simple characterisation. They are, according to my definition, artgames, and their critical reception illustrates this. In Erik Kain’s review of Journey (2012), for example, he effectively summarises many of the responses to the game that recognised it as a unique and experimental narrative art form, one based on building player empathy through the complex embodied aesthetics of playing. For him, ‘Journey is meant to be experienced, rather than observed’ (Kain 2012). As such, the reviews of Journey (formal and informal, in game journals and on personal blogs) are filled with personal confessions from players, many focused on the experience of crying during play, and especially at the end of the game-play—an ending that in fact extends fully into real-life. The players’ emotional connections to the abstractions of the in-game world, the semiotic absences (the chirping and beeping that replace natural language), as well as to other players encountered during play, whose avatars almost perfectly reflect one’s own, offer a rich context to explore the onto-epistemologies of player-bodies. Positioned at a liminal site of becoming bodies, bodies filled with being and knowing, driven and fueled by pre-cognitive affective states, singular and multiple, the layered states of being accessed in the game through emergent play reveal complex and distributed materialities. They offer us an inspirational path to follow.

Similarly, another experimental work from the GIL at USC, Walden, The Game, is designed as an experience based on Henry David Thoreau’s contemplative transcendental reflections on nature in Walden (1854). The game works through its strategic design to support critical and complex embodied game-play. It evokes complex relationships and reflections on real and in-game experiences (the differences here are indeterminate) for players through intertextual referencing and layered materialities. Game play is sustained by recursively moving through human and non-human objects, natural and cultural states, and simulated physical and virtual
environments. The game-play, following Thoreau’s transcendental vision outlined in the original text of *Walden* itself, ‘*is infinite in its relations*’ and requires a quotidian understanding of materiality that my call to action supports. Collectively, the two games, read through the lens of feminist posthumanist reflections on matter and resistance, illustrate how contemporary experimental games can enact a radical politics of becoming-bodies through critical play. Their impact on the market is already affirmed through the critical support and recognition from the industry and from the national cultural funding in the US supporting its development. For example, *Journey* won several ‘game of the year’ awards and garnered two Grammy nominations. *Walden, the Game* has received substantial support through the US National Endowment for the Arts. Tracy Fullerton, the lead researcher for *Walden, the Game* is a prominent figure at Game Developer Conferences, where she has presented work to industry professionals, who have received it with great interest. Fullerton’s work has also been discussed across popular media channels, such as National Public Radio in the US and *Time* magazine. Clearly, the market is open to change.

2) **Academies**. Market advancement and game development work has not been undertaken in academic isolation and it has developed in multi-disciplinary contexts (artistic, intellectual, cultural, industrial). Research in the discipline of Game Studies has from its very inception documented how games reshape users’ relationship to media, immersing and engaging them in compelling and complex ways. Video Game Studies as an academic discipline is still relatively young (approximately 20 years old). It has its roots in the Nordic region, from where much of the current research is still generated, including from our own researchers at the University of Skövde, who are actively working to re-imagine game spheres and networks. The work of foundational theorists like Espen Aarseth, Markku Eskelinen and Jesper Juul, who in the late ‘90s and early 2000s helped define the field, was grounded in identifying the unique aesthetics, narrative and ludological properties of video games, distinct from older media like literature, TV and film (Aarseth 1997, 2001; Eskelinen 2001; Juul 2001). Central to these definitions, and to those that followed, were discussions of user-interactions and the strategies within which the media compelled users to play with content, thus making them vital and dramatic forces within complex human/computer interactions and interfaces (Laure-Ryan 2001; Pearce 2006a, 2006b). As the markets for video games have crossed over from games designed for pure entertainment into fields where game principles are applied for more critical ends, a disciplinary revolution has begun, which opens the door for more trans- and post-practices.

We can recognise it in emerging fields and academic educations including, for example, Serious Games (games used in education, health care, science and defense), Digital Heritage (games used in museum and heritage sites and settings) and Games for Impact (games used for social transformation and awareness of critical is-
sues). Researchers at leading academic institutions in the US (e.g. Drew Davidson at Carnegie Mellon and Constance Steinkuehler at the University of Wisconsin-Madison) direct research centers focused on the social and political impacts of games. Steinkuehler also served as the first White House Senior Policy Analyst (2011-12) for game-based initiatives, working to align games with priority areas, such as health and scientific advancements. The Sweden Game Arena, founded at the University of Skövde, was established as a consortium to merge academic, industrial and regional development. The inclusion of artgames would only further reflect the ways that innovative creative practices may combine with critical and strategic initiatives to intersect with cultural ideologies and domains to effect change.

And so we must intra-act, enact, and act with...

Onward
In the conclusion to Shrank’s *Avant-Garde Videogames*, he acknowledges that the key to cultivating diversity and change in games is to move beyond the avant-garde. For him, that offers an obvious direction forward: ‘one clear strategy is to make games more representative of the diversity within game culture itself’ (Shrank 2014: 187). This is then a question of ‘opening up more roles for women in both games and game companies’ and ‘normalizing women and acceptance of all genders in game culture’ (ibid.: 187). I challenge that position and extend it. The need for the diversity and true politics of difference that artgames could support move us far beyond game culture. Seen through Barad’s agential realist approach, combined with Alaimo’s trans-corporeal influences, as well as the experimental politics of avant-garde art video games that Shrank and Flanagan outline, we clearly recognise that game culture is, in fact, just culture culture. Acknowledging gender and women as influences and supporting their rise through the ranks of a fully evolved and pre-determined field will not overthrow or revolutionise anything, or at least anything materially substantive. If we truly want a revolution, we must intra-act, enact and act with the phenomenal materialities artgames provide. We must discover and recover openness, and we must all then lead in the diverse directions this might entail. No followers allowed. We do not yet know or see what we might discover, and so we must all remain in becoming, in process, in artgame culture networks, in/difference.

References


Computer games combine various artistic disciplines, such as visual art, sound, music and storytelling, with low-level data representations and algorithms in order to create an interactive experience for one or more players. This essay will discuss the implications of exploring the design space at the intersection of games and art from a game design perspective. In particular, this essay will argue that exploring and treating games as art is a step towards inclusive game development.

Game Design
People play games for a number of reasons: to socialise, compete, role-play and solve puzzles, to name a few. Game design is about creating an interactive experience that fulfils one or several of these motivations for a player. Central to the design process is therefore to set player-experience goals; that is, ‘descriptions of the interesting and unique situations in which you hope players will find themselves’ (Fullerton 2008).

The game designer’s task is to set the objective of the game and specify the rules that state what the player can and cannot do in the game. Since games require interaction, the game design must provide the player with opportunities to make choices and perform actions. Furthermore, to keep players motivated to continue towards the goal, the actions must seem appropriate and meaningful given the context of the game. This will in turn allow the player to experience agency, ‘the satisfying power to take meaningful action and see the results of our decisions and choices’ (Murray 1997: 126).
There are several layers involved in the design of a game: the player, the rule system, and the actual interface between the player and the rule system, also referred to as the interaction model (e.g. Adams 2010), through which the player and game system communicate.

Hunicke, LeBlanc and Zubek (2004) introduce the Mechanics-Dynamics-Aesthetics (MDA) framework in order to better describe these layers and provide a methodology for understanding game design. Their model does not deviate much from similar models, such as those proposed by Adams (2010: 37-38) and Fullerton (2008), but they do provide a vocabulary for talking about player experience goals, which is very useful for the purpose of this essay.

1) **Aesthetics:** While aesthetics is often associated with the artistic quality of an artifact, in particular its audiovisual expression, aesthetics in the MDA framework refers to what makes the game ‘fun’. However, ‘fun’ is not a very useful concept, since the meaning of ‘fun’ is anything that motivates the player to play the game, from horror to pastime. Instead, they propose a taxonomy of ‘fun’ (see Table 1), which is a vocabulary for talking about what type of player experiences the game (intends to) offer, such as ‘discovery’ or ‘narrative’. The aesthetics of the game is therefore also described as ‘the desirable emotional responses evoked in the player’ when interacting with the game (Hunicke, LeBlanc & Zubek, 2004).

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<th>1. Sensation</th>
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<td>2. Fantasy</td>
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<td>3. Narrative</td>
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<td>6. Discovery</td>
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<td>7. Expression</td>
<td>Game as self-discovery</td>
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<td>8. Submission</td>
<td>Game as pastime</td>
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Table 1. Taxonomy of ‘fun’ (Hunicke, LeBlanc & Zubek 2004)

2) **Dynamics:** As implied, the ‘fun’ a game offers can only be experienced through interaction. As such, playing a game can be thought of as a form of communication between a player and a game system; the player performs an action and the system responds to that action according to a set of rules. Since the player typically has a number of available actions to choose from, there will be different outcomes that in turn will affect how the game progresses from thereon. This behaviour of the game is what Hunicke, LeBlanc and Zubek (2004) refer to as the dynamics of the game.

3) **Mechanics:** The rule system that determines how the game responds to particular actions made by the player is defined in the mechanics layer. As such, the mechanics layer is static, i.e. it does not do anything unless the game is played. However, when designing for a specific ‘emotional reaction’, these experiences must be trans-
lated into rules and code (in case of a digital game), which correspond to the me-
chanics layer.

To give an example, if the desired emotional response is fear (Aesthetics), the designer must first identify what, in general, makes people scared, and then translate these situations into interesting game scenarios and events that the player is encouraged to engage in. Typically, this means following the genre conventions of a horror game. These scenarios are presented to the player in terms of e.g. a story, a setting, sound, music and graphics. In particular, the scenarios provide the player with opportunities to act in a meaningful way (Dynamics). The exact specification of when and how the system should react to things that happen in the game, either as a result of the player’s action or generated by the game system itself, is defined in the rule system (Mechanics).

That the aesthetics of a game promises a certain experience does not mean that it will evoke the same or similar emotions in every player that interacts with it. Also, there will be players that have preferences that go beyond what the aesthetics has to offer, i.e. players that desire other kinds of emotional experiences. A game that portrays women in a sexist way or lack women altogether might for example repel women and some men from playing it, despite the fact that the genre of the game normally appeals to them. This means that the presentation of the game also affect the experience of players even though this is not explicitly stated in MDA framework.

**Inclusive Game Development**

Since almost everyone plays games, games have come to play an important social and cultural role in society, something that shapes us as individuals and as a society. This means that having access to games and gaming culture is an important part of community belonging, and is also an important part of forming culture. It goes without saying that any group that for some reason is excluded from gaming culture has less in common with their friends, less to talk about and thus fewer opportunities to shape their cultural landscape.

Inclusive game development is about working towards a goal of having games for everyone on the market. For example, it is about making games that are free of sexism and gender stereotypes and that show diverse representations of ethnicity, religious beliefs and sexual orientation. It is also about making games accessible for players with disabilities, to give them the opportunity to play the same games as others, on equal terms. It could also be about making games for the elderly, which is a growing player base.

Inclusive game development is thus about broadening the idea of what games are and can be, to explore new categories of aesthetics in order to accommodate a diverse and broader player base. In order to do this, we need diversity in game development teams. Therefore, inclusiveness should be considered throughout the game development process, from the game development team to the end users.
In their latest report, the Swedish Games Industry explicitly state that ‘gender equality is as important in the games industry as in the rest of society, since it is about securing the best competence and increasing the consumer target groups. [...] Equality also concerns culture, sexuality, identity, age and level of function. This goes for both companies and game content’ (Swedish Games Industry, 2015), i.e. the game industry ranks inclusive game development as one of the most important challenges to address in order for the industry to develop and grow.

Efforts are now being made to create an inclusive and diverse gaming community, where Diversi is perhaps the most notable initiative, as a nation-wide project bringing together industry representatives, educations, journalists and players (see http://diversi.nu). However, progress is slow, and trying to make game development more inclusive is often met with resistance and sometimes even aggression. This is particularly true when it comes to gender inclusive game development, which will be discussed next.

**Gender Inclusive Game Development**

As mentioned, the Swedish Games Industry have stated that diversity is necessary for the industry to grow and the most pressing issue in this regard is attracting more women to become game developers (Swedish Games Industry, 2015). Women currently make up for only 18% of all workers in the Swedish game industry; this includes workers in administration and HR, traditionally female dominated areas.

Women constitute approximately half of the player base now; despite this, it is no secret that most of the high profile games with the largest budgets are targeted towards men in their mid-twenties. This is also evident in the content of most of these games: violent action games featuring male heroes, and sports games. In addition, many of these games are also criticised for being sexist and, in combination with encouraging violent and sometimes even criminal behaviour, they have contributed to giving the game industry as a whole a bad reputation and deterred many women from entering this industry. To reverse this trend, game companies have to make an effort to create more gender inclusive games.

The bad reputation is not exclusively the fault of the game content; it is also due to the harsh climate for women in games in general. Over the last years, female players, developers and journalists have raised their voices against the harassment and threats they have received as members of the gaming community, not the least by members of the #GamerGate movement.

To work towards gender equality within games therefore means working against prejudices and towards gender inclusive game development, i.e. gender inclusive teams, content and target groups, with the long-term goal of changing attitudes towards games in society. In 2011, a group of students and teachers from the game development programs in Skövde initiated Donna, an interest group that works actively towards these goals of inclusive game design (for more see http://www.his.se/donna).

Within Donna, we have observed that women tend to be more attracted to game development when it involves the creation of artistic content. For example, game educations that feature graphics or creative
writing have distinctively more female applicants than those that are technology-driven. Consequently, educational programs within those areas have an almost even gender distribution, including the summer school *Art and Game Obstruction*. Interestingly though, technology is involved in almost all aspects of computer game development, and games in themselves may be considered artwork.

**Game design as art**

One could say that a game that has been created by an artist for an art exhibition is art, while a game that has been created for the commercial market is not. However, some games could fall into both categories. Examples such as *Train* (by Brenda Romero), *Passage* (by Jason Rohrer) and *Journey* and *Flower* (both developed by thatgamecompany) deviate from traditional games in one or several regards. *Train* (2009) is an award-winning board game created as an installation as part of Brenda Romero’s series through which she investigates the expressive power of games, referred to as ‘*The Mechanic is the Message*’:

> *The Mechanic is the Message* [...] captures and expresses difficult experiences through the medium of a game. Much like photographs, paintings, literature and music are capable of transmitting the full range of the human experience from one human to another, so too can games. Due to their interactivity, the installation suggests that games are capable of a higher form of communication, one which actively engages the participant and makes them a part of the experience rather than a passive observer (Romero 2016).

*Train* is thus created as a piece of art by a game designer, making the game designer an artist.

Jason Rohrer has also created a number of games that have artistic rather than commercial ambitions, and that offer a player experience out of the ordinary. *Passage* is one such example, in which the player walks the path of life in a surreal fashion. Like Romero, Rohrer use mechanics to convey a message. Thatgamecompany has been acknowledged for their art-driven games for the commercial market, especially *Journey* and *Flower*. Even though the company markets the games using traditional forms of aesthetics, such as ‘challenge’ and ‘exploration’, the setting and pacing of these games differs from most other games that use these aesthetics. Instead, a new aesthetics category might need to be invented; for example, ‘restoration’, as proposed by Helmisaari (2016).

The ‘restoration’ category evolved from adding gameplay elements to a virtual restorative environment (VRE), which is a system that aims to offer users stress-reduction. Typically, these systems do not offer any interaction other than navigating a virtual environment, but Helmasaari’s (2016) study showed that a VRE with more interaction possibilities had approximately the same restorative effect as one that only offered the ability to navigate. Her VRE game had many similarities with *Flower*, and even though the restorative functions of *Flower* and *Journey* have not been studied, it could be argued that these games would indeed support this new aesthetics category. Hence, exploring new forms of gameplay might result in new categories of aesthetics, and vice versa, and this is what inclusive game development will eventually lead to.
Discussion
Inclusive game development is like a cycle; in order to include and attract (new) players, game developers must make an effort to make game content more inclusive in terms of, for example, representation, stories, perspectives and accessibility. This might also require the exploration of new forms of gameplay and new aesthetics categories. To achieve this, the game industry needs people with varied backgrounds and life experiences that will bring new stories and perspectives to game design. Game developers market themselves through their games, so by making inclusive games they will not only attract new players, they will also attract diverse developers to their company, thus closing the cycle.

The Art and Game Obstruction course has shown that exploring the design space between game design and art will introduce new forms of gameplay (dynamics) and play experiences (aesthetics). Even though it might be difficult for game companies or publishers to see the commercial potential in games such as those created during the course, games such as Journey and Flower show that art-driven games in fact can be commercially successful and acclaimed.

The course has also shown that when game design meets art, it attracts female creators, both artists and designers. And, since the artifacts were exhibited in an art museum, a new audience was reached, some of whom had never played a game before. The course as a whole is thus an example of inclusive game development in practice.

References


Part 2

Artists and Curators
In the very influential exhibition Documenta 13 (2012), the artists Janet Cardiff and George Bures Miller made the artwork ‘Alter Bahnhof Video Walk’ that in many ways manifests the interaction between Space – Content – Audience. With a tablet in your hand you were guided through the train station in Kassel, Germany. On the tablet a video was playing, telling a story and showing you where to go, seeing both scenes displayed in real life and digitally. This made you both into an artwork yourself (i.e. for the people not participating, but seeing you moving zombie-like through the train station) and to a spectator. In a way that makes the idea of transmedia into so much more than a multimedia presentation of a product; and for me it raised the question – what will happen if we at the museum merge students of fine art and game development into a lab environment exhibition?

Being a museum and dealing with exhibitions
Skövde Art Museum is a small institution in a small city in the centre of an agricultural and industrial tradition. This has great relevance for how the museum has organised their exhibition programme up until now. However, time has empowered both the arts and the general public with digital tools that in practice turn most of us into producers of graphic and cultural content (through YouTube, Tumblr and other social media). So one of the main challenges today is to balance between a classic perspective of art and opening the institution to an expanded participation where the audience’s point of view and demands come from the basis of content rather than the basis of culture or the arts.

Recently, there has been a big data mapping of ‘the creative forces’ (‘kreativa kraftfält’) in the region
around Skövde, which confirms the above statement as well as showing that most of the creative cluster within the mapped area never interacts; this includes the academic and cultural institutions.

So, the idea of making the exhibition *Art and Game Obstruction* was founded on geography, exhibition development and collaboration. Valand Academy and the game development department at Skövde University were both contacted almost two years prior to the set date for the exhibition, and agreed to be part of this project. The setup was straightforward: Master’s students from both game development and fine arts were to participate in a ten-week course that would also be an exhibition and a creative laboratory. The purpose was to encourage students to collaborate across academic fields, and by this also try the laboratory format as a tool for the museum to work with in future exhibition practices.

**The space and the curation**

The idea of creating a hybrid between an exhibition and a lab/workshop environment was a main focus of the project. Showing a process and making it a part of both an educational and an artistic/exhibition purpose requires an artwork produced specifically for this situation. At this point the artist Olle Essvik was contacted, and a gang of four was thereby set (the museum, the artist (Essvik), the art academy and the department of game development). Olle Essvik was to artistically lead the work of the exhibition space and through his art illustrate the interaction between contemporary art and inclusive game development. The format of making an exhibition out of a workshop situation is not uncommon, especially not within game and digital expressions. However, that kind of workshop is usually performed on a 24-hour basis, not ten weeks. In this case, the solution of making the artwork into a combination of a classroom and a scenography came about quite early. Olle Essvik congenially worked his way into an analog infrastructure of a digital landscape. The art space became publicly engaged and fully transparent. The students were given total freedom to interact with Olle Essvik’s artwork, so that by the end of the exhibition there had been a complete transformation of his original work.

**Merging art and game**

Contemporary art often deals with issues where content is more central than the visual; if it’s not the other way around or even a lack of both. Art does not follow the rules of science and being ‘unfaithful’ is the key to art’s contemporariness. So in a way you can argue that contemporary art is effectively unfaithful to everything and everybody, including art itself. From my point of view, as a director at an art museum with a background as an artist, I find this to be the most compelling aspect of art. This also makes contemporary art and artists splendid collaboration partners. Also important to this project is the fact that if something is shown in an art museum, it’s ART. This doesn’t mean its necessarily good art, but it introduces a framework that will encourage an experimental state of mind.

From my understanding of games, playability is the core. Translated into art, playability is close to the interaction between the author/artist and the audience/participant most frequently met in performance art. So if everything happening and shown within the white cube is art, the students attending the course are also art, and if an interaction with the audience is made, it also will be art.
Truly, to me this is art. The stage is thereby set, and the merging of art and game can commence. How the collaboration between the two different creative disciplines plays out is, of course, dependent on how well their personalities interact. However, the setup is favourable for new ideas and new ways to express both art and game.
The snow fortress. There it was, the first snow. As soon as the ground had turned white we started building. White balls rolled along, leaving green trails in the snow. The first layers of a fortress that melted, only to be resurrected a few nights later. The wet, packed snow that was easy to mould, then the cold, turning melting snow to hardened ice. The new snow, covering the efforts of the day before, enabling new constructions. The winter that was cold, that was warm, or that was both. The supply of snow as building material was unlimited. We could go on building for eternity. The fortress was remoulded, and sections that one person had built were transformed by others. The knowledge passed down from one generation to the next. Knowledge surviving, fortresses melting away. I picture digital technology like snow, spreading and disappearing. The latest technology that once represented the future is replaced by new technology and a new future. We go on building to the sound of dripping ice and snow that keeps falling.

This is similar to how I think of art: as knowledge passed along and artworks building on other works. An open artwork, already in a state of change, left to be altered without restrictions. Like a minimalistic work passed along for kids – animals – artists – football players – the computer game industry – to keep building on. A game with no end. An artwork in the form of an environment, not just an object, but also a process and an interaction, a coming into being involving several participants. Imagining the artwork as a game with constantly changing structures and origins – in which the artist acts as a constructor and instructor, allowing others to alter and reshape the work. As an artist, you guide and observe the events that take place based on the premises and structures laid out.
I was invited to create an exhibition at the Art Museum in Skövde in connection with a summer course, where art students from Valand Academy in Gothenburg came together with students from the computer game development programme at the University of Skövde. The idea was for me to set up an exhibition that would gradually be taken over by the students, an environment that could also serve as a space for seminars and workshops led by artists, Brody Condon and Julian Oliver.

I started out by drawing up five sets of instructions for different environments, based on my own personal reflections on digital technology, computers and games, an image of a prehistoric digital world or a dystopian future where the digital never happened, as an invitation for the students to fill them with digital content.

The workshop became a part of the exhibition and the exhibition influenced the creative process of the students. For me the work became an experimental game, a play in two acts – one of constructing and one of handing over.

**Act 1. Staging**

*The room is darkened and the sun is missing. Empty blue screens without content lighting up the room. A corridor filled with darkness. A campfire with ice. A forgotten Internet cafe. Periscopes mirroring the sky. The digital beginning. The time we hardly remember. A room without content. The emptiness.*

**Act 2. The process and the final completion**
ACT 1

[dead trees, fireplace, battlefield 3 + XFX radeon HD 6870 black edition, chilled computers]

Last summer was hot and the heat damaged the electronics. The museum is blacked out and the sun is shut out. The darkness cools down the space, isolating it from the summer heat. A fireplace as a meeting point. Ice instead of fire, melting and making noise.

[computer-assisted-translated-notes:] Campfires are popular particularly among organized campers such as Scouts. Without the necessary security is a campfire potentially dangerous. A certain amount of knowledge required to build a stable fire, to keep it alive, and to extinguish it properly. We gathered before the fire. We grill sausages and we cools computers from the heat outside. We gather on dead trees. The fire is gone and instead of ice that melts. In the dark room in front of the screen, I sit alone. Now that I have started to play Battlefield 3 on my data, then the processor unit (GPU) in my video card is very warm, I think. It’s up and sometimes over 90 degrees (!) When I Player and then start the green flashes occur in my graphics card is the XFX Radeon HD 6870 Black Edition. It is equipped with just a fan, cooling Same design that AMD’s reference card.

ACT 2

Picture below to the right, Jennie Sörensen, Root.
ACT 1

[Cyber-cafe, periscope+gutenberg+ pilgrims, 4 * 3 + Edison, Windows]

In the inner section of the museum there are windows, four meters above the ground, that can’t be reached without a ladder. Through the windows, roofs and the sky. Below the windows an Internet café is constructed, fitted with six booths. Instead of computers there are periscopes leading up to the windows, reflecting the skies above the museum building. In the room are reflected shadows of the moving clouds.

[computer-assisted-translated-notes:]

Black paint. Several computers in a dark room. The smell of hot computers and fans, an internet café, also known as a Cyber-café is a place that provides Internet access to the public, usually for a fee. These companies usually sell snacks and drinks. Computers periscope against reality. Reflecting the sky, a structure that helps us to see what is already there. A periscope is an instrument for observation over, around or through an object, obstacle or condition. In its simplest form, it consists of an outer casing with mirrors at each end parallel to each other at 45 degrees. Johannes Gutenberg creates PERISCOPE ON 1430s to enable pilgrims to see over the heads of the crowd on vigintennial. Computers periscope toward the reality of size 4*3. This measure was approved by Thomas A Edison, such as film, such as computers, such as the TV window, such as light on new worlds.

ACT 2

Picture below to the right, and pictures below on the next spread, Marisa Tapper, Beginning.
I heard them beating like an evil

Do you see it now?
**ACT 1**

[engraved in plastic junk]

In the middle of the museum space are piles of digital junk. A call for discarded digital material in the local newspaper. A computer company gets in touch, offering an unlimited supply of material in the form of graphic cards, computer screens, cases, computer mice and keyboards. A donation of discs, software, computers and CDs from the municipality. Tools that no one wants become the building material for workshops and artworks, but also a flashback from a time that was, a digital museum of junk.

[computer-assisted-translated-notes:]

Is impersonal and there is very little trace of humans. In some cases, the texts engraved in plastic to prevent thieves to steal. Discs with older documents from the IT department. A tool for stories, a part of someone’s life. Much of this is now demagnitised and without content. A piece of plastic sometimes with traces of coffee stains, dirt, a name.

**ACT 2**

Picture below to the right, Robert J. Homewood, *Don’t let them die.*
ACT 1

[blue-screen-of-death, phosphors, James Turrell]

The screens, projectors and television sets belonging to the museum are installed in the blacked-out exhibition space. The devices are turned on and the museum fills up with blue light, awaiting content. Like a forgotten projector, left on in the office.

[computer-assisted-translated-notes:]

Dystopian night. In one of the classrooms is a projector on, but the content and blue as a wait
ELI5: Why is the default color for a disconnected blue projector? Each projector I’ve ever used has a blue screen when no device is connected. Why, Reddit? Why? This is likely a holdover from CRT day. CRT TVs used phosphors stimulated by an electron beam. The green and red phosphor hit saturation at a much lower setting and as a result would be damaged and wear out quickly. To save the phosphorus they would set it up so that it simply project a blue screen. The blue screen of death - or BSOD blue-screen-of-death - is always an unwelcome sight. BSODs appears when Windows encounters a serious error like a blue screen or a painting of James Turrell or Yves Klein.

ACT 2

Picture below to the right, Minnamari Helmisaari, Virtual Dreamscape
ACT 1

[corridor shooter  Quake, Latin for ‘dark room’ ]

Right by the entrance, a ten meter long corridor. Painted black and with no light inlet. A peephole at the end of the corridor.

[computer-assisted-translated-notes:]

I remember the night running around the hall in search of new weapons. Endless nights of violence. I Really want a large corridor shooter - back to Quake and Doom 1/2 days! I just can not get into the Battlefield and COD series is actually not that corridor shooter. I want a dark game with crazy weapons, ammo packs, health packs and off the wall multiplayer. As a symbol of dreams or a movie. The end of the corridor was a hole. as a camera obscura (Latin for ‘dark room’) is an optical drive that led to photography and photographic camera. The device consists of a box or a room with a hole in one side. Light from an external scene passes through the hole and strikes a surface inside where it is reproduced, inverted (ie, upside down), but with color and perspective preserved. A reverse monitoring. The world looks up.

ACT 2

Picture below to the right, Karin Ryding, The Presence
This sense of the unsaid has emphasised the role of the contemporary as a loose bounding term that is always pointing away from itself rather than being articulated and rethought from the centre.


Any act of periodisation clearly illustrates the uneven nature of development of modes and theories seeking to impose an order that is clearly absent from historical development; however, for the sake of brevity I would suggest contemporary art emerges as a dominant form throughout the late ‘80s and early ‘90s, concurrent and entangled with the breakdown of the Soviet system and increased globalisation. Often summarised in the image event of the fall of the Berlin Wall, this period was famously formulated as ‘the end of history’ by Francis Fukuyama in an essay published in the summer of 1989, arguing that we had reached the pinnacle of human development in the form of liberal democracy and market capitalism, and that whilst things would still happen, the underlying coordinates were now set solid and immutable, inevitably spreading around the world. Simultaneously, we saw the increasing prevalence of the computer, initially in the workplace but very quickly into the home, the development of the World Wide Web and, importantly for the perspective of this text, the increasing access to video games in a domestic context.

Contemporary art is discussed in a nebulous manner, being almost impossible to define via traditional categories of medium or school. Arguably, it makes productive use of this indeterminacy, laying claim to a post-conceptual core to validate its existence. From a British perspective this is epitomised by the
Turner Prize, won in concurrent years by the leading lights of the Young British Artists, a group of young artists supposedly embodying a ‘pulling oneself up by the bootstraps’ post-Thatcherite entrepreneurialism, with attitude! The rise of the Turner Prize and the shift from art being an object of derision in the press to something that one was to be seen to be engaging with was wrapped up in the term Cool Britannia, a marketing phrase from the mid ‘90s used to discuss the shift from an economy of production to one of creative industries and service, comfortably avoiding the issue of the flexibilisation and atomisation of labour forces that was integral to this move. For all the talk of the spontaneous creative possibilities of the post-Wall Western world, the post-conceptualism that lies at its core has been one of surprising homogeneity.

Responding to the architecture collective Assemble winning the 2015 Turner Prize, writer and curator Morgan Quaintance published a text under the title ‘Teleology and the Turner Prize or: Utility, the New Conservatism’ on e-flux, making the following observation:

In other words, contemporary art is a critically engaged field that, for the most part, produces critically engaged actors who are uncomfortable with state power and its various methods of citizen subjection. (Quaintance 2015)

The author proposes a creeping conservatism to be found behind any art that might propose utility rather than an undefined contemporary art-ness as its function, supposing contemporary art possesses a unique critical function, and as a corollary the artist as a uniquely critical subject. The text features an early invocation of a Kantian purposeless purpose acting in some way as an excess beyond the base world of the economy, and the artist as receiving a privileged point of view. Interestingly, the idea of art being anything, following Duchamp’s originary act of bringing the urinal into the gallery, is consistently lauded: the work from the other nominees in this edition of the Turner Prize exhibition included a reading room on conspiracy theories, a musical performance and a series of modernist chairs with fur jackets attached. What becomes increasingly clear is that there are certain actions that are considered to be too far and that need to be policed; these almost always happen when the artwork oversteps the boundaries of the exhibition format and its connection to consumption, and seeks to enter a social or political situation. This is a notable concern at the moment in the art world – that the artist is the correctly critical subject and that no other discipline could possibly have developed as advanced a position as the artist. One of contemporary art’s main operational modes is the assumption of a super-subjective position, sitting above and often in judgment and it is, increasingly, marked by its exclusionary gestures, defining itself as what is not contemporary art rather than what is. This relates to a spectre haunting this text, that of media art, which is a parallel but distinct world never fully integrated into the world of contemporary art.

The past 30 years has seen the use of video move from a minor medium to one of the established forms, sitting comfortably alongside sculpture, painting and installation. The same fate has not been shared by video games. Arguably, this disparity in media dissemination can be seen through the lens of access to the means of production: video cameras have been rapidly shrinking and integrating with other technologies to the point where most people reading this will have access to one either in their pocket
or on their desk. Alongside the ability to capture video, smartphones and tablets now allow the user to edit this footage; already, there is competition to be the first to record and edit a feature-length film on a smartphone. Whilst on the other hand video games have developed in a less democratic way; from the flash games popular in the mid 2000s to current HD blockbusters, they remain primarily a specialist area with a high level of technical skill required. Even though Unity (a multi-platform game development engine) offers the full development suite for free and non-commercial usage, this is not a truly democratising act, as it requires an amount of time to learn, which places it well outside the bounds of most people’s reach. Contemporary art’s reticence to engage with video games while embracing film and video is also linked in part to film’s history and prominent cultural position. There is a recent history of experimentation in film and video, with critical and academic writing attached to it, which contemporary art can reference and by association claim a seriousness, giving it a legitimacy.

When we consider contemporary art’s relation to the video game we can see the super-subjective position discussed above in evidence again. This treats video games as a subject, which the artist can comment on in moral judgment of its culture. Below I cite some recent works of contemporary art that use video games in a specifically contemporary art-like manner, demonstrating two potential modes of engagement; the first treats games thematically and the second formally.

The first mode is the intervention into an existing platform to unveil its hidden functioning. These works generally produce videos of performances in the worlds of these games to be viewed either in a gallery or online. This has become such a prevalent mode of artistic production that it has had its first survey exhibition, GAME VIDEO/ART. A SURVEY, in Milan.

*Second Life* (Linden Lab, 2003) is a video game without any classical game structures in place. Users create an avatar and enter a boundless platform in which they can construct their own worlds. It became massively popular in the mid 2000s, and people built a vast sprawling environment, in part a simulation of our own world and in part a fantasy. After a year or so of popularity, and talk of aligning its economy with that of the ‘real’ world, regular users started to drop off and it became increasingly populated by bots (autonomous programs on a network). The landscapes that are left over are the subject matter of Jon Rafman’s project *Kool-Aid Man in Second Life* (2008-2011), a visually pleasurable work in which the artist enters the fantasy community-built world, offering tours of the ruins of the desires of a once-thriving world. Behind the image presented to us is a fairly standard artistic trope of the fascination with the defunct and the ruin seeming to imbue a sense of seriousness, as seen in the fixation of artists with 16mm film. There is an interesting tension in its resurrection of ‘the Flaneur’, a central figure of early modernity, transported into a garish and contemporary form, but it ultimately works to perpetuate an obsession with ‘the modern’.

A similar tone can be found in the 2010 work *Freedom*, by the collaborative duo Eva and Franco Mattes. In an earlier work also inhabited *Second Life* and in a slightly more complex manner to Rafman, they were engaged in the restaging of canonical works of performance art. In *Freedom*, they again enter the world of video games, this time it is the massively popular online world of *Call of Duty* (Infinity Ward, 2003), entering the arena of battle largely inhabited by teens and men in their early twenties. Here,
instead of aiming to take as many heads as possible, Eva asks for peace and states that she is making performance art, which is fairly predictably met with being shot repeatedly, as the young men mock them.

This mode has an oddness in its approach to video games in that it takes away one of the key aspects of video games, interactivity, and the player’s ability to take control, arguably situating the artists in a trajectory of video art. It asks for a specific mode of attention that is that of contemporary art. The artist is positioned as knowing more than the viewer, as if people are unaware of contradictions of the game rather than simply ignoring them in order to be able to function within prescribed limits.

The second mode to outline treats the video game as a form to be replicated, and as a form of entertainment. One can see a marked influence on contemporary art from video games in the practice of installation artists, exemplified by the likes of Christoph Büchel, Gregor Schneider and Mike Nelson. These artists construct large-scale environments in which the viewer is left to explore, cast as the protagonists of their own narrative as they walk through these large sets and which resemble the way one might travel through as a gamer within the well established survival horror genre games – *Resident Evil* (Capcom, 1996–), *Silent Hill* (Konami, 1999), etc. The exemplary large-scale installation *Simply Botiful* (2007) by Christoph Büchel took place in the Coppermill space, a giant derelict warehouse in the East End of London, briefly run by the mega gallery Hauser and Wirth. Visitors were cast into a large space occupied by piles of rubbish, shipping containers, fridges, and at one point a tunnel accessed through a fridge, leading to the site of an excavation of a mammoth. The installation seemed to have multiple narratives running at the same time, as visitors crawled through holes to encounter makeshift brothels, doss houses for itinerant workers, ethnographers’ offices and investigations revolving around shredded paperwork in an Arabic script. The primary reference utilised in discussions around this type of work is the horror film; however, arguably a more productive way of thinking about them would be via open world survival horror games. Rather than a clear narrative to be played out for a passive spectator, this type of work casts the visitor as protagonist, allowing for a multiplicity of experience.

By way of conclusion, it is worth turning back to the point at which we began, in the 1990s, where what was happening outside of the mainstream alignment of art and entrepreneurialism would produce what we know as contemporary art. In Glasgow in 1993, at the anarchist summer school, anarchist groups played the first game of three-sided football. This was first developed from a theoretical perspective by the Danish situationist artist and philosopher Asger Jorn, but was never enacted. It was inspired by pushing the idea of the Hegelian dialectic that had served as a base for Marxist thought, and, equally, the liberalism of Fukayama, into the third dimension with a trialectic. The rules subvert the traditional game of football and are based around conceding the fewest goals rather than scoring the most, seeking to complicate predefined competitive relations:

*The key to the game is that it does not foster aggression or competitiveness, rather it deconstructs the mythic bi-polar structure of conventional football, where an us-and-them struggle mediated by the referee mimics the way the media and the state pose themselves as ‘neutral’ elements in the class struggle.*
After the initial three-sided match, the game was picked up by the Association of Autonomous Astronauts (AAA), ‘a non-hierarchical network of like-minded groups around the world dedicated to local, community-based space exploration programmes’. The network, active between 1995 and 2000, rallied around the idea that

*the days of this society are numbered. Its reasons and its merits have been weighed in the balance and found wanting; its inhabitants are divided into two parties, one of which wants to build its own spaceships and leave this world behind.*

In some ways, this partly accepts the end narrative of Fukuyama by humorously projecting an exit through the democratisation of space travel. AAA operated at the same time as groups such as the London Psychogeographic Association and the Neoists, and emerged largely from artists who were dissatisfied with the highly individualised conception of art on offer, and instead involved a playing with and dissolving of authorship. Three-sided football offered a perfect form for them to engage in, as it pushes the idea of an art away from the object and the exhibition to focus on the processual and the ludic. Importantly, it pushes beyond the level of an unveiling to instead put the participant into a different set of social relations, from which they are able to situate themselves in the world more fully. This could ultimately prove a more productive relation for art to pursue with the world of games, pushing at their limits to establish new forms from within.

References

Julian Oliver’s Covert Computing Workshop

Robert J. Homewood

Julian’s workshop was different. Not just from the form and style of the other classes that we took during the course, but from most classes that I have attended anywhere. There was an element of rebellion, of political rhetoric and critical responsibility. He strove to show us how we could leverage modern technology to place our works within the context of an ever more connected world.

In his own work as an artist and lecturer, Julian has tried to highlight the dangers associated with how easily the general populace accepts new technology without making an effort to educate themselves as to its inner workings. His workshop started with an example. Thirty years ago, most systems in society could be understood with educated guessing and a modicum of sense. If you asked someone to explain how the postal service worked, they would most likely be able to give you a relatively accurate description of the process. Mail is collected, sorted at a warehouse and then distributed to the relevant addresses through various means. In our age, the majority of people do not understand how emails work. Sure, they can usually describe how to send an email, but most have little understanding about what’s happening under the hood.

To a degree, people can be forgiven for this ignorance as the systems that we use everyday are likely at least an order of magnitude more complex than the postal service. Filled with dense jargon, esoteric numeric addresses and complicated data pathways, the blithe usage of these systems has become so ingrained as a part of daily living in the 21st century that we could hardly imagine life without them. Children growing up in this era, sometimes referred to as ‘digital natives’ (Prensky 2001) will likely struggle to explain to their own children how their grandparents managed without such a digital lifestyle.
As wonderful as modern technology is, there is a danger to our lack of understanding. From the threat of identity theft and exploitation, through to overt political manipulation, there could be any number of issues going on under the surface that we are not only unaware of, but do not even have the ability to understand. Enter ‘Critical Engineering’ (https://criticalengineering.org), a movement of technologically adept artists, engineers and computer scientists dedicated to communicating and humanising the technological esoteric and disseminating it to the public through lectures and workshops.

The workshop that Julian took us through was one such endeavour. It began with an outline of some of the issues we face as a result of the advent of ubiquitous technologies, a joyride through the mysterious world of connected devices. We were shown how easy it is to break through many security measures, and made aware of quite how vulnerable we are to attack by malicious groups and hackers.

This is not to say that hackers are necessarily ‘bad’. Despite the negative connotation regularly ascribed by the media, hacking is actually just a mentality of questioning and a form of expression. It stems from a desire to exploit one’s human characteristic of curiosity and inquisitiveness. These people are not content to merely treat the systems around them as black box tools, but rather embody the urge to explore the depths of these systems, seeing how far they can be pushed and what hidden affordances they offer. This does not, however, mean that all hackers are ‘good’ either. Like any powerful tool, it all depends on the skill and intention with which it is wielded. While we all enjoy the ease of communication and access to information enabled by our connected world, the technology that we live through and depend on for much of our social interaction is also opening us up to a form of vulnerability that we have never been exposed to before.

A few years back I was listening to legendary graphics programmer John Carmack discussing a related topic, and he noted that ten (fifteen by now) years ago we would have been totally shocked if we had been told that we would all be carrying around tracking devices that would allow governments and corporations to track our movements and patterns. He mused, wondering what we would have thought if we’d been told that we would queue up for hours to purchase the latest edition of our Orwellian-like tracking device.

Part of the problem with our current state of information inequality is that it is profoundly rife at the top levels of government. The youth which have grown up with these technologies have a greater incentive and encouragement to keep themselves informed than government officials. Business leaders, however, have noted how powerful it can be to leverage this ignorance and can afford to pay security and data experts to push every advantage available. This means that whilst businesses are capitalising on ‘opportunities’, government officials are not in a great position to understand which regulations are going to best serve the people of the world. There have been laws proposed which would grant corporations too much power and laws that might stifle business growth; luckily, the big dangers, such as SOPA (Stop Online Piracy Art), have been avoided for now, but there is no telling what laws may slip through in the future if the trend continues.
The workshop was not all political rhetoric however, there was also a very practical side to it. We were taken through the fundamentals of how networks and computers work. We were walked through the Unix-based command line and how to flash devices with custom operating systems so as to take full advantage of hardware, which had been artificially handicapped in order to sell a larger range of products with ‘higher capabilities’. These (relatively) basic skills have inspired me and form a good foundation from which to delve deeper. I have found myself being more aware of the systems around me and have even been drawn into the world of ‘open source’ and the ‘free software movement’ (free as in freedom), a movement dedicated to transparency and the open sharing of ideas and tools. The point is that we need to be more aware of how technological and political forces manipulate us and how we are being gradually coerced into giving up the right to our own data. Whilst it may seem a fair trade today, there may come a time when our data may translate into the rights we hold over our civil liberties.

Not a Gun (Robert J. Homewood, 2015)

As remote technologies and artificial intelligence become more ubiquitous, their viability as a form of mechanised warfare becomes more economically appealing, moving them steadily out of the realm of science fiction and into reality. Not a Gun attempts to highlight this danger by focussing attention on how easily the true shock and horror of warfare can be mitigated through the use of discrete and protracted layers of abstraction between a human agent pulling a trigger and a killing machine firing a bullet. The sculpture features a toy gun suspended above a pedestal, illuminated from above and casting long menacing shadows down the wall. The toy is made of cheap, brightly coloured plastic, looks fun to play with and is suspended at the perfect height to be picked up and held. When the trigger is pulled, an electrical circuit is closed between a Wi-Fi router hidden in the gun’s barrel and a battery pack embedded within the ammo chamber. This causes the router to boot up and start projecting a wireless signal. Once connected to by a phone or tablet, the router directs the viewer’s web browser to a website displaying disturbing images of children mauled in US drone strikes alongside a contextually appropriate quote from Noam Chomsky. This interaction is an attempt to infer a procedural rhetoric about the nature of automated mechanical warfare and also generate awareness of the societal moulding and desensitisation to violence through videogames and TV/film. The title of the piece makes reference to René Magritte’s ‘This is not a pipe’, which plays with the notion of form and representation as a semiotic expression.

References

From the moment I entered Brody’s workshop in the small gallery at Skövde Kulturhus, I felt as though I’d entered an Otherworld. For a start, Brody came to greet me personally, as I arrived late, flustered and slightly fevered. In fact, I’d debated whether to even attend at all. Apart from succumbing to a flu bug which seemed to have Sweden in its grip, I was very sceptical about LARP. On seeing a mention in the schedule of a week of live-action roleplay, I imagined a group of guys romping through the woods with rubber swords and Viking helmets. The word, Nordic, did nothing to dispel this image.

I’ve a feeling this is an attitude for which Brody is ready: as he clasped my hands warmly and showed me to my seat in the circle of students, each with a carefully folded piece of dark cloth in front of them, the shadow of a smile flickered in his eyes. He led us through an introductory exercise where each person in turn had to say something about members of the circle. All carefully avoided him. I was last and, seeing a gap in the market, I dove straight in with my observations about our new professor. His eyes lit up and I felt the circle was complete. It was a pretty confronting exercise, but I soon learned that LARPer in general and Brody Condon in particular never shy away from confrontation: quite the opposite, it is the food of good LARP.

It soon became apparent that Brody’s serious composure belied the passion he feels for exploration of the psyche in all its forms. Both personally and as an artist coming from Berlin, via the LA art scene and a series of powerful interactions with the Scandinavian LARP community, he seems to be seeking nothing less than an accounting of the rhythms of the soul itself. He gave us an appraisal of his life and the route he’d taken to this point, with a startling frankness that ensured everyone began to open up just that little bit more.
That first morning, we were taken through some LARP exercises to loosen us up and help us open up to thinking as different characters. The LARP techniques we were taught helped us make fast decisions about our character’s backstories and got us into a more performative space. During that week, Brody introduced us to three more artists, Adam James, Peter Munthe-Kaas and Adriane Skarped.

Adam James introduced us to an exciting piece that he had been commissioned to put on at the Turbine Gallery at the Tate Modern. This involved a large group of people traversing the hall and stopping to converse with each person they encountered, taking place continuously each day over several months. This gave them insight into speaking quite openly about their innermost thoughts and feelings to complete strangers. He then set up an exercise where we were divided into groups of 4-5 people, with group members linking bodies to become a monster in an alien landscape. As we encountered the other groups, there was a lot of physical interaction. My group in particular included both Brody and Adriane pushing it to the limits. Whilst most of the creatures created by the groups seemed relatively benign, our creature was of a far more aggressive nature, luring another creature into a false sense of security before launching a surprise attack, breaking off one of its ‘limbs’ (a member of their group) and dragging it into the mysterious black box cabin at the side of the gallery. In retaliation, another group tried to steal one of our limbs (Brody) and flee with it. I wouldn’t let go and so their entire creature and ours became locked in a tug of war, with Brody’s body as the rope. This was an exercise in community and belonging as well as breaking the rules and letting go of our inhibitions. Also, our group pushed the rules and social conventions, giving rise to much debate afterwards about what’s ‘acceptable’ and why you should or shouldn’t follow those conventions at all.

On the third day, Danish ecologist and LARP designer, Peter Munthe-Kaas, stunned us by showing powerful films of large-scale Nordic-style LARP productions with which he had been involved. Some of the projects had taken a full year to plan and workshop, with members of the public paying to be involved. The first was a piece about a mental asylum, set in a darkened warehouse with islands of light illuminating circles of chairs. Participants were shorn of all personal identity, wearing identical shifts and no make-up. He told us that the darkness represented madness and the pools of light were the wards of the hospital, which could be accessed by the participants or ‘patients’. The piece lasted several days.

He showed a film of the participants recounting their experiences with tears, anguish and ultimately joy at their sense of transformation. I was transfixed by another project, ‘Totem’, where a group of semi-naked young people became a tribe and enacted a coming-of-age ritual in the darkened Swedish countryside around a large bonfire. There was even a piece set in a dystopian, futuristic Copenhagen, where the populace of the city was divided into three discrete social classes. The lowest class, ‘C’, were forced to labour on a piece of wasteland evoking a refugee or concentration camp situation. The result was chilling.

As my fever had overcome me in the morning, I missed experiencing the meaning of the dark cloths on each seat, which I’d spotted on the first day of the course. Apparently, whilst I recovered for a while in a gallery upstairs, with a cushion and blanket provided by Brody, the rest of the group took part in
an exercise to experience lack of sight. Blindfolded, they’d groped around the floor, crawling over each other, a group of unseeing monks caught in a silent ritual of discovery. By all accounts it was incredible, and it was much talked about for weeks. I was too stubborn to go home, and that snatched hour or two of recovery was enough for me to rejoin the class.

At the end, Brody remarked that the highlight of the day was seeing ‘you just get it’. As he pointed at me, I was in a heightened state of consciousness, with so many ideas were flying through my brain at once.

To cap it all off, we had a day with Adriane talking about the large-scale televised media project that she was involved in, called The Truth About Marika. In conjunction with Swedish Television, a three-month project was hatched to persuade the Swedish public that her fictional friend had gone missing and was presumed to be dead or abducted. Working with Company P, Adriane went on TV news shows, conferences and rock concerts, handing out fliers and maintaining the grief-stricken façade that her best friend, Marika, was really gone. She told us how she had hidden in an apartment with her crew, manipulating the press and answering her phone lines, staying in character every time she left the building. At the end of three months it was revealed as a hoax, leaving the public divided, with some enraged and others applauding the elaborate artifice. It caused quite a scandal at the time, but also managed to win a BAFTA award for the best TV show.

A plethora of techniques and ideas flowed to us from the presenters in a steady stream, with little time to take notes: this was pedagogy at its most visceral. As the week came to a close, with Brody showing us his own LARP work and demonstrating techniques he’d developed, my mind was electrified. I’d found a potential way of harnessing my extremely divergent thinking and seemingly disparate ideas into a form of art that could involve people, media, technology and transformation in a new style of storytelling.

For me, Brody Condon’s workshop was the highlight of an incredibly stimulating course. His teaching style coupled an inquisitive, emotionally revealing method of enquiry with sets of techniques to open the students up, almost unwittingly. This, along with a relaxed, collegiate style, where we all gathered in the park at the end of each day, in a circle on the grass, Brody seated against a tree trunk, was highly unusual. As we shared our responses and reactions to the work, Brody was generous and intellectually demanding at once. He had a presence which incited one to ask uncomfortable questions and look deeper within. I found it charismatic and inspirational. It changed me. The scene was set for my own work to grow.
Part 3

Papers, Practice and Statements
In the 1960s, Arthur Danto and George Dickie formulated a theory of art that comes down to: ‘works of art are art because of the position they occupy within an institutional context’ (Dickie 2001: 52). This means that there are no intrinsic features of an artwork that make it into art; it is only fully elevated to this significance if it is presented, acknowledged and treated as such by artists, museum curators, art connoisseurs, philosophers of art, etc. – or what Danto (1964: 571-584) terms ‘the artworld’. Although this is certainly not the only theory of art, I find it interesting because it is so clearly about acceptance. What is accepted as art, and by whom? Games are not completely accepted as an art form, or at least they often exist under the radar and simply go unnoticed by the artworld.

There are of course examples of so-called ‘art games’ which have been displayed at museums, but this happens rarely (although I would like to add that MoMA has recently set an important example of how to exhibiting games). In the museum context we have grown accustomed to installations, video art and even performance art, but most things are see-but-do-not-touch kinds of art. Why this fear of interaction? I have no answer to this question, only ideas around concerns for audience expectations and a lack of knowledge of games and their critical potential.

Digital games, just like film, are a seductive medium. Fun and entertainment are highly valued when it comes to games, but not so in the world of ‘high art’. Even immersion itself can be questioned in the art context. Should we lose ourselves in experience or should we keep a critical distance? The seductive quality of immersion can no doubt seem manipulative. So the question stirs, are games essentially manipulative or playful? I would argue that they are both, and this is one of the reasons why it is such an interesting medium to work with in an art context. Rules hidden in algorithms can lure us into actions almost against our will; at the same time, rules can foster an environment of critical play. Artist
and game scholar Mary Flanagan (2009) traces a lineage of critical game design in her book *Critical Play*. These games are dealing with social issues, power, identities, and so on, many of which have emerged from within art history. They ‘carry beliefs within their representation system and mechanics’ (Flanagan 2009: 4). Artists and game designers have worked with elements commonly used in games, such as rules, representation systems, codes of conduct, contexts of reception, winning and losing criteria, modes of interaction, player roles, etc. One example is the Surrealists, who often used games as part of their artistic endeavours, because the playful attitude they conjured up worked to undermine bourgeois society (Brotchie and Gooding 1995: 10-12).

What do we miss out on when we do not explore games as art as fully as we could? This is a question worth asking. I have already mentioned the rich opportunity to explore the tension existing in the relationship between rule systems and play. We live our lives inside a multitude of systems that we navigate everyday. Perhaps the most obvious one is the law. Laid on top of this are the capitalist market system, network systems, cultural codes of conduct and so on. When do we choose to break the rules of these systems? What are the consequences when we follow them blindly? Games can help to manifest and illustrate these questions.

When it comes to games made to be exhibited in a physical space, such as in an art museum, there is another area of artistic exploration that should attract attention, namely, the body. When playing digital games we attach our bodies to the game controls and thus we form cybernetic circuits – linking flesh and blood with technology. In this way ‘both the player and the game share an active agency in the way they each afford, translate, and mediate the actions of the other, and the actual actor active in videogame play is in fact a hybrid of both player and game’ (Keogh 2014: 15). We play with the game and the game plays with us. This is, I believe, part of the reason why games are so loved – by responding to our actions they acknowledge our existence. But it is in fact a rather complex relationship formed between the player and the game. What embodied knowledge do we perceive from inhabiting the invisible body of the protagonist in a first-person game? How does the power we have over the virtual body of an avatar affect the relationship we have to our own imperfect bodies? I can easily envision these and many more questions around the body-game relationship as interesting topics for art exhibitions.

In my own piece, *The Presence* (Ryding 2015), the body plays an important role. Here the digital game is placed inside a long, dark corridor, sealed off by black and yellow striped construction tape. Visitors to the art exhibition have to make the active decision to physically cross the line and go inside. Guided or seduced by the light flickering on the screen attached to the wall at the end of the corridor, as well as by the mysterious sounds coming from that direction, you can choose to go further in. As you approach the end of the corridor, you need to lift up a hand and reach for the light for the game to respond (using a concealed sensor).

The ceremony of first taking the step to physically enter the magical space of the corridor and then slowly approaching the light is a vital part of the game experience. The construction tape at the entrance is signalling: ‘Keep out!’ and yet the opening presented, as well as the seductive light and
soundscape coming from within, are all inviting the player inside. This construction is playing with the rules of conduct, intentionally giving the player a psychological obstacle to respond to. It also helps to put the player into a certain role – the role of the intruder. This invitation to roleplay is also an important aspect of the digital element of the piece. As you start interacting with the flickering light on the screen, you are soon presented with questions showing up inside the light. You can answer ‘yes’ by reaching out once, and ‘no’ by reaching out twice in a row. A strange form of communication is thus established. By taking part in this dialogue, you will soon realise that you have the option to step into the role of the spirit of a deceased parent – or choose to stay yourself. Should you choose to be the spirit of the parent, you can either reassure your living son or daughter of your undying parental love, or you may do the opposite and play with their feelings of not being good enough. To the question: ‘Are you proud of what I did to the house?’ you can answer with a simple yes or no…

Playing with the role of the player – and by role I don’t mean when you inhabit a digital character inside a game, but rather the role of the players themselves as human beings playing the game – is something I find interesting. My professional work involves designing digital games, but in my free time I’m involved in the Nordic LARP (Live Action Role-Playing) community. Making The Presence was the first time I had the chance to use inspiration from both these worlds, and present it in the context of an art exhibition. I did expect that some visitors would not quite grasp that they were indeed allowed to enter into the corridor, and perhaps that some would not have the courage to do so, but I was touched by the stories I heard from those who approached me afterwards. The one I will never forget was my friend telling me about his experience of taking the role of his own newly deceased father and how, through this role, he was able to reassure himself of his father’s love and appreciation. With games we set up the rules and we prepare the space to enter, but what happens inside is between the player and the game. From time to time we see that games have the ability to touch areas out of our control, but that can stir up questions or take us places we never expected to go. That is what I understand art to be.

References


If you have something to say, please make games

Ossian Borén

Hello!

My name is Ossian Borén and I am an artist and game designer. I make art using game design as my preferred medium. I am writing this to inspire you to do the same.

What is art? To me art is about expressing yourself through a medium with ‘artistic’ intent. I believe anything can be art, as long as you intend it to be. A lot of people mistake art to be inherently good, that art has a certain subliminal quality just because it’s art, but this is not true — art can lack this quality, art can be bad art, and art can be good at other things. It’s more relevant to look at the things you can do in the art space. You can push aesthetic boundaries, you can make a political statement, you can deconstruct the world around you, experiment with the meaning of things, all sorts of things really, as long as its intended purpose is to be art. For me though, what makes a piece of work into a piece of ‘art’ work is that its creator has to communicate that it is art. This is not something that people take for granted. This is why you can have a community like the game community, where you see ‘gamers’ like me failing to get their preferred medium recognised as an art form, because most game developers never even try. And those creators who do try to have their game recognised as art, fail in communicating their ambition. Our society has created a set of pointers that tell us something is art. When we put a thing in an art space like a gallery or a museum, we ‘get’ that it is supposed to be art because this is communicated to us through these pointers. For me as an artist, the notion that something has to fit into a certain context in order to be art is rather ridiculous and troublesome. However, knowing that this sort of framework exists and how it works is the first step to experimenting with other contexts, such as games.
So what is a game? I’d like to be inclusive in my view of games. I don’t distinguish between traditional video games, board games or sports. I think they’re all types of the same thing. Here I will try to introduce a game definition of my own (although not entirely original):

- Games — rule-based machines that provide multiple possible outcomes, usually through interaction with a human. These machines have their rules powered by either a processor, a brain or a hybrid combination of both.

Games are machines. You put something in one end, and out comes something else. They’re machines with rules and if-statements and cause and effect. There exists a ‘tree’ of different outcomes, called the possibility space, and this space can be explored through interaction. The interaction usually is, but doesn’t have to be, with a human. This is important, because I believe that a game such as Game of Life (Conway 1970), where there is zero human interaction, is still a game; it still features dynamic interaction and multiple outcomes. This is also why many games are exciting to watch even when you’re not playing. The exploration of the possibility space can even be more rewarding than seeing who wins or loses.

Let’s talk about rules a little bit. Rules are what make any machine tick, really. They describe what a machine should do with whatever it encounters. For me, what makes a rule a game rule is when it’s layered upon the already existing and always present ruleset of everyday life. For example, there’s a (mostly unwritten) rule that you should throw your litter in the bin. A lot of people find this activity boring, but what if we change the rule? For example: you should put litter in the bin from atop a chair on the other side of the room, and you get a ‘point’ if you do it. This generally boring activity now becomes a game, because of a simple rule change.

There are many types of games; I would like to introduce the idea of dividing them into two main categories: games with processor-powered and/or brain-powered rules. For a machine to work, it has to have a ruleset. Unlike mechanical machines, what keeps us from breaking the rules of a game machine is either digital game code, powered by a computer processor, or, in the case of most board games, a brain. These categories roughly translate to what we usually call digital and analog games. The old categories start to crumble when you consider something like a pack of cards played with on a phone. It’s much easier to analyse games when the categories instead point to where the rules are upheld. In addition, my definition allows the categories to broaden a bit. For example, the game of watching raindrops race down a window pane is not really an analog game in the traditional sense; it is most definitely a brain-powered game. There are probably as many exceptions to my definition as there are games. But as a tool to write about how to make a game, I think the definition works.

Now I will consider art and games together. Back when I started making art games, I realised that creating artwork is a lot like game design. These days you see a lot of contemporary artists working with rules, participation and machines as part of their practice. I think this trend is part of an ongoing backlash against the modernist art era, where artists were geniuses and art was produced for an exclusive, intellectual middle/upper class.
Going back to the notion of art being communication, when we make an artwork that has any of these elements (participation, interaction or machines), we can communicate that there is a system surrounding the work. If you encounter something interactive in an art space, you think about the rules of consuming art: ‘Can I touch it?’ ‘How do I approach it?’ When making a game as an artwork, the artist can show the consumer how the artwork is made, like peeking behind the curtain. The system can be fully exposed. From there you can redefine the framework surrounding art. I want to change how art is perceived by the public; I want people to take ownership of the art framework. It’s not just for intellectuals or ‘geniuses’ — it’s for anyone who can consume culture.

There’s a common misconception that art has to be serious, especially when it comes to the ‘are games art’ debate. There is a lot of art about non-serious subjects, especially if you go down the route of making art about art. Let’s just put the following in all-caps: ART IS NOT A SERIOUS MATTER. Art is communication. Art is culture (and a very important part of it). Art is a vessel which can contain serious matter, but it is not in itself serious. Additionally, a thing does not have to be beautiful to be art either. It’s not beauty that makes a thing art, it’s the successful attempt to communicate art that it is. A good way to communicate that you’re making art is to make it aesthetically pleasing or original, but this is not necessary.

I think a good way to think about art games is that they are a bit like art films. They can be big or low budget. They can be made by any number of people. They can be about anything and can be serious or funny or boring or whatever. A game can be artistic and entertaining at the same time (actually I prefer it to be both). However, sometimes, when designing an art game, you have to make choices that land on either the artistic or entertainment side of the fence. It is really important to make the right choices for a game to ‘work’. I see a lot of games that try to approach interesting subjects but fall short because a design decision was made that favours playability over subject matter. Now, this is ok if you want to make entertainment, but not so much if you want to make art. Every aspect of the game has to be made with the artistic intent in mind: game mechanics, aesthetics, control, game feel, framing, distribution model, pricing and so on. Here’s the thing. Your game can be art, entertainment or both, but it’s still the context you put it in and how it’s perceived that makes it art or not, and even if you go through the checklist of pointers to make it perceived as art, your art piece won’t necessarily be interesting art.

One way to go about making an art game is to look at procedural rhetorics, a term coined by game designer and writer Ian Bogost in his essay The Rhetoric of Video Games (2008). Procedural rhetoric is the idea that, like regular rhetoric, you can make arguments about the world not just with what you say, but with how you say it. Procedural rhetoric does this with rules. While a text is read and an image is looked at, a rule is experienced as a process. When you make a rule, you express something through the process that the rule creates. Here’s a bad example: if I make a rule that says ‘you can only take one banana’ then I might actually be implying that there aren’t enough bananas for everyone to take two.

I’ll give you a better example. In the game Depression Quest (2013), a browser-based text adventure by Zoe Quinn, you go through the story, playing as a person with depression. Sometimes you have to make choices about what to say or do. These choices cover a range of different ways to handle the given
situation. However, some choices are crossed out, depending on the state of your depression. You still see the multiple choices but the ‘good ones’ aren’t clickable. This is the procedural rhetoric. While the game isn’t saying this out loud, it is clearly demonstrated by the game rules that as a depressed person you might know exactly what you should or want to do in a given situation, but because of your illness you simply can’t do the thing you desperately want. The procedural rhetoric is: the more depressed you are, the fewer choices you have. But is it an art game? Since it’s not presented as one, it really isn’t. Again, just because it’s serious doesn’t mean it’s art.

Continuing on the theme of procedural rhetorics, if we go way back in time we find that games have always been based on real-world things. Even in a fairly abstract game such as chess, the pieces represent different classes of people in a medieval war scenario. This is expressed not just through their names and aesthetics, but in how they move and what their values are (a pawn is worth less than a king). Yoko Ono works with instruction-based interactive art (among other things), so it is not hard to see her as one of the first artists to use games as an art practice. Her White Chess Set from 1966 remains one of the best works I’ve seen. It’s a chess variant where both sides play with white pieces instead of white versus black. It is a complete and playable game, but it was produced as art foremost, not just because it was exhibited as such, but because of a game design decision that prioritised artistic quality over entertaining playability. The game becomes not only an interesting social interaction where you have to remember which pieces are yours, but the altered ruleset poses interesting questions about war, race and politics that the original game doesn’t. I also made a chess variant a few years ago called Chess with Love (2013-2015). In it, in every turn two pieces move towards each other because they are ‘in love’. Whether or not the players want to, they have to negotiate around this unstoppable force (love) that the ruleset represents. Should the warmongering players give in to it and accept peace? Should they try to play around it, or even use it as a tactical advantage? I made Chess with Love to point out that chess is not an abstract game, but a game about war. I wanted to give the pieces a bit of agency and humanity.

Miranda July also uses a lot of rules and instructions in her work. In 2014, she released an art project in the form of a messaging app called Somebody. In it, you can send a message to another person, but instead of it going directly to that person, it is sent to somebody nearby. Then that somebody has to deliver the message in person instead. For July, it’s an art project. For me, this is an art game. It has a ruleset that is upheld not just within the phone’s processor, but also in the brain of the player/user, because that somebody is framed as a player that roleplays the sender as if they were actually there. A player that wouldn’t play by this rule couldn’t really partake in Somebody. I think roleplaying is an interesting way to combine game design with the performative and the social.

Now I would like to bring up the art game I made for the exhibition at Skövde Konsthall. Show your emoji is a short card game for two players. A deck of cards all have yellow emojis (smiley)s on them, roughly based on the ones found on a smartphone. One player draws a card from the deck without showing their opponent, and then tries to copy that expression using their face. The other player looks at their opponent’s face, and, based on that, they draw an emoji on a sticky note. Once finished, the game asks the players to compare their emojis. Are they the same? What’s different? What does an
emotion look like? This game tries to deconstruct facial expression, emotion and the concept of emojis through this simple and fun game mechanic. This game is actually supposed to be both an entertaining game and a serious art piece. My idea was to give players (be they strangers, friends or relatives) an excuse to really look at each other’s faces in a rather intimate way. Maybe you see something that you haven’t really thought about? What most people did at the exhibition, though, was play and have fun. They’d try hard to make the faces and then giggle or look embarrassed and their true emotions would take over. Oh how I missed this sort of thing in an art context!

I hope that you now see how important game design is for me. Games aren’t just about having fun or bringing people together; there are important things to say and stories to tell, and there are people, like me, who want to express these things through game design. By knowing how to make interesting games and how to communicate them as art, we can skew the art world to be more inclusive, warmer and friendlier. I really hope this text has inspired you to set foot in this largely unexplored cultural realm of art and games.

I’ll see you there,

Ossian

References

Depression Quest (2013) [video game]. Game Designer: Zoe Quinn et al.. Play the game for free here: http://www.depressionquest.com


This course has been incredibly interesting and thought-provoking, and full of memorable moments, one of which occurred after a lecture in the first week. We were having a heated discussion about what a game can and cannot be. Since the topic of the course itself was games and art, someone asked if games could be art. The lecturer’s answer was a firm no. Someone else asked, if games can’t be art, does that mean that they can’t be stories either? Of course games can’t be stories, the lecturer argued. The discussion went on and soon it became clear that his arguments were based on a rigid, formalist definition of games, like Jesper Juul’s (2003), which suggests that games are nothing more than rule-based systems with quantifiable outcomes. If one goes by that definition, then sure, games can’t be art, nor can they be stories. While I don’t agree with this definition – I’ll get to why later – at that point I wasn’t interested in discussing how to define games. There was another question occupying my mind. I raised my hand and asked ‘but what’s the point?’

In most cases, definitions are extremely useful. According to the Swedish National Encyclopedia we use definitions to specify terms or create boundaries for the use and meaning of expressions (Nationalencyklopedin, ‘definition’). Communication becomes clearer and more efficient when we use short, standardized terms instead of long and complicated descriptions. Bad definitions, however, create confusion and segregation if we don’t understand each other as a consequence. I think we encounter two big problems when we attempt to define games. The first is that games are notoriously hard to define. The second is that we often seem to forget to ask that very important question – what is the point?

The first problem
Let’s first examine why we struggle to define games. If it was easy, we would have a good standardized definition by this point, and while we have plenty of different suggestions, none of them quite hit the
spot. Many existing definitions are too narrow and exclude many phenomena we think of as games. Game genres such as sandbox games, simulators, puzzle games and exploration games often fall outside the frame. To rectify this, other wider and more inclusive definitions have appeared. For example, Bernard Suits defines games as

an activity directed toward bringing about a specific state of affairs, using only means permitted by specific rules, where the means permitted by the rules are more limited in scope than they would be in the absence of the rules, and where the sole reason for accepting such limitation is to make possible such activity. (Suits, 1967: 156)

If you use this definition to explain the phenomenon of games to someone who had never experienced any, do you think they’d understand? Suits’s definition includes most games, but the definition is also too nondescript to be useful. It doesn’t capture the essence of what a game is. By analysing some of the most frequently quoted definitions (Juul, 2003; Callois, 2001; Salen & Zimmerman, 2003; Crawford, 2003; Costikyan, 1994; Abt, 1987; Avedon & Sutton-Smith, 1971; Maroney, 2001; Suits, 1967; McGonigal, 2011), I’ve identified the most common requirements in game definitions.

Of these ten definitions, eight dictate that games need rules, the same number call for goals and quantifiable outcomes, four definitions say that games need conflict, three that they must challenge the player and three specify that games need to be voluntary activities. Of these five common requirements, or aspects, I believe that four concern the distinction between pure play and games, or what Roger Callois (2001) calls paidia and ludus. They describe the amount of structure in a play activity. The most basic form of structure is rules. One type of rules can be goals and when the player is prevented from reaching goals, challenge emerges. When another player or an AI agent creates the challenge, there is conflict. By this reasoning, these four aspects boil down to rules, which give play structure. I believe there are problems with how we use each of these aspects to define ludus-games as separate from paidia-play.

Rules are probably the most commonly thought of requirement for a game. When it comes to computer games, using this aspect to define games is less troublesome but also less informative, since every computer program consists of rules. Every type of interaction has to be written in code, and is thus predetermined and unbreakable without modifying the code itself. But is there actually any kind of play which is completely free of rules or limitations? Even during pretend play, children create fictional worlds in which some things are allowed and some things aren’t. As soon as you enter the magic circle, you’ve accepted a context which is different from reality. The rules can be broken of course; for example, you can cheat in football, but that doesn’t make it less of a game. Play isn’t either rule-free or rule-regulated. I think a spectrum of play activities, such as the one proposed by Callois (2001), ranging from spontaneous paidia to structured ludus, must be used to describe the degree of rules in a game.

When you apply the requirement that games need goals, games such as SimCity (Maxis, 1989-2013) and Crusader Kings II (Paradox Development Studio, 2012) are excluded. But don’t we play these for the same kinds of reasons as we play Call of Duty (Infinity Ward, 2003-2015) or Civilisation (1991-2010)?
Both Crusader Kings II and the Civilisation games are strategy games with similar gameplay. It makes little sense that the presence of a goal should entirely change the experience. Let’s take The Sims (Maxis & The Sims Studio, 2000-2016), an open-ended sandbox-style game, as an example. If the developers simply had implemented a winning condition – say, earn a million simoleons – would the game be any different? Would the experience of playing The Sims drastically change? Probably not. The majority of the factors which shape the game experience would be the same. In games such as Skyrim (Bethesda Game Studio, 2011), there are many built-in goals in the quest system, but the player can choose which ones to aim for, or ignore all of them entirely in order to make up their own. Using the developer-implemented goals as a requirement for being a game is problematic, because their presence or absence doesn’t necessarily shape the experience. In many cases, the player’s own goals have a much larger impact.

The challenge aspect obviously also has limitations. The same game can present different levels of challenge to different players. Can the same thing be a challenge and thus a game for one person, whilst not being a game for someone else if they think it’s too easy? Can something cease to be a game once you’ve mastered it? Many video games present very little challenge, and would no longer qualify as games if we include challenge in our definition. One example is ‘walking simulators’, of which Dear Esther (2012) is an example, a game which focuses more on exploration than overcoming obstacles.

Conflict requires multiple players, or at least an AI which can simulate complex behaviour. If neither is present, then you have a puzzle and not a game, according to Crawford (2003). The same is true if there is an AI, but its behaviour is too algorithmic. This aspect also excludes many experiences that we think are games, such as Tetris (List, 1984) and Candy Crush Saga (King, 2012). The line becomes blurry when it comes to AI behaviour. Where can we draw a line between which AIs are complex enough to be considered agents, and which ones are too simple?

Last, but not least, voluntariness also appears in three of the definitions. This is the only one in the top five which doesn’t concern the distinction between ludus and paidia, but rather play and other kinds of activities. While at first glance this aspect might seem simple enough, what if one player forces another player to play with them? Then that first player is playing a game, because the activity is voluntary, but the other one isn’t because they are being forced. Nothing changes about the game system itself, but obviously the two people will have very different experiences.

Based on this analysis, I want to bring up two points which I believe are important to keep in mind when making a definition of games. The first is that defining the term ‘game’ without taking the player into account is impossible. A game is nothing until it’s actually played. Voluntariness certainly can’t be evaluated without a player, and I think the same holds true for all of the other aspects. Players make up their own rules and goals, experience different amounts of challenge and encounter different amounts of conflict when playing with others. Maybe we should forget about the artefact itself – the code, the cards, the board – and base our definition of games on why we play them and what we experience when we do. Second, none of the aspects I’ve discussed (except for maybe voluntariness) is either/or. The degrees of goals, rules, challenge and conflict in a game are better described by continuums than
booleans. We can’t just create a checklist to help us decide what is a game and what is not. I think all of the factors above can help us describe what a game is in general, but maybe a game doesn’t have to be all of those things, or can have more of one thing and less of another.

In 1953, the philosopher Ludwig Wittgenstein debated the definition of games. He argued that elements such as rules, competition and even play aren’t enough to describe what a game really is (Wittgenstein, 1986). None of the current definitions are perfect, as they are too wide or too narrow. However, we use the term ‘game’ without any issues. Forcing a bad definition offers no improvement, it rather makes matters worse. Wittgenstein explains the way we intuitively understand which things are games and which aren’t as ‘family resemblance’. When we see two people who are related we notice similarities, for example physical appearance, speech patterns and mannerisms. If we notice enough of them, we have a ‘match’. Wittgenstein argues that the same principle holds true for language. If we know of enough things that are and aren’t games, we can determine whether new activities we experience are indeed games. I think there’s a lot of truth in Wittgenstein’s reasoning. It’s hard to draw a line between games and things which are not games, just as it’s hard to decide when two people are far enough apart in a family tree as not to be related. At some point we have to draw the line, but at the moment there is no definition a clear majority can agree on. Until then, I think it’s best that we leave classifying things as games to our intuition, which will of course vary from person to person. Where we draw the line is probably influenced by personal preferences and motivations for playing, and maybe that’s okay.

The second problem
Why do we want to define games? A definition must have a purpose or it’s useless. We rarely ask this important question, which is the second big problem of defining games. I believe that most definitions today do more harm than good to the medium. Instead of asking ourselves how we can develop it and create new experiences, we’re obsessed with asking ‘is this really a game?’, discrediting those who make something different. Our creativity is hampered when we’re more concerned with what we create than why we create it.

In the article Video games have a diversity problem than runs deeper than race or gender (2015), an anonymous developer contemplates the fact that we’re moving towards a mechanical singularity. Rhythm action, strategy simulations and narrative-driven games are all examples of genres which have been forced to the sideline to make room for the perfect shooter. The focus is put on mechanics allowing players to ‘kill, race or score’. The current common definitions enforce this problem. Talking in terms of goals, rules, challenge and conflict works very well for games about killing, racing and scoring. But they can’t really explain the experience of searching through the cupboards for clues about your missing sister’s whereabouts in Gone Home (The Fullbright Company, 2013), or how we feel when we build our dream house in The Sims (Maxis & The Sims Studio, 2000-2016). If our idea of what games are is all about challenge and conflict, this will limit the kinds of games we make.

These narrow definitions have other ramifications. Julia Khan (2015) explains that ‘disqualification’ keeps women out of the games hobby. It’s common for games that are popular among women to be branded as too easy, boring or ‘not real games’. Many titles with a big female following, such as The
**Conclusions**

Even before this course I felt that there was something wrong with how we labelled some experiences as ‘games’ and others as ‘not real games’ or ‘non-games’ (how confusing is that?), and that we need a new definition which includes more experiences as games. But now I actually don’t think much about the game label at all. At the core, what it comes down to is play. The game is the artefact and playing it is the activity, and in my opinion the activity is what matters. The distinction between pure play and gaming, between toys and games, is just a matter of structure. Players’ reasons to play, regardless of the levels of rules, goals, conflict and challenge, are the same. I think the distinction which is actually interesting is the one between playing and other human activities.

The Wikipedia page about games describes two human activities which are very similar to games: work and art (Wikipedia, Game). While playing games is described as an activity engaged in for entertainment, work is performed to receive compensation and art is made to express aesthetic or ideological elements. It is, however, pointed out that the distinctions between these activities are not entirely clear-cut, and I agree. Some activities seem to be somewhere in between. For example, a professional football player plays a game, but the game is also work and their livelihood depends on how they perform. Making art can also be work when producing something with the intention of selling it. And, last but not least, there can be games which you not only play for entertainment, but maybe to have a deeper experience or to express yourself. Then the activity is both play and art. Some activities might only focus on one of these aspects, while others might be a mix of all three. Using this kind of model puts the person’s experience and motivation in focus. If we quit talking in terms of absolutes, of ‘games’ and ‘non-games’, and start measuring the user’s experience with spectrums, I believe we can become open to more kinds of expressions and experiences, and focus on what really matters.

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Introduction
This anecdotal paper illustrates key reflections and observations from the creation and exhibition of the art game *Don’t let them die* during the Art and Game Obstruction Summer Course. The piece plays with metaphors for society, an emergent narrative and a subtle control mechanic. The piece is a digital artwork created using game technology and exhibiting an element of emergent gameplay/narrative. It was first created and exhibited at the Skövde Kulturhus in Sweden as part of a group show. It was again exhibited as part of another group show at the ICIDS 2015 conference (International Conference on Interactive Digital Storytelling) in Copenhagen. The piece has a melancholic feel to it and is intended to evoke a sense of beauty and impermanence.

Art & Games
The Art and Game Obstruction course pushed me to reflect upon myself and my interactions with the world in ways novel to me at the time. Previously, my work had always been driven by either pure curiosity or economic goals. Being granted ‘artistic license’ did not negate these factors from my process completely, but rather helped me to allow them a different weighting and purpose, and enabled a sense of rhetoric in my work that had previously been missing. We were shown that contemporary art is largely about the context in which it is presented and the multitude of ways in which this could be expressed.

Boids
The opening words to artificial life programmer Craig Reynolds’ seminal paper on digitally simulating
flocks of birds are: ‘The motion of a flock of birds is one of nature’s delights’ (Reynolds 1987), which is an appropriate beginning to such an eloquent algorithm. In his paper, Reynolds describes a heuristic system that moves a group of agents in such a way as to simulate the movements of flocks of birds, schools of fish and herds of animals.

In essence, the system simulates the flock’s movement by aggregating the interactions of all the agents within the system. Reynolds affectionately named these agents ‘Boids’, after the way that New Yorkers often pronounce the word ‘birds’. The movement and interaction between these ‘Boids’ is constrained by a few basic principles:

- Collision Avoidance: avoid collisions with nearby flockmates
- Velocity Matching: attempt to match velocity with nearby flockmates
- Flock Centering: attempt to stay close to nearby flockmates
- Dominance: explore limits of agency and try to influence adjacent neighbours

Although the implementation becomes a little more complicated, these high-level rules govern the interaction of the system as a whole and are somewhat intuitive. I felt that a comparison could (in some respects) be drawn with the way that people often act as agents within a society. Collision Avoidance can be found in the way that civil members of society will usually try to avoid confrontations with each other. Behaviour similar to Velocity Matching can be observed when people (especially young people who are still trying to define themselves) mirror those around them in an attempt to ‘fit in’. Flock Centering also fits nicely as a fundamental building block of society; when people stick together, they form a greater unit and generally become stronger as a whole. Dominance could be seen as representing a natural urge to expand and exert control over our surroundings.

**Interaction and Emergence**

*Don’t let them die* features no obvious controls. I wanted it to work as an aesthetically pleasing piece that could be displayed and enjoyed without needing to be interacted with directly. The key to finding the interactive element, however, lies in the title. In *Don’t let them die*, the aim of the game is to try to keep the birds from dying. There is, however, no immediate threat to the birds’ wellbeing, and without any obvious control interface, the viewer is left to wonder how this is supposed to work.

As the birds are supposed to be a reflection of people as agents within society, the birds will die with the sudden and catastrophic collapse of society. The piece is internet enabled and has been designed to pull in live stock data once per minute. If there is a strong indication (if more than three of these stocks simultaneously lose a significant proportion of their value within a short period of time) that there has been a global economic meltdown, the birds will die and fall out of the sky.

The interaction occurs outside of the game, with the stock price acting as a conduit for judging society’s faith and stability in the current economic state and model of the world. The standard example given when presenting the piece was to point out how every time the viewers had paid a company
to transport them (or at least provide them with the means to travel) from place to place, they were fueling the economy in one way or another, which would eventually trickle back down to the piece.

A subtle narrative, it was hoped, would emerge from the viewer’s later reflection on this interaction. Perhaps in the days following exposure to the piece, it might come back to mind and make them contemplate how their economic interactions affect the world around them and, in turn, the digital representation of birds flying up in the mountains.

Presentation
This project has (at the time of writing) been exhibited twice (with a request for a third exhibit pending). Both times, the piece has been displayed on fairly large screens (first on a television, and second, projected onto a suspended screen). The piece was first exhibited at the Skövde Kulturhus as a direct and immediate component of the Radical Play: Art and Game Obstruction course. At this time, the piece was embedded in a structure made out of abandoned computer components created by the curators of the exhibition. A gamepad controller was left in front of the piece to entice and confuse viewers. The piece was accompanied by music by American industrial rock band Nine Inch Nails (2008), under the Creative Commons License. The second exhibition was tied to ICIDS 2015, hosted by Aalborg University Copenhagen. The exhibit took place in the Diesel House, an engineering museum for diesel engines, and was documented in the official exhibition catalog, ICIDS Art Exhibition (2015).

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Level Up!
Exploring themes of sacred geometry, gamification and the opaque nature of game technology, this installation projects a virtual shape onto a real-life functional staircase. Level Up! began as an attempt to highlight geometric principals of repetition and symmetry within basic architecture. By winding string through each of the spokes of the bannister, a relationship could be drawn between them in a tangible manner. After this initial exploration (the bottom-most point of the bannister being connected to each of the points along the top), I decided that it would be too time-consuming to experiment with all of the different patterned combinations of string. Instead, I decided that it would be more efficient to recreate the scene digitally so I could experiment with all the different ways of stringing up the bannister.

I wrote a program to visualise the bannister and then wrote a number of algorithms for drawing different patterns of varying complexity. I decided upon a fairly simple yet geometrically appealing design which gave the pattern depth and reminded me of perspective grids from the movie Tron (1982) and other such retro sci-fi aesthetics.

After completing this portion of the installation I decided to experiment with stringing together other
parts of the staircase. Between the sections of the staircase (the main bannister, above the bannister, and overhanging the stairs) there are three levels of detail just like in many 3D digital games where more or less detailed versions of an objects and images are served to the player’s graphics card according to their distance so as to optimise the ratio between graphical fidelity and hardware performance.

At the top of the staircase sits a bowl of candy; any staircase dweller/adventurer brave enough to endure the arduous journey of ‘The Dreaded Staircase’ is rewarded by being allowed to take some candy. This stands as a parody of the current infatuation with and misunderstood nature of gamification as a subset of Serious Games.

Next to the staircase I printed some of the unused designs and framed them, along with the actual code used to create them. This not only illuminates part of my process but also highlights the opaque barrier to understanding of how videogames work. There is also an interesting interplay present between elements of the real world being recreated on a screen, and elements usually found on a screen being printed and displayed within a frame.

Complementing this comparison are the three paint palettes used when painting the string, which I were also mounted. These are actually pieces of metal from abandoned computer components which have been flattened and used to mix the fluorescent paint.

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**Play With Me**

Can Art be infused with an element of ludic interaction? Art exhibitions and artefacts occupy a sacred space in society. They are considered with either reverence by those who appreciate them, exclusion and ignorance (not only as an inherent state but also as a conscious self-belief) by those who do not understand them, or a critical discernment by those who are educated in art literacy. There is often a socio-economic component corresponding to these levels of art appreciation.

This piece attempts to explore this space in a more playful manner, allowing an artwork to be tampered with within a framework of game rules. Its goal is to temporarily convert the art space into a space where play can occur. Through play, it is hoped that members of the public might interrogate their own beliefs on what it means to be an artist and confront any limiting axioms they may have relating to expressive creativity.

Games are often compared to other mediums of expression and judged with the qualification, can they be considered good art. **Play With Me** attempts to flip this line of inquiry on its head, instead asking whether a piece of art can be considered a good game.
References


*Tron* (1982), dir. Steven Lisberger
1st Memory – I am a teenager, and I fall off a bike. I bruise myself, though I am happy that I could experience the rapid fall without serious injury. I feel relief.

Corridors of Time takes the player on a journey through memories. You play the role of an investigator and hacker that enters an abandoned spaceship to find out what has happened with it. With the help of a manual you search through an archive of short stories: someone’s, or something’s, memories. Could be a human, could be a machine that left this data, or memory, base for someone to find. But what was its intention?

9th Memory – I lose my mother to a chronic heart disease. It was inevitable, the doctors say. In the hospital waiting room, I find a kid playing with a gameboy, an electronic toy. We start talking. It’s a rough day, we both agree. And he lends me his game.

What is human?

Empathy. Death. Memories, and how they change over time. As humans, we are always some kind of sum of our memories.

Today, the crowd who actively engage in playing video games also gather around the digital hearth of their video game console or gaming PC in order to experience something otherworldly, mundane, grand or human. Ever since us human folks started gathering in front of fireplaces and trading stories, we’ve been entranced by hearing and telling exciting, scary, rambunctious, freaky, great stories. We
were interested in testing out how digital storytelling in a new, physical space would further enrich the playing experience.

As players, we actively pursue the most fulfilling Experience of Play. We interact and want to be seduced by the goings-on of the fictional game world. We thought, then, that the physical manifestation of *Corridors of Time* — two different screens that you interact with from within a metallic cage — act as both a facilitator for your immersion as well as a further descriptor of the in-game scenario. You literally step into the place of the protagonist, prodding the unseen digital corridors, all the while touching the actual metal bars of the cage you’ve stepped into. We hoped this would further expand the tactile and core narrative of the experience, beyond the usual gaming vernacular of, say, holding a gamepad on your couch at home.

The *manual* is a guide that the character brought with them, and is the key to unlocking the secrets of the *terminal*, which is supposed to feel a bit archaic and alien, hence the classic green text and black background theme.

We wanted to make a short vignette-style game, and at the same time create a spatial design to explore immersion and the relation between body and space on several levels. The materials and technology were thoroughly discussed and carefully chosen. Metal was used in both graphics and installation: metallic yarn covered cables and plastics, while at the same time creating a softer feeling for the player. The human/machine, brain/computer, organic/mechanic themes are embedded in all aspects of the experience. The videos and images, as well as the soundscape we used, have all gone through transformative processes, moving between those states/roles. Neuron communication recorded from a human body, translated to audio through a computer. Underwater footage of a crab turned into a machine-like creature, video of a humanoid sculpture, maybe a cyborg, architectural shapes filmed and then transformed into a glitching screen.

The two-screen idea came early on in the project. Having some kind of game mechanic where you had to go back and forth between screens, taking in not just what was on the screens but also the space they were in and the space between them. It’s an interesting game mechanic. You become more aware of your body, your arms, hands and eyes. We discussed second-screen experiences and touchscreens and decided to use a tablet as the manual, representing a newer tool with the game graphics less scratched than the images on the main screen. For the main screen we tried three different methods that also fit the three different spaces in which the game has been exhibited so far. At the Skövde art museum we used a TV screen mounted on the wall, and headphones, as there were many works in the same room. At the Epic Unidragon Game Gallery we used a projection on white textile at the end of the gallery space, which is a 40-foot container. There we were able to have the soundscape fill the back of the container and bounce nicely on the thin metal walls. The last way you can experience the game, including when it is not exhibited as an installation, is an online version at Itch.io that can be played on any screen.

Let’s return to the concept of time and memories. There’s a scene in *Blade Runner* (Ridley Scott, 1982)
where Tyrell tells Deckard about the recent advancements in replicant (android, synthetic, imitant, fake human) tech, giving the latest NEXUS 6 models a ‘cushion or a pillow for their emotions’, and Deckard realises that he’s been giving them memories, a default set of things that hasn’t really happened to them, but to make them feel like they have, with the intention of giving them empathy, pain, lust, etc. Somewhere along the line we made the choice to have the terminal be an object for accessing memories like those out of *Blade Runner*, and we feel this is an important comparison to make.

Even though the brain is not a computer, the cyberspace theme, and the view of technology as extensions of our bodies, links us back to the brain, the neurons. This theme can also be found in the soundscape of the game, where underneath the soundtrack you’ll hear sound recordings of neurons communicating. Maybe, in modern sci-fi, the brain is the final frontier? We try to compare brains to computers, and that’s where the idea of the fake human came to be in the first place, but it’s really probably something else. In understanding what the brain is, we try to understand things like true intelligence, consciousness, free will. In our game we made this ‘entity’ that has accumulated all these memories. There’s a moral choice at the end where you can let it loose or capture it for the sake of science.

Your choice is a light-hearted one, as this is a vignette game after all. It is not the result of hours of build-up and tension, for most players a kind of fumbling in the dark. You click something and you get an instant response. It’s a quick and fragmented story that the player gets, but the meatspace with the cage gives a different immersion for the player’s experience. Granted, it might be a little difficult to discern the full story experience, but the point of the story is that it’s fragmented, like the memories within it. In a best-case scenario the player can at least play the game and leave it feeling that they, for a short time, let their bodies invest in the intertextuality of meatspace, memories and glitches, hopefully leaving a small trace of something that wouldn’t feel exactly the same had they only opened a book, watched a film or played a game on a regular PC. We wanted to grant them something inherent to the place and the specific experience.

2nd Memory – *As a middle-aged person I am taking a walk. I feel adult responsibilities weigh me down in relationships. I find the freedom of being alone liberating.*

In exploring what residue memories would actually leave on the digital as well as physical worlds, we hoped to create a guide of sorts. A playful tour of the impossible fiber optics connecting our digital intents with the actual stepping into a small structure of metal bars and iron screws. In combining a varying sensory experience where players would glance between the two separate digital screens, the player would stand in the cage and divert their attention to the different means with which they control the screens and ideally create a connection between the player and avatar. *Corridors of Time* is another kind of immersion than the games where you’re supposed to forget or shut out meatspace. It augments rather than replaces reality.
One long summer…

Marisa Tapper

Affected by the over-stimulated pituitary gland of those who live in the far north, I could barely sleep at all. I was on hiatus, taking a break, writing fiction by night, dozing by day. I was writing in my sleep, and the stories seemed the better for it. As I watched the inside of my eyelids, tales wove around me like smoke, plunging me into arid, alien lands one moment and catching me on an updraft of illumination the next. Curious then, that a seemingly harmless group of rebel angels should sweep me unnervingly high in the sky, or plunge me into complete darkness.

I imagined Nephilim, powerful and ill-intentioned, an awkward heroine, a defiant underground group of modern tech-hungry youth and imports from various Sumerian Myths, including Inanna. Somehow the pieces made a crooked puzzle, and I was immersed in a mystical place of ritual and intrigue. As summer ended, I rejoined the world, with an almost-finished dystopian novel filled with my new friends. They were hard to let go, but life wanted me back.

A few summers later, faced with the endless concrete of a bare gallery space, strewn with broken computer parts, arranged around a large, corrugated steel container, I was puzzled. I needed a story to tell. The Art and Game Obstruction course had offered techniques and tools for art, fascinating personalities to work alongside and even a pile of materials to play with. But it all came down to that empty space, made the more eerie once classes had ended and most students had gone away to plot on their own.

Without stopping to think, I went to the store and purchased several large bags of salt, splaying it in a rudimentary circle as my accomplice filmed me, hooded and hunched. Over the next week or so, the circle grew thicker, as I smuggled in more salt, refining my technique by using a length of string
anchored in the centre with a piece of tape. I placed candles at various geometric points, creating the magic circle mentioned in game studies.

At least, I pretended to be using that kind of magic circle, not the older one, hardly spoken of amongst academics. Yet there I sat, day by day, feeling less alone in the echoing gallery, with my sketch pads and notebooks on the floor. I’d searched through the piles of machine parts to collect every identical computer piece (computer back) I could find. I never knew what to call them, but spent a few days wincing from their sharp edges, as I wove them with string into articulated blinds for the three tiny porthole windows in the container, or cabin, as I came to call it. I ate my lunch in the circle; I practically lived there while the gallery was open, even piling a huge mound of salt in the middle for visitors to play with.

I’d thought of Andy Goldsworthy’s circles in nature and Anish Kapoor’s series of works with piles of pigment, reminiscent of the spices of India. This was my spice and my natural world, a habitat of the man-made, with a set of periscopes climbing the gallery walls to the skylight, reflecting the clouds into the pitch black interior of the container. The shutters tamed the light from those three bright portholes and the large viewing window reflecting the sky above. As I sat on one of the chairs placed by each peep hole, I tried to imagine what had happened here, in the fictional past. At that moment, a large, winged being screeched from above. I looked around the cabin, realising I was on guard detail and tonight it was my duty to defend the tribe.

Of course: the Nephilim were the danger here. This cabin henceforth became a bunker, and I lived among refugees from some unnamed cataclysmic event. The sky, the sun was too bright, forcing us to take shelter. The bird men, those fallen angels, were foes, and defences must be shored up. I set to work with some trestle tables kindly donated by the gallery staff, securing them with rope, binding them together into bunk beds. I found an old sleeping bag and sheets, and began to fill the place with dried foods and candles, littering empty beer bottles on the floor.

I checked with other exhibitors whether they’d mind me daubing the pristine corrugated steel of the cabin with graffiti, then painted a large black wing the length the cabin. I’d started to wonder about using feathers on the wings, when one day a member of the gallery staff brought me a bundle of raven feathers she’d collected in the park for me early that morning. Another artist stopped by her local craft store and picked up a large bag of tiny coloured feathers for me. I was moved: those bird-men had begun to fly into other imaginations. I spent the next while covered in paint and feathers and completed the gigantic wing.

Perched up a ladder most days in the quiet gallery, while outside the sun blazed, I was conscious of the irony: I’d locked myself behind a computer for a long time, my every creative impulse narrowed down to fit that 13-inch rectangle of blue light. Now black house paint crusted my hands to my elbows and I rarely went home without paint on my hair and face. Stepping onto the mezzanine to look at it, the sweep of the wing and the connecting curve of the salt circle, I was overwhelmed. This was no graffiti, but rather automatic painting from some art seance. The whole concept had stopped being my idea and
was actually pushing me forward. This time I was almost making things in my sleep.
The wing and the circle seemed to trigger events for the rest of the summer. Visitors to the gallery were puzzled or even scared of the circle. A reporter demanded to know what it meant. ‘What did he think it meant’, I asked. ‘Magic’, he said. There it is, then. He seemed satisfied. Another shyly asked me what he was supposed to do, as he hovered outside it. ‘What do you want to do’, I asked him. He dipped his toe inside the circle, gathered his courage and plunged in. It ended with me taking photos on his iPhone as he posed, dribbling salt through his hands with glee. Each day, there were drawings in the centre pile, though rarely footprints. I found it fascinating to watch reactions to the salt: they either didn’t notice the circle, or saw it and tramped on it anyway. It became a sort of test and showed a certain reverence for the circle. Best of all, one morning I found the most intricate skull with patterns weaving around, spreading from the centre. Whether made by one of the gallery staff or a passing goth, I never knew. The circle of salt itself had become a game.

As I started imagining the circumstances of the world annihilation which seemed to have taken place in our land of disused machines, it became clear that the Nephs, as I called them, had kept their promise to destroy the world. It was quite some time before I realised that the text painted all over the corridor wall was translated from Swedish on a small sheet of paper, pinned beneath, which declared that the artist, Olle Essvik, had created this desolate landscape for us, depicting a world after machines had died. Because I hadn’t thought to decipher the text, ignorance had given me a productive license. Late night at home I drew the bad angels that filled my vision. You could call it a haunting. I still wasn’t sure how it would all come together, until I began to make a website to hold the story. Dark and foreboding, with pictures of a man silhouetted in the window, peering out at the burnt world, and with recordings and cries for help, it soon became obvious it was an invitation. I created a call for action for those remaining souls who’d come through the cataclysm in the last two years. Survival was dependent on unity, I reasoned. If you get this message... Survive.

A few brave students said they wanted to experience the apocalypse with me. Advice was given from every quarter. One game designer sent me images daily from every dystopian game he liked. I furnished the cabin with more bedding, toilet rolls, electric candles, lengths of rope and containers of water. I moved in an armchair to rest in after the watch. I began to live in the dark, spending long periods in there, imagining a ghastly future. One day, I discovered a pair of young teenage boys who were working in the gallery for the summer holidays holed up in the cabin. They gave me sage advice on the exact type of axe I needed for the wall and demanded I put in a broken radio. They were clearly excited, throwing suggestions down like a gauntlet. The armchair had turned the thing into an Edward Kienholz for me; I half expected to find someone permanently seated there one morning.

Soon afterward I discovered a child’s trainer hidden among the bedding. Someone was playing with me. The other shoe turned up in the gallery a few days later. I placed them by the bed, with a pile of old clothes. I began wanting to actually live there.

I remembered that Peter Munthe-Kaas, the LARP designer who’d lectured us weeks ago, worked with a group of organisers, designed projects over months for a year, workshopped them with hundreds of
participants for several weekends, and staged them over three days or more. I had a few days until the event, a handful of LARPers and one day in which to stage it. I was concerned.

The day the website went live however, participants eagerly chose from three genders and picked from a list of names and personality types. Upon selection, they were each sent a character sketch to portray as they wished.

The stage was set, these characters I had envisioned years before came to life in the minds of others, and the LARP began.
avalanche
water
fearless
lingers

dust
haunts
lonely
ill

samurai

8
12

JOYFUL ORNAMENT
BRIGHT HERMIT LAUGHS PEACEFULLY
JOYFUL AFTERGLOW
The Marriage of Two Different Things

Jennie Sörensen

Artgames, Artgames. Artgames.

What is an Artgame? We discussed this at length during the course, dissecting the terms Game and Art. There are several different definitions of a Game that describe how rules and participants should relate to each other, but all of them either exclude things that people think are games, like tic-tac-toe, or include things that are not, like word processing software. Art, on the other hand, is much more subjective: if someone thinks something is Art, it is. You cannot deny that person’s aesthetic experience. In a broader social context, though, society has to somehow agree on what is Art, and clearly tell people that ‘this thing, right here, this is Art’. And that is what society does: it puts things in museums and attaches small labels reading ‘this is Art’ next to them, and then invites people in to engage with the Art. We arrived at the conclusion that everything is a Game and all Games are Art, you just have to display then properly.

To me, Art is a question or a statement directed at an audience. The audience may of course choose not to engage with the statement, and sometimes they do not understand the statement, and then the Art is just a pretty picture, good music or a fun game displayed in an art context. The singular aesthetic experience is what decides whether something is Art on a personal level. Great Art is something that can easily engage with a statement and get an audience to think. What, then, is the statement of the game HaikuSlam?

HaikuSlam is a game about competitive poetry. The idea was to take something soft, thoughtful and
slow from the art-world, i.e. poetry, and combine it with something fast, uncaring and hard from the
game-world, i.e. a fighting game. Thus the hybrid baby Poetry Fighting game was born.

While almost all the other games displayed at the exhibition focused on being deep and mysterious, we
took a very straightforward approach to the game, with structured design choices and a focus on fun
gameplay. Perhaps, we thought, it’s because we are game students, not art students. We developed this
game as we would have developed any other game. Does this make our game less valid as Art?

It would be displayed in an art context, i.e. it would be considered art. But was it truly the capital A
kind of Art? Art in its deepest and most meaningful sense? Would it be accepted as Art, or overlooked
because it was a Game? Because it was fun? Did it engage? Did it communicate feeling? What were
the feelings associated with it? Other than the joy of creation. And the mischievousness of presenting
something so silly to a serious Art community. And the pride of a job well done. Yes, we did feel things
in relation to our craft. All positive feelings, but Art doesn’t have to always be about the bad things
in life. It doesn’t have to try to teach us about injustices to make us better people; it can be a simple
celebration of fun. Just like Games don’t have to always be about that kick of instant gratification, but
can involve something deeper.

The exhibition was a great success. The people who tried the HaikuSlam were engaged and had fun.
Meaningless poetry was generated, sometimes more thought-provoking than we could have written
ourselves. Some may find meaning in the poetry created, but finding meaning in something random,
does not mean it have an inherent meaning. And it all took place on the balcony overlooking the rest of
the hall, making the statement of HaikuSlam abundantly clear:

Games are silly.

So is Art.

Violently hard
Fast fiercely horribly hard
Fast fast fast fast hard
The summer school "Art and Game Obstruction" was filled with new encounters, such as fictive creatures from new dimensions, and a bunch of awesome people who are perhaps unlikely to meet anywhere other than in this context, while performing strange rites created in the art hall as travellers in time and space. The course has been challenging in many ways, and the main objectives for me during the course centred around questions about control and lack of control and movement in all its aspects. The theme of obstruction suited me just fine, because issues of control have been my main focus in my own artistic work for quite some time now. Encouraged by all the excellent workshop leaders, we were likely to jump from the roof of Kulturhuset, blindfolded, if they had proposed that. Control is such an interesting topic since the level of commitment or devotion is common in any movement. You are probably going to be influenced in so many ways that you don’t even understand it, until you leave it. I’m interested in sincere meetings and group psychology. I got my share during the course, and I loved and loathed every second. This contradiction in feelings made the whole period so interesting and intense. I guess it was due to the fact that there was a quirky sensation about to be in a context that I was not familiar with, e.g. the rules and practices of game art, but at the same time this feeling also triggered and challenged us to explore new possibilities and solutions. During the summer course, I worked on three collaborative art pieces and a film. My former artistic experiences steered right from the start the direction for my involvement in these different projects.

One of the projects was a spatial interactive experience, which was very smooth, interesting teamwork with game designer Mathilda Bjarnehed, based on a wish to include visitors in an experience by using senses in new ways.
We named this piece Advena; it is an interactive, space-specific installation. It is a separate room in the art hall filled with ordinary objects and textures slightly twisted in appearance or placement within the room, in which up to five blindfolded visitors encounter and explore by touching and navigating through it. The room had an ambient looping soundscape, uniquely created for the piece. It played from multiple speakers placed in different locations of the room, with the purpose of putting participants in a particular mood and slightly muting the sounds from the other persons in the room. The interactive part consisted of the player being told to trade talismans, in the shapes of bracelets, with other participants. The players could locate each other with the help of small bells attached to the bracelets. One of the few rules we set was that only non-verbal communication was allowed. Some visitors seemed to use different spatial and bodily interaction skills that had more of a gaming approach, whereas some participants found it quite unpleasant to not be able to see or communicate in the ways they were used to. Some described it as frightening to touch a stranger. This piece is interesting in the way it invites the visitor to be active in the art space, and in how it relates to a wish of viewer-participation from the side of the artist. The art space has altered historically from an arena for exclusive art objects, not to be touched, towards inclusivity and events based on audience participation. Advena also captured the feeling of a lack of control, which was one of the strongest feelings in many of the initial workshops. Especially Brody Condon’s workshop adopted a very physical approach in different types of role plays, bodily contact and improvisation. Advena was strongly influenced by these issues.

Transcend was another of my collaborative works in the art hall. In this project, I worked with mask and movement. To be able to enter a world shaped as a character is the first thought that comes to my mind when I think about the game world. In one way or another, we wear different social masks in different environments as social constructions. One’s value as a human being is often associated with different socio-economic structures and power structures that have evolved through history. However, these social constructions also enable us to recreate ourselves over and over again throughout life. They give us different labels, masks and shells that communicate with other labels, masks and shells, in different situations and over time.

With a mask, all human identity is gone; this gives the mask bearer strength to meet the unknown. The tradition of the mask is vivid in most human cultures around the world. The masked human gets another personality and in many cases transforms.

Here are the remains of a ritual and memories of a dream, and the desire to enter into a new reality. Hands that express love and intimacy. Movements in tune and in wordless communication.

I do not look at my installation, which was presented in the final exhibit in the art hall, as an art piece. I see it more as remains or scenography from the actual event that was created in the movement between the actors. The art piece was that moment and only traces of the moment was present in the exhibition. The four participants were filmed while they were guided by my voice in a dystopic narrative: ‘you are about to transcend into a new reality’. This new reality could either be another universe or life form, or it could be post-life.
To make this ritual you are asked to put on a mask. Once you wear the mask you will lose your human identity and you recieve the strength to face the unknown.

I guided the small group through a ten-minute ritual, accompanied by my own soundscape composed for this specific moment. The soundscape was a blend of breathing and the sounds of things that were collapsing, which some might have experienced discomforting. The bearers of the masks were encouraged to concentrate on their own inner breathing and an inner calming rythm. Although I filmed the whole sequence, what we experienced during those actual ten minutes cannot be captured. That moment is gone. The gestures and the interaction were there and meant something in that specific moment, but now they are all gone. This is the case with dance expression and other live acts, but it is also what I like about it. You have to be in the here and now to fully experience it.

My masks found a new narrative in another person’s art piece, in the LARP. In my artisic work, I prefer to collaborate with choreographers and dancers. Performing art is often abstract, especially when it comes to modern dance. It is an art form where the viewer can create the narrative and interpret what is happening on stage. Just as with contemporary music and sound art, dance can often be perceived as difficult to interpret, but beauty also lies in this fact: viewers are free to interpret, feel and reflect on the experience on display. You can create the inputs you want and relate them to your own very personal sphere. I felt at times completely confused in the game art context and particularly in the parts that had to do with areas that I’m not used to, such as computer programming. I kind of wish that I had taken the opportunity to learn more about computer programming and off-grid networking, since this area, digital communication, controls most of our lives. The most frightening thing during these weeks was the understanding of how vulnerable our society is in terms the lack of privacy when using daily digital platforms. These are contemporary rituals that we never really think of until something goes wrong. It’s the most frightening phenomenon to be aware of; there exist tools to control us.

I am interested in the so-called off grid movement, makers movement, community art and craftism. These are movements that might change the world for the better and that most likely can encourage people to take active control of their lives. Even if Olle Essvik in some way created the dystopian blue tone in the beginning, I believe that many of the stories that evolved during this summer course, showed strong belief in human interaction and development, rather than armageddon. At least many of them offer a passage to other dimensions.

The art hall and this context in Skövde is quite complicated for me to relate to merely as a course participant, since I have worked there before. I found it quite confusing at times, but at Skövde Kulturhus, there is a constant wish to be inclusive, and I think this was successful in many of the activities. Art institutions in Sweden are funded by several funding bodies, and the funding is related to hot-button topics. We were the lucky ones this time to have the opportunity to enter the art hall. The goal should be to create a fruitful collaboration that will benefit research and acknowledge the strength in cross-border collaboration within the academic world, municipal institutions and companies in every part of society.
I’m very glad to be a part of this experiment, since I believe in less elitism within the art scene. I like the fact that the modern art scene, as well as the expressions, are more inclusive. Events such as in community art projects outside conventional exhibition spaces, has changed towards inclusive art production and consumption. Every human has the right to meet art and participate in making art. Exploring and creating are basic human needs. We are the only creatures who can build imaginary worlds and realities, and interact with them. This creates the possibility of thinking in new ways and inventing new path ways. As a conclusion, we signed up to participate in a course and we delivered in one way or another something in order to get academic points. Being part of this publication is a way of entering a game framed within academia. Your name next to a VIP person in a publication is a way to become or continue to be someone on the game art scene. Placing some masks in an art space in Skövde, in a context like this one, is a way to play the role of the artist. And the art hall plays on, with money and funding related to the next topic of the day.

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Obstructive Analysis of the Exhibited Videogame Between

Iman Farhanieh and Carlos González Díaz

1. Introduction

Between is an art game set in a mystical, beautiful and intriguing void where the spectator takes the role of a ball of light that is constantly moving forward into the mystical and beautiful unknown, represented with a tunnel of light and music. The game places the player in the role of a person that has recently died and needs guidance to reach the afterlife successfully. In order to do so, the player needs to collect points and experience the story of the soul that you are playing as, by going through the different Chakras that are in the body. This study will perform a critical analysis of the piece using obstruction as a pathway, discussing how the game manages to deliver an experience. This paper will introduce the theoretical background and the technical components behind the project. Finally, the two exhibitions will be explained and the conclusions of the critical analysis will be discussed, proposing guidelines for further development.

2. Visual Inspiration

2.1. Chakra

In different Asiatic belief systems, Chakras are energy centres within the human body that help to regulate all its processes, from organ function to immune system regulation (Judith, 2013). The term makes reference to a spinning wheel filled with colors. There are a total of seven Chakras that starts from the bottom to the tip of the human spine, connected to the different vital functions that a human being has during life. Chakras could become blocked and in need of a balance restoration through different procedures, both mental and physical (Judith, 2013). Illumination and music will be affected in each of
the levels of *Between*. Depending on the level, which represents a Chakra, the emotions, music and the colour chromaticity will be altered and by the end of each level, the player will face a Chakra symbol to unlock.

2.2. Sacred Geometry
The name Sacred Geometry comes from the design and construction of religious structures or sacred spaces. Certain geometric shapes and proportions have symbolic and mystical meaning, like the circle, the triangle and the square (Doolan, 2008; Lawlor, 1982). Sacred Geometry has its root in the mathematical symmetric principles behind certain shapes, such as the logarithmic spiral or the hexagonal construction of honeycomb cells. These shapes and drawings can be found in different cultures around the world, creating a link between their use and their meaning (Lawlor, 1982). By using explicit visual references to sacred geometrical shapes, we considered that the spectator would appreciate the mysticism these symbols have (Lawlor, 1982; Doolan, 2008) while interacting with the installation.

2.3. Alex Grey
Alex Grey is an artist that mainly focuses on how a person develops during life, presenting the stages of a developing psyche (Grey, 1989). The paintings that heavily inspired the art production of *Between* are those belonging to the series ‘Progress of the Soul’ (Grey, 1989). In this series of paintings, Alex Grey analyses and recreates the physical body of men and women during different stages in their lives. Grey applies this multidimensional perspective to paint the universal human experience.

The colours and symbols that appear in his work are incorporated from the culture and believing around Chakras, sacred geometries and tessellations in natural situations. The colour palette in *Between* is strongly inspired by the series of pictures mentioned above, that motivates the spectator to recall on topics tied to spirituality and afterlife.

3. Audio and Narration
According to Dave Russell (2012), when an act or a course of events is conveyed by a message, it is considered a narrative. In simpler terms, Russell (2012) uses examples such as the game designer using the sound of blocks falling from the sky in *Tetris* (Bullet-Proof Software, 1989) to convey a story, or robotic sounds in *Machinarium* (Amanita Design, 2009). Although the menus and head-up display (HUD) in a game are not part of the narrative, they still support it. For example, video games with a science fiction theme usually includes graphical user interface (GUI) elements with the same theme.

In Johnny Wingstedt’s (2005) thesis, it is suggested that in order for a sound to fulfill specific functions in a video game such as anticipating action, creating emotion or drawing attention, it needs to be accompanied by images as part of the narrative. Each cue, sound and piece of music needs to be related to the narrative, to the gameplay and to other aspects of the game by strict control logic in order to function properly. This is why it was important for the team to make the audio and music of the game an essential part of the narrative. The aim of each piece of music and sound in the game was to reflect a specific psychological state of the player and to represent each one of the Chakras.
4. Interaction Design
It has been suggested (Carney et al., 2010; Isbister, 2011; Isbister and DiMauro, 2011) that embodying interaction and performing movements while playing video games, have an effect on a player’s arousal level and produce neurobiochemical changes. A study done by Lindley et al. (2008) shows that performing realistic movements in a digital environment leads to players being more engaged and having more social interactions outside the game. Although more research and studies are needed on this matter, it still can be argued that motion controllers have the potential to affect the player in a multifactorial manner. This is why it was essential for the team to create a game where the player performs different physical movements, potentially improving immersion and engagement.

5. Obstruction
As Barr et al. (2006) mentions in their article, two consistent aspects of games that most agree on is that they should be challenging and not easy, and that they ‘involve a struggle to perform actions in unfavourable conditions’ (Barr, et al., 2006, p.1). Games are considered obstructive and usually when we think about obstruction in games, we tend to think about opponents or enemies such as the Combine soldiers in Half-Life 2 (Valve Corporation, 2004) that chooses to shoot and kill our avatar. However, obstruction is a more general term than ‘enemies’, and other agents in a game can also be considered obstructions such as opponents and challenges mostly designed through the artificial intelligence of the game. For example, in Grand Theft Auto IV (Rockstar North, 2008), when the tires of the player’s car are shot, this increases the difficulty of driving, which is considered an obstruction.

Adams (2013) writes that not all players desire interactive agency and freedom. While most players welcome freedom, some are fine with experiencing a story without an ability to change the plot-line or obstruct the plot. To use the same game as an example, Grand Theft Auto IV (Rockstar North, 2008) places very few constraints on where players can go. This is seen mostly when players drive which leads to illogical situations that can eventually lead to the game losing its story-like quality.

5.1. Accidental and Deliberate Obstruction
According to Adams (2013), there are two types of obstructions in video games, the first being accidental obstruction and the second being deliberate obstruction. Accidental obstruction occurs when designers know what are the defined events of the plot and when they occur, while the players do not. The second type occurs when players intentionally and deliberately obstruct an interactive storyline with predefined plot events.

Therefore, in order to avoid obstructions to the narrative flow of the game, the team decided to design the game in such a way that the player is obligated to perform specific tasks and events to advance in the story. Failing to complete these tasks will lead to the game starting over where the player has to start the game with a different narrative each time.
6. Serious Games
Each year, the term Serious Games becomes more accepted. Many authors have suggested different definitions of this term; however, there is one aspect of Serious Games that all agree on, which is that the main goal of Serious Games is not entertainment (one definition of the term is given by Zyda 2005; reviewed in Rego, Moreira and Reis, 2010).

This is why we consider our piece to be a Serious Game, considering that the main goal of Between is to please sensorially the spectator inside the exhibition, recalling spiritualist and regenerative thoughts on people’s minds.

7. Artefact
7.1. Game Design
In Between, the players interact with the game by using the PlayStation Move controller. With it, the player can control and move the avatar, which is a ball of light that flies down a tunnel of light filled with light points. The main objective is to collect the light points that are flying in the tunnel of light. The light points in the game represent the player’s acceptance and how strongly they feel of their life events. As the lights points are collected, the game presents the player with episodes from the character’s life through subtitles and voiceovers. After the player makes some progress in the game, a chakra gate is presented to the player. In order to pass through this gate and enter the next level, the player needs to collect a specific number of light points. If enough light points are collected, the player will pass through the gate into the next zone, where the mood and the theme of the tunnel will change. If not, the game will reset and the player will play as a new character. As the player progresses, the speed of the light points increases.

There are seven zones in the game; each zone is related to one of the chakra symbols. Each symbol represents a different vital function that a human being has during their life. For example, the root chakra represents grounding and survival instincts. The symbol of the root chakra is represented in red; thus, the zone related to the root chakra uses the color red. Also, the theme and music of each zone change in order to suit the chakra symbol the zone represents.

7.2. Game Technology
For this project, we decided to use the Unity 3D game engine. The reason for this is that many team members had experience with this technology. At the two exhibitions, the game was running on Windows 7 64bit with a tracking camera connected by a USB cable and a motion controller (PS Move, 2010) connected through Bluetooth. Also, a projector was connected to the system, which displayed the game on a wall. The minimum requirement for the PC running the game was dual core CPU at 1.5GHz with minimum of 2GB ram.

7.3. Game Purpose
The main goal of the game Between is to provide an experience for the player where a proposed experience of death is exposed. Because of the deep and heavy stories in the game, the team felt that it would
be more suitable if the target audience was people with a mature mindset, to ensure that the writing would not be offensive to them. The team aimed to add an artistic feel to the game, allowing the player to expand his perspective by connecting the art, story, aesthetics and experience of the piece together.

8. Exhibitions
We showed Between in two different art galleries in Scandinavia. The technology and equipment were similar in both; however, certain changes were made in the second exhibition, in order to address feedback gathered during the first.

8.1. Skövde Culture House
The first exhibition, with the main topic of ‘Obstruction’, was held in Skövde’s central Culture House from the 21st of August until the 29th of August, 2015.

8.1.1. Experience
The exhibition lasted one week, and the game was available for visitors eight hours a day. During that time, we gathered feedback from the players and monitored the game’s performance and players’ opinions about the experience.

In general, visitors were interested in playing the game and felt comfortable with how the installation was prepared and how the projection was set up. The visuals of the game attracted people to the installation and garnered compliments during gameplay. Players were not discouraged from playing because of the use of the PlayStation Move and understood how to interact with the installation. However, we found that users had problems interacting with the game at the beginning of the gameplay session, not feeling the perspective of the avatar properly and having a difficulty, or even not following at all, the movements required to advance in the game. In addition, visitors were not able to find the connections between the different elements of the game. They asked why they needed to perform movements in order to advance in the game, and did not understand that they needed to collect a certain number of light beads in order to get to the next level.

A number of technical problems arose during the exhibition. First, the tracking device did not always track optimally, in which case we had to swap the game control for a usual computer mouse. Second, we found it very difficult to set up the motion controller inside the exhibition room.

8.1.2. Conclusion
After the exhibition ended, we analysed our impressions of how the installation performed. First, we found that there was a ludo-narrative dissonance that caused the players not to understand why they had to follow the trail of mali beads with their movements. This issue was made a priority to address for the next version of the game.

Additionally, the technical problems presented by the game were also made a priority. The tracking problem was found to be caused by a poorly optimised code. The pairing issue was not found to be an
algorithmic problem, but rather a physical problem due to the number of devices in the room emitting waves, interfering with the Bluetooth wireless connection between the motion controller and the computer.

8.2. Copenhagen ICIDS

8.2.1. Changes in the Game

A number of issues with the game had to be addressed. First, there were technical problems with the tracking technology that led the motion control to fail irregularly. To correct this problem, the algorithms behind it were improved, making them more stable. In addition, the option to track player movement with a Wii Remote was added, in case the PlayStation Move failed in the new installation.

Second, regarding the ludo-narrative dissonance present in the game, the music in the whole game was reworked, so that each level had a distinct musical according to each of the Chakra definitions. In addition, the bead trail system was improved, allowing us to set a different feel for each level. Finally, a sacred geometric figure was added to each stage. Each sacred geometric figure appeared, incomplete, in the center of the screen, and was drawn as the player collected beads. All of the changes were made to match each level to one of the Chakras.

8.2.2. Experience

The exhibition was open for five days, during which time mostly attendants from the ICIDS conference visited it. We gathered visitors’ opinions and feedback, but no interview was performed after each gameplay session, due to the open nature of the installation space.

Visitors were interested in playing the game and content with how the installation was placed. The game’s visuals and music were praised early, enticing visitors to enter the room, leading them to the back seats that we placed. We found that on some occasions, visitors were most interested in watching the piece rather than interacting with it. Those that wanted to interact with the game were not discouraged by the PlayStation Move and showed enjoyment in interacting with the game. We were explaining the game when new visitors arrive to the room, while players were interacting with it, as well as checking whether the current user needed assistance. However, some users emphasised that the narration was obstructing their flow while interacting with the motion controller, even though spectators that were not interacting did not complain. It is also important to remark that not every visitor understood all of the connections between the different elements in the game until the explanation was complete. Although the installation performed optimally in terms of tracking precision and response time, we found some new technical problems. The system in charge of switching songs between the different levels behaved erratically on sporadic occasions after the game had been running for several hours, on those occasions requiring us to restart the installation, potentially interfering with the visitor experience. Nevertheless, most of the time the game was stable and required no assistance.

8.2.3. Conclusion

After the exhibition, we confirmed that the ludo-narrative dissonance was still affecting the latest installation, generating an obstruction in the interaction flow of players interacting with the game when the
narrative sections of the game that were including text and voiceacting were prompting on screen. Additionally, the elements introduced in this version of the game helped reduce the mismatch in the first version. Players better understood how to collect mali beads, how to progress through the experience and what the connection was between the images, sounds and physical movement. Regarding the technical problems, the performance was not perfect, because the background songs occasionally misperformed. However, the new space made the tracker performance more optimal.

In conclusion, despite the ludo-narrative dissonance still being present, progress was made in lessening the obstruction it produced. The technology performed optimally except for sporadic errors with the music subsystem, which were not believed to have an impact on the overall experience.

9. Future Development and Discussion

The study presented in this article aims to provide a better understanding of how an art videogame in this situation can perform in two exhibitions, using obstruction as a pathway. We found that the piece experienced different issues, one being a ludo-narrative dissonance and the other being certain technical challenges that produced obstructions at different levels between the user and the artefact.

After introducing different changes to the game, the existent mismatch was improved but remained present. The technical issues were mostly solved. The improvement in the piece was traced through personal interviews and local observation.

In conclusion, the outcomes of the study show that visitors liked the installation and that the changes introduced were positive, taking into account that there are still issues that might produce an obstruction to user experience.

There are a number of actions that could be performed in the future research based on this study. One could rework certain game mechanics. Modifying how the narrative is displayed or increasing the interactivity during the narrative screens would be measures to take to avoid breaking the user’s flow during the interaction. Another mechanic that could be interesting to study is a more complex light beads trail spawn system, which would allow users to perform specific actions and make specific shapes in the air with the motion controller, such as those performed by a priest during a mass.

All of these proposed directions for research would benefit from a broader kinds of data that would be worthwhile to collect, such as how long users play for, or where they make the most movements. In addition, developing a procedure to gather more qualitative data from users would allow us to gain more knowledge, by performing triangulations against the quantitative data collected. Further research in any of these directions would be welcome to improve futures iterations of the project.
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Virtual Dreamscapes: Artistic Exploration of Dreams through Art and Games

Minnamari Helmisaari

The aim of this paper is to offer insight into artistic exploration concerning the creation of a virtual dreamscape. The creation of the dreamscape is first discussed through theoretical perspectives that have inspired the work, and then through a description of design choices that were carried out in order to strengthen the installation’s thematic connections to dreams, virtuality and childhood.

Virtuality & Art Games

The term ‘virtual dreamscape’ will be used in this text as a description of the game prototype that was created for an exhibition. To clarify what this term stands for and how it is used in this document, an overview of different definitions of virtuality is offered below.

In the article Videogames and Aesthetics (2010), Grant Tavinor writes that a problem arising from discussions concerning games is the relationship between the term ‘fiction’ and the term ‘virtuality’: ‘A lot of writers use virtual to refer to the unreal nature of certain digital objects, so much so that term may often simply be a synonym for fictional […]’ (Tavinor 2010: 628). Tavinor advocates for understanding the game world as both fictive and virtual, but that there is also an important distinction between the two terms. The fictive element has to do with the game world’s connection to reality, while the virtual aspect has to do with its interactivity. In summary, Tavinor (2010) defines virtuality as a structural feature that enables interaction within the game medium.

Using different philosophical theories, Adriana de Souza e Silva and Daniel M. Sutko (2011) offer
viewpoints on the integration between virtual and physical reality. Drawing on Gilles Deleuze’s ideas, they describe virtuality as a potential for creation:

Within Deleuze’s logic, there is no point in addressing the opposition between real and virtual. The real is pure immanence, containing virtual (potential) realities and actual realities. [...] The potential to be actualized and differentiated into diverse realities is what makes the virtual part of the real rather than opposed to it. (de Souza e Silva & Sutko 2011:33)

Using these ideas, the potential for creation could be described as arising from the virtual medium’s interactive trait. Therefore, there are some similarities between Tavinor’s (2010) and de Souza e Silva & Sutko’s (2011) reasoning.

The potential for creation described by de Souza e Silva and Sutko (2011) hints at the game medium’s potential for creating works of art. In fact, in the article Art Video Games: Ritual Communication of Feelings in the Digital Era (2015), Carlos Mauricio Castaño Diaz and Worawach Tungtjitcharoen offer an overview of different perspectives concerning art games. Diaz and Tungtjitcharoen argue that a similarity between art and games is the interactive element, which exists both in artworks and games: ‘Indeed, in both video games and interactive conceptual art, one of the critical points for artists and game designers is the communication between the machine (or the art work) and the people who interact with it’ (Diaz & Tungtjitcharoen 2015: 4).

**Dreams and Virtual Worldmaking**

In the article Dreams, Art and Virtual Worldmaking (2003), Bert O. States discusses what dreams have in common with art and fiction. Interestingly, there can be said to be some similarities between the act of dreaming and the act of playing a game. In a way, a dream can be described as a mental game. In fact, States does compare dreams to games: ‘The dream might be compared, in this regard, to a three-dimensional chess game’ (States 2003:10). A similarity between dreams and games is the experience of immersion and interaction that can occur both within dream world and game world. Nevertheless, both worlds remain out of reach, at least physically. Also, States says that ‘[...] the dream presents the conceivable in terms of the real’ (2003:8). This is something that can be said about some games as well. One can of course argue that games can never feel as real as dreams; still, the world that is presented within a game can be described as its own reality.

Perceiving the conceivable in terms of the real is also discussed by Ian Shaw and Joanne Sharp in the article Playing with the future: social irrealism and the politics of aesthetics (2013). Shaw and Sharp examine the political, future-oriented aesthetics of video games by using the concept of ‘social irrealism’:

Social irrealism is a form of storytelling by which questions over the future of humanity and its existential place in the world are told through imaginary landscapes and alien
tropes that refract and reshape the real. Although it is true that video games usually produce fictional spaces, they do not produce entirely unreal spaces. Instead, they are much more like virtual laboratories for probing, playing and experimenting with reality. (Shaw & Sharp 2013:343)

Interestingly, Shaw and Sharp (2013) also discuss the role of virtuality and fiction in defining reality. The quote above can be compared to a quote by States, where he describes a similarity between dreams and games:

Dreaming and fiction, all forms of virtual worldmaking, may (amongst other things) be highly intensified forms of circuit maintenance: a sort of dry run of the neurons which allows us to have an experience in a safe place [...] rather than in a dangerous one. In other words, in the virtual world of dreams and fictions we get to drive off a cliff into the sea many times in a lifetime, whereas in the actual world we can only do it once. Precisely how this is useful to us [...] is still an open question. (States 2003:12)

To sum up, video games can function as ‘virtual laboratories for probing, playing and experimenting with reality’ (Shaw & Sharp 2013), and similarly, dreams can function as a ‘dry run of the neurons that allows us to have an experience in a safe place’ (States 2003). So, what happens when art, dreams and games are combined in a virtual dreamscape? This question will now be explored further by describing the process of creating the virtual dreamscape.

Reshaping a Childhood Dream
The idea of experimenting with creating a virtual dreamscape was inspired by a dream I had as a child. In this dream I was in a room with no doors or windows, with mysterious black scribbles on the walls. Nothing else happened in the dream. I was just stuck in a creepy room with no way out – quite an obstructive experience. This dream occurred at a time in childhood when I had just started to sleep alone, in a room farther from my parents’ room. Therefore, the dream might have been a way for me to explore my ability to be alone, even if it felt a bit scary. In this way, perhaps the dream did in fact serve as a kind of ‘dry run for the neurons’, allowing me to ‘experience something new in a safe place’ (States 2003).

So, fascinated by the connections between dreams and games, I set out to create that room in a game engine, while also changing it and adding something new to it. In the dream I was stuck in the room with the dark scribbles, but with the game I wanted to explore what could happen if the child got out of the room. In a way, the dreamscape was used as a ‘virtual laboratory’ where I could create a new reality – a version of the dream that differed from my ‘real’ childhood dream.

The virtual dreamscape therefore functions as a kind of metaphor for a child’s journey of growth. To express the feeling of the player/child overcoming a fear, I made the doorway dark and frightening, and the black scribbles from my dream were turned into particle systems obscuring the doorway.
In contrast to the nightmarish room, the environment outside the room was purposefully open and disorienting.

Something that was not present in my dream, but that I wanted to add to the virtual dreamscape, was text-snippets illustrating the thoughts of a child (an expression of my former self experiencing the dream) floating in the air in different parts of the scene. In this virtual dreamscape, it was essential to have something that would hint towards the existence of the child, as the game is experienced through a first-person view, without any kind of player character. To create the text snippets, I decided to collaborate with a classmate. She immediately grasped the theme and created text that perfectly conveyed the feelings of a child wandering through a strange dream world, both curious and frightened at the same time. By having someone else write the child’s thoughts, it was as though the child came to life. Fascinated by how the collaboration added another dimension to the dreamscape, I decided to also enlist a friend to create atmospheric music for the dreamscape.

Through these collaborations, the range of the dream was expanded. The real and the unreal were also further blended as the dreamscape became populated by the creations of other people’s imaginations. The child became a hybrid of my past experiences and the experiences of my friends, thus becoming a representation of not only my childhood. Instead, it grew into an imaginary child consisting of a combination of our shared imaginations.

Artistic Obstruction

One of the most important, and difficult, things was to strengthen the playability while not completely eliminating the obstructive element of the open environment. This problem highlights an interesting aspect with game prototypes with a more artistic agenda: the player getting lost can be seen as a part of the experience. If this is the sole purpose of the game, this is of course only a positive thing, but my view on the matter is that if I create a world to explore, I don’t want to hinder the player more than necessary. I wanted the prototype to be at least a little bit approachable. Also, I tried to keep in mind that the people who would view the finished prototype might not all be that used to playing games. So, I had two clashing perspectives, and I needed a compromise to solve the clash. One perspective was that I wanted to keep the disorienting feeling; I wanted to make it possible for a player to feel lost. But on the other hand, I didn’t want them to only feel lost, as there was a story to find, if that was the player’s motivation. Also, different people play differently, and they should be allowed to do so.

Classmates that had tested early prototypes had had difficulties finding the route that led the story forward (invisible staircases that turned visible as you jumped above them), so I decided on a compromise – creating more staircases that lead the player further. This way, there were more possible routes to take, while the stairs still remained quite invisible, up until the moment you came near enough. One important thing was to make it easier for people who were interested in the story to find more pieces of the story. To do that, I placed the stairs in such a way that there were trails of text-snippets leading to each staircase.
Virtuality and Materiality
The fact that the virtual dreamscape was to be shown in an exhibition – a public, physical environment – opened up a different set of possibilities than when a game is built to be played in a private home. In the creation of the installation, I was able to work on the physical space as well as the virtual. The possibility of choosing the setting in which to present the game meant that the atmosphere and overall mood could be strengthened further by using the space in a way that blended well with the virtual dreamscape.

As I had the unique opportunity to use physical materials to strengthen the atmosphere, I decided to create some ‘physical particles’ made of paper, using the same texture that appears in digital form in the virtual dreamscape. In this way, I attempted to create a dreamlike blend from the virtual into the physical. Now, the viewer had to step through a physical particle-doorway to be able to view the virtual dreamscape, and to then step through the virtual particle-doorway within the game to experience the dreamscape. In a way, the physical particle-doorway also binds the theme of obstruction to the installation, in a similar manner as the virtual doorway obstructs the player. The sense of touch is often overlooked when working deeply within virtual environments. So, the creation of the physical particle-doorway was my attempt to close the gap between the virtual and the physical.

Child’s Play
In addition to creating a game prototype, I created a cartoon using screenshots from the virtual dreamscape. In the cartoon, the story of the child is depicted as a linear narrative. The aim was to create a blend of subjectivity and objectivity between the prototype and the cartoon: in the cartoon there is a character that the reader follows, while there is no such visual representation in the prototype, as you play the character from a first-person perspective. In this way, the cartoon is a metaphor for me – and other adults – viewing the child from an outside perspective. The virtual dreamscape, on the other hand, can be seen as a metaphor for a child’s ability to immerse fully into a story/game.

Another example of material-use to strengthen the childhood theme between virtual and physical reality was the use of a children’s bed as the seat in front of the virtual dreamscape. At first, I was a bit worried that adults would feel uncomfortable sitting in the tiny bed, but in the end I decided that perhaps that type of minor discomfort was not solely negative. It might even enhance the experience. In a sense, the installation had obstructive elements for adults, in a similar manner to how regular furniture can be obstructive to children. Therefore, the theme was strengthened further. Also, from sporadic observations, it seemed that children enjoyed sitting in the tiny bed exploring the virtual dreamscape. This felt like the best praise the artwork could possibly get. After all, as the artwork centers on childhood, children are the main audience. They are the virtual dreamscape’s guests of honor. And by engaging with the dreamscape, it almost felt like the memory from my childhood dream came alive once more. But this time, I was no longer alone in the dream.
References


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