

**“IT’S LIKE A WALK IN THE PARK” - ON WHY ARE  
WALKING SIMULATORS SO CONTROVERSIAL.**

**ABSTRACT**

The paper is devoted to controversies in computer games studies connected with game classification and characteristics. Controversies on walking simulators are discussed in depth; also historical roots of these games and their ergodicity.

**Keywords:** computer games, indie games, walking simulators, classification decisions, ergodic continuum

*Golf has too much walking to be a good game,  
and just enough game to spoil a good walk.*

Harry Leon Wilson

**REASONS WHY STUDY OF WALKING SIMULATORS IS NEEDED**

So called “walking simulators” are one of the most characteristic genres of the recent wave of “indie” games (Garda & Grabarczyk 2016). Unfortunately, unlike other characteristic nascent genres - for example roguelike games (Garda 2013) they did not receive enough attention and remain understudied.

Contrary to this they are oftentimes thoroughly discussed on game forums, in popular pieces and columns.<sup>1</sup> This lack of academic interest is rather surprising once we realize that the nature of controversies walking simulators spawn leads to fundamental, conceptual questions that remain at the core of game studies.

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<sup>1</sup> See (Barda 2014), (Penabella 2015), (Sims 2016), (Thier 2016) and (Cross 2015) for examples of such recent discussions.

Arguably, the thing that adds to the confusion the most is that the terminology used to describe walking simulators seems to be very inadequate and sometimes downright misleading. Let's briefly look at some of the propositions presented in the recent discussions of the subject. It is only natural to start with the term I decided to use throughout this paper - "walking simulators". There are two reasons why I decided to use it. First of all, it seems to be the most popular one as even the authors who prefer other descriptions mention it (sometimes in critical way). Second reason is that the term started to be used as a classification label in Valve's Steam store (currently more than 200 games has been classified as walking simulators). This classification decision seems to be important as Steam remains to be the predominant platform for selling digital PC games and most of the games belonging to the category of walking simulators are produced and distributed through this channel.

It is not hard to see that this choice of label leads to controversies. First of all, as many users and commentators point out the term seems to be derogatory and somehow ironic.<sup>2</sup> Simulating something that is so simple, commonplace and mundane as the act of walking creates seems absurd and can be likened to such satirical games as the famous *Goat Simulator* or a recent, less known *Shower with your dad simulator*. Needless to say this derogatory aspect is especially troublesome in the academic context as it introduces normativity into the discourse. Second of all, the term in question seems to be simply inaccurate since the prototypical games classified as walking simulators (I analyze some of them below) do not contain actual simulation of walking as there is little or no consideration given to the laws of physics, anatomy, properties of the terrain etc. Both problems can be best summarized by the following quote from Ed Key, the developer of one of the prototypical walking simulators *Proteus* (analyzed in section 2). When asked by the interviewer about how he feels about the term he answered:

*Yeah, I find it pretty stupid. I was talking about this on twitter recently and how QWOP is the only real walking simulator.*<sup>3</sup> Rich Wilson pointed out that Mias-

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<sup>2</sup> As (Cross 2015) points out: „Walking simulator" has undergone the Stygian journey of most pejoratives, becoming a term of neutral description or ironic reclamation to some, even as it remains an insult to others."

<sup>3</sup> The game Ed Key refers in this quote, *QWOP* is a simple free satirical game which lets the player control

*mata was another one - since this actually does emulate some elements of physically walking over different terrain, like momentum when running down slopes. My counterpoint to this: Why don't we call all traditional FPSs "face clickers"? It's a similar kind of reductionism.*

*On the other hand, perhaps it is genuinely useful for some people in identifying games within this vague genre of exploration with minimal interaction. I don't get too stressed about it.* (Sigl 2014)

Some alternative terms that has been proposed are: light adventures, first person walkers, wandering simulators and exploratory games. Similarly to Ed Key I believe that of all these propositions it is the last one which fits the genre the best. Still, for the sake of this paper I am going to use the titular “walking simulator” solely because of the popularity and recognition it achieved.

What is interesting, apart from being a growing genre in and of itself, walking simulators seem to influence other genres of games - especially action adventure and shooter genres - three good examples of such influences being: the *Uncharted* series, *Spec Ops the Line* and Hideo Kojima's *P.T.*. And judging by the commercial and critical success of some of the recent entry's in the genre (Stuart 2016) it is reasonable to expect the influence to increase in the future.

Obviously, there are many ways one can study walking simulators, so let me narrow down the aim of this paper. I wish to analyze some of the prototypical examples of the walking simulator genre and pinpoint their common properties (section 2). Then I am going to look into the controversies surrounding the genre and see if, by putting the emotions and normative discourse aside, we can still learn something interesting about the genre in question (section 3). In the end I claim that even though the criticism is misguided, at least one of the intuitions behind the controversies walking simulators attract can be explicated in a precise way and that this explication greatly helps us to understand both - the genre of walking simulators and games in general (section 4).

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the movement of limbs of a runner. The point of the game is that the act of walking (or running) which seems to be simple when it is performed unconsciously starts to be very complicated once you try to consciously simulate it. The game can be found at the following address: <https://www.foddy.net/Athletics.html>

## WHAT ARE WALKING SIMULATORS?

As is often the case (especially when it comes to new phenomena) it is better to start with a working definition and a handful of prototypical examples. For this reason let's begin with an initial assumption that walking simulators are games in which traversal is the main (or even the sole) mechanic.<sup>4</sup> Note that we don't presume if the games in question are presented from the first person perspective or whether the traversal is linear or not, so we don't limit ourselves to any specific subtype of walking simulators.<sup>5</sup>

### Examples of typical walking simulators

Let us now look at a few prototypical and highly influential examples of walking simulators. Let's start with The Chinese Room's *Dear Esther*, which has been pointed out in every popular discussion or column I mentioned in footnote 1. The game casts the player on the shore of Hebridean island and lets her explore it in a fairly unrestricted, nonlinear fashion. Instead of pointers or minimaps the game uses subtle environmental cues and natural unsurmountable obstacles to guide the player through island so the task the player performs is actually a journey from the starting point to the finish. There is no interaction between the player and the environment, she can only move, observe and listen. Listening proves especially important as small portions of the game's narrative presented in the form of a series of letters to the titular Esther are recited to the player throughout the game. What is important the narrative bits are completely parallel to player's actions as they are triggered semi-randomly and do not contain information needed to complete the journey. The world the player explores seems to be no longer inhabited by anyone - the player does not meet any characters, most of the objects are worn out, etc. The only thing the player does is that she moves through space, looks at things at her own pace and makes sense of the world she has been placed in. But the point is that both - looking and making sense is completely optional. Players could just as well rush through

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<sup>4</sup> I don't have the space to explain the notion of „mechanic” which is central to both – game studies and game development. A good analysis of this term can be found in (Sicart 2008). For the purpose of this paper we can understand „mechanic” as the internal rule which governs the progression of the game. For example, the rule that a given chess piece can only be moved diagonally is a chess mechanic.

<sup>5</sup> For this reason it is best to use a more neutral word “traversal” instead of “exploration” which can be associated with the lack of linearity.

*Dear Esther* without paying attention to the environment and the story bits.

There are several reasons why *Dear Esther* is very important in the context of any study of walking simulator genre. First of all, it achieved critical<sup>6</sup> and commercial success and inspired many followers, sometimes even satirical ones (*Dear Esteban*). Second of all, the game was consciously crafted as an experiment inspired by an academic question - the question of how minimalistic game design could get – of how many mechanics could be possibly stripped from a typical First Person Shooter.<sup>7</sup> Third of all, it contains most of the properties which can then be found (in different combinations) in other games which belong to the genre: first person perspective, slow, deliberate movement, no visible interface, lack of tasks of any kind, lack of obstacles the player has to overcome to proceed, no combat, short length, no interaction with the environment, no puzzles, an ending which the player achieves only by traversing the space, and a focus on observation (down to a specific button designated just for this). As we are going to see below, not every property of this list will be present in the games belonging to the genre, but they are a very good starting point similar to prototypical lists of properties used in the prototype concept theory.

Another notable example of a walking simulator is Tale of Tales' *The Graveyard*. This extremely short (it can be easily completed in 15 minutes) experimental game gives the player the opportunity to control an elderly woman who walks through a cemetery (modelled after an actual cemetery of Izegem, Belgium). The game is presented from a third person perspective and uses a 3D game engine. Despite this it does not give the player the ability to move the camera. The player can walk off the main path but this does not change anything as she cannot go off-screen and the perspective of the camera does not shift. The freedom of movement is only superficial - the only way to advance the game is to move forward towards a small bench where the lady the player controls sits and listens to a song. What is interesting the only action that is other than walking (the act of sitting) is triggered automatically whenever the player stands in the right spot. The game ends when the player decides to stand up and

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<sup>6</sup> As of moment of writing this (30.06.2016) its Metacritic score is 75/100.

<sup>7</sup> To be precise, this academic problem inspired the original free version published in 2007. It does not matter for our considerations as both games differ only in graphical fidelity. The original thesis that inspired the game was the game's creator Ph.D. thesis (Pinchbeck 2009)

exit the cemetery through the gate.<sup>8</sup> As the creators of the game point out (and what is being somewhat confirmed by the reactions of users on game's Steam forums) the reaction towards the game has been rather mixed. As Michaël Samyn, main designer of *The Graveyard* said on Tale of Tales blog:

*Peer response from the indie game scene was a little odd. The Graveyard was regularly compared to Jason Rohrer's Passage because it deals with similar subject matter. Often, however, our fellow game designers and indie game fans found Passage a superior product because it uses a conventional game structure to convey its message. To some extent The Graveyard is disqualified beforehand because "it is not a game". That was also the response of Jonathan Blow when we proposed to show The Graveyard in his Experimental Games Workshop at the Game Developers Conference. The gameplay in The Graveyard cannot be considered experimental/interesting/etc because it cannot be considered gameplay. Or something along those lines.* (Samyn 2016)

What makes *The Graveyard* especially interesting is that, similarly to *Dear Esther* it has been deliberately built by subtracting as many game mechanics as possible. As the author points out in the cited blog post the original idea of the game was much more complicated mechanically as they considered additional possible interactions with the environment. In the end, all of them have been stripped away in a conscious minimalistic design decision in order to strengthen the narrative.

The game which has been brought up in the above citation, *The Passage* by Jason Rohrer deserves its own mention not only because it predates both - *The Graveyard* and *Dear Esther* but also because it belongs to a somewhat rare category of two dimensional walking simulators.<sup>9</sup> The Passage lets the player to literally walk through the life of the controlled character. Even though the player's movement is fairly unrestricted, the screen dimensions (the game is presented in a very wide horizontal bar) and the way the movement advances the narrative quickly communicates to the player that the only thing that is required of her is a steady walk towards the right part of the screen. From the point of view of game mechanics there are two important differences between *The Passage* and *The Graveyard*. At the beginning of the former game the player encounters another character, a girl. If the player walks into this character

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<sup>8</sup> There is a small variation introduced in the commercial version of the game (the original was free, the commercial version costs 5USD) as the elderly lady can die randomly at any moment.

<sup>9</sup> Some other notable examples of 2D walking simulators are: *To The Moon* and *Home*.

they become a couple and walk through life together. But it does not have to be this way - the player can just as well avoid the contact with the girl and end the game as a single. The other mechanical difference is that *The Passage* presents the player with some (admittedly very easy) obstacles - road blocks which have to be avoided. Singling out these minute details may seem surprising, but, as we are going to see in section 4 there are important reasons for this.

The last example I would like to quickly analyze is Ed Key's *Proteus*. Similarly to all above examples *Proteus* contains no mechanics other than walking - the player cannot manipulate or pick up objects and there are no notable obstacles of any sort. Contrary to previously mentioned walking simulators the narrative does not play an important role in *Proteus* - the game contains an ending but the players are not steered towards it in any way. At the face of it *Proteus* looks like a never ending exploration of an uninhabited<sup>10</sup> island. What differentiates *Proteus* from the three examples we analyzed above is that the island the player explores is procedurally generated, that is generated anew, every time the player restarts the game. Thus, at least in theory, no two game sessions with *Proteus* are identical. The message this solution gives to the players is very powerful - contrary to traditional first person adventure games (as we are going to see below, walking simulators are often compared to this genre) the world of *Proteus* isn't an intentionally created space which can be treated as a big puzzle to be solved. There very well may be no meaning behind most details (as they are sometimes placed randomly). Because of this the exploration and discovery becomes the centerpiece of the experience, its sole mechanic. An observant player will eventually realize that the game contains a subtle progression system - every time the night falls the player has to climb on any elevated structure and look for bright lights. Then if, she decides to enter these lights the season changes. Once, the cycle of seasons completes, the game ends. The way the game signals this structure is very subtle - some players may not discover it at all, other players may trigger the season change by accident, never knowing what exactly caused it. This whimsical attitude to the game's structure is possible because, as I mentioned, contrary to the three games we analyzed, the narrative does not play an important role in *Proteus* - the game contains no words,

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<sup>10</sup> The island contains a single empty building but the lack of inhabitants is even more pronounced by the contrast it makes with the rest of the island.

symbols or any message conveyed by traditional means. It means that even though the genre of walking simulators originated from theoretical considerations about the relation between narrative and mechanics and the need to give the former prominence, there is nothing that prevents the designers to create walking simulators which lack any narrative (or contain it only in a rudimentary sense in which every human endeavor contains it).

### **What are the historical roots of walking simulators?**

One of the key reasons why walking simulators demand more research is that they seem to be a genuine example of a new genre which has no obvious predecessors. This seems to be especially surprising because there are no technological reasons why this genre couldn't be explored earlier. For example, a game similar to "The Passage" could have easily been made on the Atari 2600. And yet, even if a clear cut case of a "walking simulator from the past" might be extremely hard to find, it is at least possible to point out at some examples which could retrospectively be seen as early signs of tendencies and attitudes which led to the rise of the genre. These "early signs" can be categorized into three groups:

#### ***Experimental games from the 1990s***

The first category is very much varied and comprises of games in which traversal remains a sole or the most important mechanic. It can be argued that this idea predates digital games and can also be found in several board games in which the board and the throw of a die fully determines the player movement (so he becomes more of an observer than a player). *Game of The Goose* and some variants of *Snakes and Ladders* are examples of such games. Additionally, some of the 3D maze games released on personal computers in the early 80's fall under our working definition as well.

And yet, it is probably a handful of unique games created in the 1990's which remind today's walking simulators the most. Haruhiko Shono's *Alice - an interactive museum* an adventure game published in 1991 is a good example of this. The game lets the player explore the titular virtual museum from a first person view. The traversal of space is done by clicking different directions of the screen, so there is no continuous walking, but it does not change the fact



that exploration remains the most central mechanic. Even though *Alice* contains several simple puzzles typical for adventure games the game is more about observing, testing and manipulating objects, than about solving problems or enjoying the story. By clicking different parts of the screen the player watches small animations, listens to music, watches pictures etc. Most of these actions have little or no consequence for the game progression - they are there only to amuse. In some respects *Alice* - an interactive museum” reminds software products aimed for small children. It functions as a virtual toy of sorts, with the whole environment functioning as one big virtual toy to be played with. The author continued his pioneering work on exploratory games with *L-Zone* and *Gadget: Invention, Travel & Adventure*, both of which were published on personal computers. It is the second of these games that achieved the most success. Even though, technically speaking, the game still does not allow the player to walk freely within the environment, it is surprising, how this 1993 adventure game reminds contemporary walking simulators. Contrary to *Alice* and *L-Zone* the game does not boil down to a virtual exposition and tells a very linear story. Puzzle elements are kept to a minimum and even though the player is occasionally given specific tasks they most often boil down to the traversal on a single path within the virtual environment.

And still, it is a rather obscure 1998 Japanese Playstation game *LSD* that reminds walking simulators the most as the game features fully realized 3D environment which the user explores at her leisure. Walking remains the single most important mechanic of the game as the progress is literally triggered by exploration. The dreamlike, poetic landscapes, experimental music and the obvious reference to the hallucinogenic drug function as narrative explanations of the lack of traditional mechanical structure of the game. Similarly to the case of *Proteus*, the players of *LSD* should realize, that there is no specific task for them to perform, and that the semi-random wandering is actually the right way to play the game. Interestingly enough the same strategy has been explored by the author of *LSD* even earlier, in the very obscure experimental 1994 adventure game *Eastern Mind: The Lost Souls of Tong Nou*. The main theme of this Macintosh and PC CD-ROM adventure game revolves around Buddhist themes, one of which - namely the notion of reincarnation - becomes embedded into the game mechanics as there is no way of failing the game: the death of the player

is actually a way of progressing the story.

The last two examples of predecessors of walking simulators produced in the 90's are two western games: *The Dark Eye* and *Bad Day on the Midway*. Both games present a first person perspective and let the player move in a non-continuous way through the environment. Both strip down the traditional adventure genre elements by removing puzzles and inventory screens. Similarly to their Japanese counterparts they justify the lack of mechanical direction by depicting surreal, poetic worlds.

Even though the games presented above cannot be anachronistically classified as early walking simulators, they do contain enough traits similar to this contemporary genre to warrant their inclusion in this section. They are either completely linear or seemingly aimless, they focus on a non systematic exploration (we may easily say that they are more about wandering than exploring), and contain next to no obstacles or fail states. Most importantly, they use the walking mechanic as the main trigger of game progression.

### ***Exploratory sections***

The second group of predecessors to walking simulators can be found in games, which taken as a whole belong to different genres but which contain sections which, taken in separation, could have been easily classified as walking simulators. Since this group of examples is rather numerous, I am going to focus only on some of the most notable ones. *Half Life*, a groundbreaking game released in 1998 starts with a famous monorail section in which the player learns about the environment she is to explore. Even though the section is completely linear, as the player has no control over the movement of the monorail she is able to walk freely inside the cabin. It is easy to see that this relatively long section (it takes more than 5 minutes) would have probably been heavily criticized if it was presented to the player only in the form of a completely non-interactive cutscene. What is surprising, giving the player the ability to change the camera perspective and focus creates a sufficing illusion of interaction and discovery. Similar (although less obvious) effect has been recreated in many later games belonging to the first person shooter genre which oftentimes use an analogous "prologue" section which familiarizes the player with the environment and movement. Good examples of such sections can be found in: *Unreal*,

*Halo, Bioshock or Bioshock infinite.*

Slower walking sections can also be used to great effect in order to change the pacing of the game. Three well known examples of such sections can be found in: *Call of Duty 4: Modern Warfare*, *Gears of War* and *Uncharted 2*. The first of these games lets the mortally injured player walk (or rather crawl) out of a helicopter and the way it constrains the movement communicates the gravity of the situation. The second example is interesting as it uses walking parts very often and very deliberately. In these sections the movement of the character becomes much slower and the ability of firing the gun becomes suppressed. That way the game forces the player to slowly observe the environment. The third game is especially interesting as, even though it was released quite late, it is most probably responsible for the great popularization of the walking simulator idea. After many sequences full of action and shooting the player finds herself in a small Tibetan village where the only thing that is demanded from her by the developers is a walk towards a clearly set destination. There is nothing that forces the player to do this quickly - she can watch the environment, pet cows, pass a ball towards children playing football etc. What's especially interesting, the developers of the game stated clearly that the section has been inspired by one of the games we analyzed above - *The Graveyard* (Kumar 2011). The Tibetan village level became so popular that similar sections has been put in both subsequent sequels to the game. Similar sequences (although much more blended with the rest of the game) can also be found in Yu Suzuki's pioneering effort *Shenmue*, published in 1998 where the player is oftentimes free to explore the environment.

Apart from these examples, one can also point at some of the less obvious sections which contain elements known from walking simulators. One good example of such sections are so called "hub worlds" that is parts which comprise mostly of level selection (a 3D menu selection of sorts) and which are oftentimes stripped from the core mechanics of the game. The most famous example of such a section can be the original starting stage of *Super Mario 64*, which contains no hazards, enemies or time constraints known from the regular levels and lets the player freely explore the world.

Yet another example of game sections which could have inspired walking simulators are developer commentary sections, where the game encourages the player to walk towards signs that trigger contextual audio clips which comment the part of the game the player experiences.<sup>11</sup> Interestingly enough, the game which introduced the idea of commentary sections triggered by walking was the sequel to original *Half Life*.

### ***Transgressive play***

The third historical source of walking simulators may be connected with the fact, that even if a given game has no parts which are relegated to walking it may still allow for play sessions which are similar to the walking simulator genre. Thus, even if a given game contains a more traditional structure it does not force the player to be “the implied player” (Aarseth 2014) – she can as well ignore most of the mechanics and play the game transgressively. It can be best seen in the case of so called *flaneur* practices, which are especially evident in the case of open world games. Since games like *Grand Theft Auto San Andreas* or *Skyrim* take place in big, varied and lively environments, many players ignored the tasks they have been given and explored the environment, observing the world around them. It is also obvious that even before the popularity of sandbox games many different genres which facilitated free-form exploration existed. Civil plane simulators or first person adventure games are good examples of this.<sup>12</sup>

### **What is the controversy about?**

#### ***Critique of walking simulators.***

As I already mentioned, the fact that walking simulators are a relatively new, original genre is only one of the reasons why they demand further study. The other is that they spawned lots of controversies among the community of players. Examples of these controversies are very easy to come by - a quick glance at forums on the Steam platform shows that *The Graveyard*, *Dear Esther* and

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<sup>11</sup> A Playstation 4 port of *Gone Home*, another popular walking simulator, can be seen as a nice proof of this connection as the way the game presents and triggers its commentary sections does not differ much from the way it tells its original story.

<sup>12</sup> The latter example might not be obvious but it stems from the fact that many first person adventure games of the 90's and 2000's (*Myst* and *Riven* included) gave the player the ability to explore a sizable part of the world without solving any puzzles.

*Proteus* attracted lots of critical opinions. There are also no doubts that the term “walking simulator” is oftentimes used in a derogatory way. The latest example of controversies that the genre inspire can be easily found in a discussion surrounding a provocative article on *Uncharted 4* published by Eurogamer (Matulef 2016) shortly after the game’s premiere.<sup>13</sup> It seems that no other genre polarizes the community as much. Walking simulators are either called the advancement of the medium, a true evolution of the art form (Sims 2016, Walsh 2016) or a sign of its decline and the threat to its future (Barda 2014, Sweeney 2015)

I believe that even if motivations of the detractors of walking simulators are often ideological as they stem from a reactionary and overly conservative view on the medium, critical evaluation of the arguments they give may prove to be useful. The reason for it is that uncovering the intuitions which back these arguments might help us understand the genre and the medium of videogames better. So - what exactly is the controversy about?

It seems that both sides agree that walking simulators are the result of subtractive design practices - they are created by removing elements typical for other game genres. At this point both sides disagree. One side argues that by eliminating some of the elements walking simulators achieve better aesthetic integrity, become more mature and as such can be understood as an artistic evolution of the medium of video games. The other side argues, that at least some of the elements walking simulators remove are essential for video games and thus they simply cease to be video games at all. Both claims are very contentious so it is not hard to understand why this difference in opinions leads to so many heated discussions. The claim of the proponents is a typical normative thesis that is very hard to evaluate because it depends on an aesthetic theory one choses to endorse. The claim of the opponents is hard because it is, in fact, a cloaked version of a well know question about the definition of video games.<sup>14</sup>

To complicate things even more, there is also no overall consensus on exactly which eliminated property is supposed to be responsible for the controversy. As

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<sup>13</sup> It is also worth to compare the claims of the author with the reactions in the comments below the article as well as with the reactions on a popular gaming forum NeoGAF: <http://www.neogaf.com/forum/showthread.php?t=1218510>, Retrieved 30.06.2016

<sup>14</sup> See (Aarseth & Caleja 2009) for a discussion of this problem.

pointed out above, walking simulators are created by subtracting several typical characteristics of other genres – is there a specific one which causes the trouble? Let's look at the points opponents of walking simulators make and see if we can find the real culprit.

It is sometimes argued that walking simulators are not really games because they contain no win and fail states. What is meant by these, slightly technical terms is that nothing the player does becomes evaluated by the game - nothing terminates it in an intended (win-state) or non-intended (fail-state) way.<sup>15</sup> It is very easy to see that this charge is simply inaccurate. First of all, most of the games belonging to the walking simulator genre (specifically all games presented in section 2) contain a very clear win-state. The games can be finished and reaching the intended ending is very clearly communicated to the player. What is even more important, there are many games which contain no such state, but which have never raised similar controversies and are even considered to be prototypical examples of the medium. Most of the high-score games are like that – for example, there is no win-state for the most versions of *Tetris*. On the other hand, even if it is true that most of the walking simulators (for example all of the games we analyzed in section 2 contain no fail-states they share this property with many other games which have never been questioned the way walking simulators are. For example - the whole line of Lucasfilm (and later Lucasarts) adventure games which became prototypical for the whole branch of point-and-click adventure games advertised the lack of fail-state as their main advantage over competition. Despite this their status as “games” has never been questioned. So, maybe the critique is simply badly formulated - maybe the problem with walking simulators is just that they posit no challenge for the player? Even if you couldn't fail in Lucasarts games you could still become stuck on one of their numerous challenging puzzles, so it at least explains something. But, then again - the history of the medium is full of easy games which did not provoke similar discussions.<sup>16</sup> How easy a game has to be in order for it to stop being considered a game?

It is also sometimes suggested that by using subtractive design, walking simu-

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<sup>15</sup> This was for example suggested by (Frelík 2015)

<sup>16</sup> See (Juul 2010) and (Juul 2013) for a thorough analysis of the role of difficulty in games.

lators become games without mechanics. But this provokes a question: why exactly couldn't traversal be counted as a game mechanic?

Let's illustrate this point with an example - picture a typical first person shooter, similar to the aforementioned *Half Life*. Now, if you remove the walking sections and make traversal automatic the resulting game will be reduced to one mechanic - the mechanic of shooting. The resulting genre is typically called an "on rails shooter". Games of this type did not provoke discussions on the nature of games even though they originated in the process of subtractive design. And yet, for whatever reason, if you design a game via a symmetrical operation, that is remove the shooting sections, the resulting genre - a walking simulator becomes controversial. What is the reason of this difference in reception?

### ***Press A to win.***

The point I was making in the last section is that most of the criticized aspects of walking simulators can be easily found in earlier games which, for whatever reason didn't attract similar criticism. It may now be useful to change the strategy – instead of looking at similar games from the past, let us look at games which elicited reactions and critiques that are similar to the ones walking simulators have received.

I believe that there is at least one such example and that the analysis of this example will prove useful in our case. Even though, as I mentioned earlier, there is no single genre that was met with similar reception, it can be argued that it happened in case of a single specific game mechanic, called "quick time event" (or QTE in short).<sup>17</sup>

The common implementation of the QTE mechanic is that a game interrupts a non-interactive part (for example a cutscene) by demanding a particular quick input from the player. The player does not have to guess the input - it is basically shown to her. To get the picture, think of a movie which stops and demands for the player to press a given button to go on further. Interestingly enough QTEs emerged in Sega's *Shenmue* which, as we saw earlier, was also one of the early pioneers of walking simulator sections.<sup>18</sup> The rationale behind QTEs is that they

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<sup>17</sup> Good critique of the QTE mechanic can be found in (Chichester 2011 and McCormack 2015)

<sup>18</sup> An earlier example of a very similar technique can be found in the series of laser disc based games released in the 80's and early 90's - look at *Dragon's Lair* or *Space Ace* as examples of this. The important

provide at least minimal agency in a sequence which would have been otherwise completely non-interactive. The reason why QTEs spawn controversy is that players often realize that the mechanic is superfluous - the game could just as well take care of itself. It does not really need the player's input. For this reason the players may feel somehow manipulated by the developers who call for agency just for the sake of it.

The hypothesis I propose to take into consideration is that walking simulators attract similar criticism to QTEs because their main mechanic – walking - is, in fact, more similar to QTE's than we might have initially expected. To see this consider a following concrete example of a game which blends both techniques – Quantic Dream's *Heavy Rain*. Some of the sections of the game are typical QTEs - a button prompt is given and the player is supposed to press it in a given time. Some of the sections can be characterized as a typical traversal sections where the player moves the character through space. But there are sections where the prompt the player sees expects her to hold the button (or more importantly a direction on the gamepad) for several seconds in order to make an action (for example move an object or squeeze through a narrow space). In sections like these the line between QTE and traversal becomes blurred – the only difference is that the action of the player not only triggers but also sustains the animation. So, at least in cases of sequences of linear movement the difference between walking and QTEs seems to boil only to the length of animation. But how does this help us explain the controversy surrounding walking simulators? Even if their core mechanic is, in some respects, similar to QTEs, why is this supposed to be a problem?

Imagine two hypothetical cases: first a game which comprises only of QTEs and secondly a broken DVD which stops every few minutes and requires the viewer to press the play button again. Is there a good argument for calling the first one “a game” and the second one “a broken movie”? Now remember that QTE's are not added to the cutscenes because the cutscenes are broken. They are disliked by the players because they are there just to hide a non-interactive sequence behind an artificially created layer of superfluous interactivity. A game comprised only of QTEs does not need a player – it could just as well

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difference between mechanics used in these games and QTEs is that laser disc games did not display the button the player had to press - she was supposed to guess it based on the action presented on the screen.



simply “play itself”.

Now, if you consider some of the walking simulators we analyzed in section 2, there are several examples which come close to this artificial form of interaction. They might never reach this extreme form of simplicity as even *The Passage* contains small barriers which the player has to navigate so a simple continuous press won't suffice. But the point is that of all game genres walking simulators come closest to our hypothetical example of a autonomous game – a game which can play itself. If I am right the hypothesis explains the intuitions behind the badly formulated criticism we analyzed above. It is not about lack of challenge, using too simple or too few mechanics or about removing player's agency. It is rather about the mechanic, the challenge and the agency being almost superfluous. And this is, in my opinion, the core of the controversy walking simulators generate. But, putting the normative aspect aside – not judging whether this type of games constitutes the downfall or the emancipation of the medium – is this description accurate? Are walking simulator superfluously interactive? Can this be somehow tested or measured? I believe that it is possible.

### **The Ergodic continuum**

Let me start by appealing to the classic notion introduced by Espen Aarseth in (Aarseth 1997), that is the notion of “ergodic” texts. The idea is quite simple - even though every text of culture, be it a book, a movie or a video game demands interpretation on many levels (from simple linguistic interpretation up to cultural one) only some of the recent texts of culture, titular cybertexts, require additional work from the interpreter. The interpreter has to apply an additional, nontrivial effort, in order for the text to reveal itself. Video games are the best illustration of this idea. Contrary to books or movies, they are typically not autonomous processes - they have to be actively worked on in order for them to be experienced from start to finish. Compare it to a movie or an audiobook which can be played even if no interpreter interacts with it. Games are somewhat incomplete - on top of the interpretation that is needed to approach them, they have also be operated by an agent. That these two functions are different can be easily shown - the operator and the interpreter can, for example, be different persons. What is even more important from our point of view, the operator does not even have to be human - it can be an artificial intelligence written

specifically to play the game. This idea isn't just a theoretical possibility - there are games which contain modules which enable the game to "play itself". Chess programs can serve as a good example of this - some of them can easily simulate a match between two players. Using the notion of ergodicity we may now rephrase our question about walking simulators by asking simply if they are ergodic, that is, if they require a nontrivial effort in order to be played? It is rather obvious that the question we ask hinges on the term "nontrivial" - is there a way of making it more precise, hopefully in a quantifiable way?

To answer this question we have to first understand that when it comes to games being able to play themselves, not all of them are equal. If we treat the act of playing the game successfully by some kind of computational procedure (which is the requirement for the game to play itself) then we will realize quickly that the difficulty of this task varies greatly between different games. What is most important is that the difficulty of this task has no obvious correlation with the overall difficulty of the game itself. A very simple arcade game like *Flappy Bird* can be very tough for the players but very easy to program an algorithm for. This difference makes the notion of ergodicity ambiguous - on one hand it may be synonymous with the everyday notion of "game difficulty", on the other hand it may be synonymous with a more technical sense, in which the effort needed to play the game can be measured in computational (rather than in psychological or physiological terms).

What is interesting, even though the idea of treating games as tasks which can be computationally solved seems to be rather obvious, it has attracted the attention of researchers only recently and the results are very interesting from our point of view. In two studies which analyzed several classic 80's and 90's games (Viglietta 2012) and Nintendo games (Aloupis et al. 2012) respectively the researchers established that the games in question are in fact so called NP-hard problems. Let me quickly explain this technical notion known from mathematical logic, as we are going to use it in our further considerations.

It is best to understand the notion of "NP-hard problems" in an opposition to the notion of "P-hard problems". The latter means that a given problem can be in principle solved computationally in a finite time period. That is - even if the solution is complex, it means, that there is a way of finding the solution in an

algorithmic way. But this is not the case for all tasks. Sometimes even if a given solution can be tested via an algorithm in finite time, the actual procedure of finding the solution can take longer than that. This is what NP-hard problems are. Now, if the number of possible solutions is very big it creates a huge technical problem because even if we are able to evaluate any given solution we have to be lucky when it comes to selecting solutions for tests. For this reason, even if the computational power we have at our disposal is considerable, we cannot resort to random picking, as this brute force technique may not prove to be lucky enough. We try to constrain the number of solutions worth testing by using some kind of heuristics, looking for analogies with other solutions etc. but at the end of the day we may not find anything to speed up the process. The trick is, that humans are pretty good at finding these types of solutions and we are not sure how exactly do we achieve this. People call it an intuition, a hunch etc. but we are not fully sure which heuristics do we actually use when we resort to this psychological phenomena. And yet, as very recent study shows some of the games may be even harder: the study shows, that not only finding but also testing (or applying) the solution may take infinite time. The technical term for these kinds of problems is “PSPACE-hard problems”. The referred study shown that a modified Super Mario Bros. game can in fact be PSPACE-hard (Demaine et al. 2016). The point that is important for our considerations is that by definition, solving NP-hard (or PSPACE-hard) tasks requires more computational effort.

The way these technical considerations may help in our discussions is that they serve as a basis for a more complex, measurable notion of ergodicity. The idea I wish to propose is that the ergodicity of games could be measured relative to the computational complexity of the problem they pose for the operator. The effort that the operator needs to put in in order for the game to function should be understood as a continuous parameter - from easy P-hard problems which are so easy that the game is practically autonomous as it presents the player with tasks which are already solved by its code (this would fit our example of a game consisting only of QTEs) to PSPACE-hard games which cannot be solved without using clever heuristics and luck.

This solution creates a scale of ergodicity for games which I propose to call “the ergodic continuum” for even if it contains specific discrete points the difference

in computational complexity between them differ in grades. The idea is that if we treat games as computational problems to be solved by the operator we can now differentiate between:



The way the notion of ergodic continuum helps us with our conundrums with walking simulators should be obvious by now. If my analysis is correct, the intuitions behind the critique of these games boils down to the fact that by design they are located on the left side of the scale- they are very easy cases of P-hard problems, that is they require minimal computational effort from the operator. The result of this is that the mechanic they are based on (linear or semi-random walking) can be easily supplanted with an algorithm. This is a natural effect of subtractive game design philosophy – as pointed out in (Viglietta 2012) eliminating gameplay elements can easily degrade a game from the status of NP-hard to P-hard. And yet, if we follow this reasoning it is obvious that the more radical criticism geared towards walking simulators isn't warranted as (at least in the specific cases of games analyzed in most of the discussions) they do not cross the boundary of autonomous software. Whether this specific category of autonomous programs can still be called “games” is a different question, which should probably be further studied.

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## REFERENCES

1. Aarseth, E. (1997), „*Cybertext: Perspectives on Ergodic Literature*”, Baltimore and London: Johns Hopkins University Press, 1997
2. Aarseth, E., (2014), „I Fought the Law: Transgressive Play and the Implied Player” In: Segal, N., Koleva, D., (Eds.), *From Literature to Cultural Literacy*, Palgrave Macmillan, 2014
3. Aarseth, E., Caleja, G., (2009), “The Word Game: The Ontology of an Undefinable Object”, invited talk at *The Philosophy of Computer Games 2009*. Oslo, 13-15 August 2009.
4. Aloupis, G., Demaine, E. D., Guo, A., (2012), Classic Nintendo Games are (NP-) Hard, arXiv:1203.1895v1, <http://arxiv.org/pdf/1203.1895v1.pdf>, Retrieved on 30.06.2016
5. Barda, O., (2014), „Art movements in video games, Justwalkingism”, Gamasutra, [http://www.gamasutra.com/blogs/OscarBarda/20140731/222365/Art\\_movements\\_in\\_video\\_games\\_Justwalkingism.php](http://www.gamasutra.com/blogs/OscarBarda/20140731/222365/Art_movements_in_video_games_Justwalkingism.php) Retrieved on 30.06.2016
6. Chichester, C., (2011), „The Bridge Between Gameplay and Cutscenes: QTEs”, Gamasutra, [http://www.gamasutra.com/blogs/CaryChichester/20111227/90834/The\\_Bridge\\_Between\\_Gameplay\\_and\\_Cutscenes\\_QTEs.php](http://www.gamasutra.com/blogs/CaryChichester/20111227/90834/The_Bridge_Between_Gameplay_and_Cutscenes_QTEs.php), Retrieved on 30.06.2016
7. Cross, Katherine, (2015), „How 'walking simulators' allow us to touch other worlds”, Gamasutra [http://www.gamasutra.com/view/news/251191/How\\_walking\\_simulators\\_allow\\_us\\_to\\_touch\\_other\\_worlds.php](http://www.gamasutra.com/view/news/251191/How_walking_simulators_allow_us_to_touch_other_worlds.php) Retrieved on 30.06.2016
8. Demaine, E., Viglietta, G., Williams, A., (2016), “Super Mario Bros. Is Harder/Easier than we Thought”, *Proceedings of the 8<sup>th</sup> International Conference of Fun with Algorithms*, 2016
9. Frelik, P., (2015), “Walkers, Notgames, and the Aesthetic of incompleteness: Towards Finer Definitions and Ever Subtler Game Criticism”, Invited lecture at: Central and Eastern European Game Studies conference, Cracow, 2015
10. Garda, M. B., (2013) „Neo-rogue and the essence of roguelikeness”, *Homo Ludens* 1(5) / 2013
11. Garda, M. B., Grabarczyk, P., (2016), „Is Every Indie Game Independent? Towards the Meaning of Independence in Video Games”
12. Kumar, M., (2011), “IndieCade: Uncharted's Unlikely Indie Inspirations”, Gamasutra, [http://www.gamasutra.com/view/news/127538/IndieCade\\_Uncharteds\\_Unlikely\\_Indie\\_Inspirations.php](http://www.gamasutra.com/view/news/127538/IndieCade_Uncharteds_Unlikely_Indie_Inspirations.php), Retrieved on 30.06.2016
13. Juul, J., (2010), “Casual Revolution”, Cambridge Mass, MIT Press, 2010
14. Juul, J., (2013), “The art of failure : an essay on the pain of playing video games”,

Cambridge Mass. MIT Press, 2013

15. Matulef, J., (2016), „Combat fatigues: How Uncharted is a walking simulator in action game's clothing”, Eurogamer, <http://www.eurogamer.net/articles/2016-05-11-combat-fatigues-how-uncharted-is-a-walking-simulator-in-action-games-clothing>, Retrieved on 30.06.2016
16. McCormack, M., (2015), „Quick Time Events - An overused trope?”, Gamasutra, [http://www.gamasutra.com/blogs/MarkMcCormack/20150423/240464/Quick\\_Time\\_Events\\_\\_An\\_overused\\_trope.php](http://www.gamasutra.com/blogs/MarkMcCormack/20150423/240464/Quick_Time_Events__An_overused_trope.php), Retrieved on 30.06.2016
17. Penabella, M. (2015), „Why are we so afraid to walk?”, Kill Screen, <https://kill-screen.com/articles/why-are-we-so-afraid-walk/> Retrieved on 30.06.2016
18. Pinchbeck, D. (2009), “Story as a function of gameplay in First Person Shooters and an analysis of FPS diegetic content 1998-2007”, University of Portsmouth Ph.D. thesis, <http://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.500333>, Retrieved on 30.06.2016
19. Samyn, M., (2008), „The Graveyard post mortem”, The old Blog of Tale of Tales, <http://tale-of-tales.com/blog/the-graveyard-post-mortem/>, Retrieved on 30.06.2016
20. Sicart, M., (2008), „Defining Game Mechanics”, Game Studies Vol 8 issue 2, 2008, <http://gamestudies.org/0802/articles/sicart>, Retrieved on 30.06.2016
21. Sigl, R. (2014), „First Person Walker Footnotes #1: Ed Key” (interview), Videogametourism, <http://videogametourism.at/content/first-person-walker-footnotes-1-ed-key>, Retrieved on 30.06.2016
22. Sims, D. (2016), „Firewatch and the Addictiveness of Lonely Video Games”, The Atlantic, <http://www.theatlantic.com/entertainment/archive/2016/02/firewatch-and-the-rise-of-the-walking-simulator/462324/> Retrieved on 30.06.2016
23. Stuart, K., (2016), „Dear Esther: how the 'walking simulator' made it to PlayStation 4 and Xbox One”, The Guardian, <https://www.theguardian.com/technology/2016/apr/06/dear-esther-original-walking-simulator-playstation-4-xbox-one>, Retrieved on 30.06.2016
24. Sweeney, J., (2015), „Indie Implosion: Walking Simulators”, Super Nerdland, <https://supernerderland.com/indie-implosion-walking-simulators/>, Retrieved on 30.06.2016
25. Thier, D., (2016), „'Everybody's Gone To The Rapture:' Why Do People Hate 'Walking Simulators?'”, Forbes, <http://www.forbes.com/sites/davidthier/2015/08/26/everybodys-gone-to-the-rapture-why-do-people-hate-walking-simulators/#24a9d2947646>, Retrieved on 30.06.2016

26. Walsh, D., (2016), „So-Called 'Walking Simulators' Are Gaming's Biggest Innovation in Decades”, The Stoned Gamer, <http://thestonedgamer.com/opinions/item/706-so-called-walking-simulators-are-gaming-s-biggest-innovation-in-decades/706-so-called-walking-simulators-are-gaming-s-biggest-innovation-in-decades>, Retrieved on 30.06.2016
27. Viglietta, G., (2012), "Gaming is a hard job, but someone has to do it!", arXiv:1201.4995 [cs.CC], <http://arxiv.org/pdf/1201.4995v5.pdf>, Retrieved 30.06.2016

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