

Self-playing Games: Rethinking the State of Digital Play

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Introduction

In my short contribution to the discussion on new game definitions, I would like to focus on an under researched aspect of digital play, involving automation and self-play, and what follows, the agential qualities of the game itself. When thinking about video games, I consider it important, if not necessary, to look at their digital dimension. The examples I am currently working with, make the digitality even more apparent and challenge a player-centric or predominantly anthropocentric understanding of gameplay.

Self-playing Games and Non-human Ludic Agents

Automation and gamic action

The modern understanding of the term automation, deriving from Greek *autómatos* (*self-moving*) and of relatively modern 16th century origin, denotes a machine with a self-contained principle of motion (Truitt 2015, 2). A digital computer is in many ways precisely such a machine. Therefore, most games, staged within the medium of the computer, involve some level of automation, such as calculating gathered props, lost lives, or the player's proximity to an enemy NPC (non-player character). Unlike in board games, where all such computation needs to be done manually by the human player, in a digital game most of the processes are automated and hidden from the player's view. This type of automation is well known to an average gamer.

What is much more mesmerising is the sort of automation projected onto the representational layer of the game, bringing the "aesthetics of agency and control (or the loss of these)" (Giddings 2005) to the forefront, to emphasise with Seth Giddings. Many recent examples I will draw upon tend to partially or entirely automate those parts of gameplay, which have been until now reserved for humans. Think about movement-simulating bots, self-acting non-human agents, or game worlds changing without the input from the human player. Here, automation becomes expressed in the playful act of the machine – machine's gamic action or ambience act as Alexander R. Galloway puts it (2006).

So, let me illustrate those observations with a few examples.

Everything by David O'Reilly (2017)

As I was preparing this talk, *Everything* (2017) kept playing itself in the background, demanding from me no more attention and participation than a lazily humming Roomba robot vacuum cleaner. In David O'Reilly's open-ended simulation, the player can do literally everything and at the same time does not have to do anything at all. On the one hand, the game invites the player to a sandbox-like exploration of its universe, giving them the possibility to get into the shoes of every creature possible. On the other, if left unattended, the game starts playing automatically - "[o]ne might let *Everything* play in the background while doing other things, letting it be an ambient aquarium of universes" as

the The Guardian reviewer notices (Brewster 2017). This paradoxical practice of not-playing, but watching the game play itself has been gaining a wider attention in the past few years, partially due to the emergence of such live-streaming platforms as Twitch, and partially due to the ever-changing attention span of the growing player base. However, if we reach beyond the veneer of consumer tastes and media frenzies, in the self-playing games and seemingly living virtual universes we may discover much older tropes of fascination with autonomous non-human agents (think of von Kempelen’s Chess Playing Automaton, Marie Antoinette’s Piano Playing Android or Jaquet-Droz’s The Writer automaton, amongst many others).



Fig. 1. *Everything* (2017)

Emissaries by Ian Cheng (2017)

Everything brings to mind another self-playing simulation, this time an art installation called *Emissaries* by Ian Cheng (exhibited in MoMA and on Twitch.tv in 2017), described by the author as the video game that plays itself. “The works are comprised of computer-generated simulations like those used in predictive technologies for complex scenarios such as climate change or elections”, we read on MoMA’s website.



Fig. 2. *Emissaries* (2017)

Sim Settlements (2017)

Another fascinating example of autonomous non-human agents traversing the game worlds points towards one of the most recent *Fallout 4* (2015) mods, *Sim Settlements* (2017). The mod makes non-player characters build their own housing, plant their own crops, even work in shops they themselves construct. The human player is welcome to the world-building algorithmic spectacle as a bystander or a delegating agent rather than an active performer. The non-player characters no longer wait for the player to micromanage them, instead, they take matters in their own hands, in a similar way to the delegated gameplay model known from god-simulation genres. The game world acquires a life-like dimension. As one of the mod's users emphasises:

The buildings your settlers construct aren't cookie-cutter affairs: they're all a bit different, right down to the clutter that eventually appears inside them. This means just about every house and store your NPCs build will look unique. I was oddly pleased to see my companion Curie build herself a home out of a trailer rather than a wood or tin shack like everyone else had done. (Livingston 2017)

Idle Games

Gameplay automation has also evolved into an entire game genre. In the so-called incremental ("idle") games, also referred to as passive, self-playing or clicker games, there is minimal or no active engagement required from the player in order for the game to progress.¹ The initial stages of most idle games (e.g. *AdVenture Capitalist*, 2014; *A Dark Room*, 2013; or the recent *Paperclips*, 2017) start with the player performing a simple task of clicking in order to gain more in-game currency (e.g. logs, coins, cookies etc.), which in turn allows them to acquire items or skills that automate most of the gameplay in the future. As the game unfolds incrementally, more options emerge and more tasks are automated. Idle games are semi-automated "on-going, never-ending affairs" (Bogost 2010).

Perhaps one of the most fascinating self-playing games is *Dreeps* (2016), a semi-automated mobile game, which only obliges the player to set the alarm clock for the game's character to wake up and embark upon a journey. While the player is sitting at their desk at work, the game's character traverses fictional worlds, slays monsters and "lives" a life of their own. The player may lurk into the game at any time, watching the in-game world and the character progress independently. In the evening, the game is metaphorically and literally put to sleep. The player sets the alarm clock for the character to wake up the following day and continue the adventures. As the designers themselves state, *Dreeps* is an RPG for those who do not have time for the actual playing.

¹ I am discussing self-play within the context of idle games more extensively in the following article: "Interpassivity and the Joy of Delegated Play in Idle Games" (Fizek, forthcoming 2018).



Fig. 3. *Dreeps* (2016)

Rethinking Anthropocentric Rules of the Game

Automation of play has become a visible part of the ludic landscape. As I am arguing, it fundamentally changes the way we think about: digital games, play, control, agency, and players.

Ludic paradox

At a first glimpse, automation of play seems like a puzzling paradox. After all, games have been primarily understood as objects to be actively engaged with, conflicts to be resolved, and meaningful actions to be taken (Huizinga 1949/2002; Caillois 1958/2001; Crawford 1982; Juul 2003; Salen and Zimmerman 2003). They are supposed to be ergodic, requiring a non-trivial effort from their participants, who in turn need to actively interpret the activity as a game for it to be considered one (Aarseth 1997; Aarseth and Calleja 2015). If anything else, games have been described as inherently interactive (Crawford 1982; Ermi and Mäyrä 2005), and oftentimes in contrast to non-interactive or less interactive media such as films or books, however problematic such oppositions may be. In other words, most digital games, staged in the medium of a computer, could be described as “explicitly participational” (Manovich 2001, 71). Of course all those assumptions are made with regards to human players.

Control

This paradox, however, does not have to express any conflict of interests. It rather opens the category of agency towards non-human entities. Control over the game becomes an act of negotiation between human and non-human actors. Such a post-human (Braidotti 2013) tone resounds in Alexander Galloway’s definition of digital games, as actions not only of human operators but equally so, those of machines (Galloway 2006). Even more so, of machines, which do not always act in response to human players, but independently of them in the so called “ambience acts” of the machine - the moments when the digital game plays itself while waiting for the player to return and continue where they left off (Galloway 2006). As we have seen in all the variety of examples, the agential dimension of the machine becomes an ever more present part of gameplay. Therefore, it is crucial to take a closer look at such conceptions of agency, which take into account the interplay between the machine and the (human) player (Mukherjee 2008, 235).

Anthropocentrism and Player-centrism

Human players seem to find automation of gameplay quite an astounding experience, especially, if it involves representations of human-like figures, who virtually embody the self-acting algorithms,

producing an illusion of a living agent in a dynamically responding world. The fascination with life-like capacities of virtual spaces resound in the following words of the player:

I can't remember when I first saw AI picking fights with each other [...] [but] the first time it happened, it was a minor moment of joy. Not because the enemy of my enemy is my friend, [...] but because it meant the game world wasn't all about me. (Rossignol 2012)

The above words expressing a moment of ludic epiphany ("the game world wasn't all about me") open a much-needed discussion on the non-player centric perception of digital play, and the part of the human player within it. Humans are usually depicted as sole meaningful agents, deriving pleasure from control over the game. In most digital games, the role of the human player is to actively participate in gameplay, and that of the machine to enable, sustain, and facilitate play; record its progress and communicate the outcome to the player. In many of the examples mentioned above, the human becomes a witness to the system's agency, and a delegator of play onto the algorithms (bots, mods, ludic system).

Post-human perspectives

By bringing AI-driven non-human players into the forefront, I open a dialogue with such scholars as Alexander R. Galloway, Ian Bogost, Seth Giddings or McKenzie Wark, amongst many others. More than a decade ago Seth Giddings proposed to recognise technological agency and shy away from the anthropocentric assumption that agency resides solely in the human (Giddings 2005). Video games as instances of everyday technoculture, as such operate within the premises of digitality, technology, simulations and software. And this digital and networked nature of the computer calls for a decentralised understanding of the player as an active agent. Post-humanist thought seems to be offering a promising perspective for games research in this respect. The subjectivity of the player is redistributed during gameplay into a post-human network of human and non-human bodies and agentialities (Stasieńko 2017).

It is an eye-opening act to look at the world from the perspective of a thing as Ian Bogost notices in *Alien Phenomenology* (2012). It is equally fascinating, if not necessary in order to understand digital play, to move beyond the human and look at the phenomena of gaming from the point of view of the game instead (McKenzie 2009, 223). The very fact that games entail AI, procedural generation, complex agential relations between the player and the avatar, mean that strict divisions into subject and object, activity and passivity need to be rethought.

Technogenesis

More importantly, technology as an inseparable part of being human, is more than a mere tool to achieve goals. A digital game is much more than a tool enabling and nesting human play! This perspective of human-technological interconnectedness, named by Katherine Hayles as *technogenesis* (Hayles 2011), manifests itself in the way digital games operate as human-non-human ludic entanglements, embodying the agential role of the machine. Think about Stanislaw Lem's deep blue Ocean of Solaris, an AI plasma entity, which altered the measurement equipment of the space scientists, so that it was no longer clear where the interpretation ended and the Ocean began (see *Solaris* 1982, 27-28).

The examples of self-acting and self-playing AI, which I have drawn upon in the previous section, make the technocultural, technogenic and post-human dimensions even more pronounced. Digital

games by their very nature break down the subject-object, organic-inorganic, and player-game dichotomies.

Towards an Open Definition

All of the above points are crucial in the discussion about new game definitions. It is important to see with new eyes from different perspectives, focusing on the digitality of games, taking into consideration their cybernetic roots and algorithmic foundations, and most importantly acknowledging their capacity to shape the human player in the act of play, much like the Ocean in *Solaris*.

So, if I was to embark upon the impossible to define what a digital game is, I'd try the following:

A digital game is an act of communication and a playful exchange, involving some degree of control negotiation between the human and the non-human, between the player and the machine.

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Ludography

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