The work of game in the age of automation

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Editors' introduction: The work of game in the age of automation

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> The achievements of the first technology might be said to culminate in the human sacrifice; those of the second, in the remote-controlled aircraft which needs no human crew.
>
> (Benjamin [1936] 2008: 26)

Currently, at the edge of the new digital frontier, automation and smart algorithms are gaining immense social attention, enticing, as mechanization and machines in the previous centuries, as much wonder as awe. Countless magazine headlines paint a fully automated future and ask question about the social significance of automation driven by artificial intelligence. The most recent cover of the *MIT Technology Review* magazine (July/August 2018 issue) reads: 'AI and robots are wreaking economic havoc. We need more of them'. Automation seems to be creeping into all aspects of our lives (at least in the developed and industrialized parts of the world), remaining especially noticeable in the context of work (McAfee and Brynjolfsson 2011) and the utilitarian products and processes of the fourth industrial revolution – such as fully automated Tesla's factories, Google's driverless cars or Amazon's automated order and delivery chains, to start with a few most recognizable examples.

But, automation is not only altering work. It is changing play too (in the broadest sense of the word).

Recent experiments with Artificial Intelligence (AI) have been hugely affecting the creative domains – music, visual arts, literature and film. And although the first computer-generated art appeared already a few decades ago soon after the invention of computers (Nake 1971: 18), in the last few years it has become particularly pronounced in the wider consciousness. Some of the examples include Sony's first fully AI produced music album, J. Walter Thompson's 3D printed Rembrandt 'created' by deep learning algorithms, *Sunspring* (Sharp, 2016) sci-fi film co-written by AI, or Google's experiments with natural language learning and poetry (below an excerpt from an algorithm-generated poem), amongst many others.

> there is no one else in the world.
> there is no one else in sight.
> they were the only ones who mattered.
> they were the only ones left.

Also, the latest exhibition at V&A (Victoria and Albert Museum) in London Chance and Control: Art in the Age of Computers brings AI-driven works of art into focus (e.g. *Dionysus* by Fabrizio Augusto Poltronieri, who has also contributed to this issue). It is indeed very symptomatic to be celebrating 50 years of computer-generated art, inspired by the landmark Cybernetic Serendipity exhibition of 1968, on the cusp of a new automated era.

It should come as no surprise then that the 'automatic turn' also affects how we design and play within virtually summoned worlds. AI-driven characters and environments have been part of video games for quite some time now. Currently, automated gameplay or automation-driven design processes are even more prevalent
– procedurally generated worlds replicate themselves to infinity, new self-playing game genres emerge (e.g. 'idle' games), and in-game bots take over the reins of 'gamic action' (Galloway 2006), automating in-game tasks or populating the already existing games. Think of boundless game worlds of *No Man's Sky* (2016), or gameplay simulating algorithms, a true plague for the developers of massively multiplayer online role-playing games (MMORPGs) or augmented reality multiplayer games such as *Pokémon Go* (2016). Players often use bots and macros to partially automate the gameplay and alleviate the repetitiveness of tedious tasks necessary in order to level up the character. In the case of incremental or the so-called 'idle' games – such as *AdVenture Capitalist* (2015) – automated gameplay becomes a new entertainment model in itself, systematically transforming play from an act of utter absorption (Huizinga 1980: 13) to an act of 'distracted habituation' (Benjamin [1936] 2008: 40); the human player from an active focussed agent to a gameplay delegator or intermittent spectator. To put it in other words still, automated play produces a spectacle of 'casual noticing' rather than 'attentive observing' (Benjamin [1936] 2008: 40).

In one of the most recent academic projects within the area of game design, deep-learning algorithms have been used to generate playable game levels in a first-person shooter *Doom* (Giacomello et al. 2018), contributing another stepping stone to procedural content generation, an ever more popular technique used in video game development.

Creative computing has been deploying automated game generation systems for some time now in order to design abstract rule systems and visual realization of those rules (Mateas and Nelson 2007). Although automated level design per se is not the focus of this issue, it is important to mention it in order to see the full spectrum of changes linked to automation within the domain of games.

Automation affects both, the figure of the player and that of the designer. It alters the experience of play. We could say that the technological reproducibility of play (think of all the above-mentioned examples of play delegated onto mods, bots and clicker algorithms) changes the relation of the players to the game (Benjamin [1936] 2008: 36). An in-depth reading of Benjamin's 'Work of art in the age of technological reproducibility' in relation to digital games has been conducted at this year's *Digital Games Research Association* annual 2018 conference. In her opening keynote on 'Play in the age of automated reproducibility', Anne Dippel proposed to rethink digital play, games and design with Benjamin's seminal work. This special issue could be seen as an indirect answer to that call. It tries to examine games and play in the light of the current fascination with automation and AI, and open the floor to numerous daunting questions: how does automation change the ludic landscape?; how to theorize automated play?; and how it changes the relationship of the human player to the game? A theme-based journal issue seems like a perfect stage to put all the above questions into the spotlight. We hope to capture the current automated ludic moment, and open an interdisciplinary space for discussion bringing together diverse research perspectives and examples dealing with the relationship between automation and gaming.

The Autoplay issue will open with a critical reflection on automation of play and its significance for the theoretical enquiries into digital games and play. In ‘Automation of play: Theorizing self-playing games and post-human ludic agents’ Sonia Fizek will look at various instances of automated gameplay through a post-humanist lens, proposing to rethink the relationship between human players and digital games, and renegotiate the current state of theory in Game Studies. Alex Gekker’s contribution ‘Let’s Not Play: Interpassivity as resistance in Let’s Play videos’ will offer a perspective to understand the delegated play and spectatorship through interpassivity, a theory introduced in the 1990s by two philosophers – Robert Pfaller (1996) and Slavoy Ži žek (1997). Nicholas Taylor and Jessica Elam will follow with an analysis of the gaming expertise in *League of Legends* as a form of automated play. In ‘“People are robots, too”: Expert gaming as autoplay’ the authors will argue for automated play as a property not only specific to technical machines but rather characteristic of assemblages of machinic and organic bodies. Walt Scacchi will introduce the readers to rarely researched genres of computer games: motorsports games and simulated automobile racing. ‘Autonomous eMotorsports racing games: Emerging practices as speculative fictions’ will contribute to the inquiries into automated play with a narrative of possible socio-technical configurations. The last piece closing the issue will explore the relations between chance and control in the field of automated algorithmic art. In a short essay on ‘The Visual Theogonies: Chance, control, automation and algorithmic art’, Fabrizio Augusto Poltronieri will delve deeper into a series of his artworks Visual Theogonies (2014), which arose out of a playful encounter with the poem ‘Theogony: The Origin of the Gods’ by Hesiod.

Last but not least, games we play reflect our values and lay bare the rules we play by. The game systems represent on a micro-scale differing modes of human–machine coexistence, dreams and fears. Games as spaces of fiction and speculation, have a far-reaching potential to play out various relationships to autonomous technology. Just as the human–machine social debates and dreams were depicted in the fiction of its time, the current fascination with algorithms, automation and non-human agency are literally replayed in the most popular digital play form of post-modernity – video games. More importantly, due to their cybernetic nature, games not only address the fascination with post-humans on the representational layer (as a mere theme or trope), but also embody it by implementing AI and algorithmic agency into the play experience. With the ever more complex and present AI, the questions of what it means to play and to be a human player seem timelier than ever; and most importantly, still barely answered.

We hope the readers will be able to find some of the answers on the pages to follow.

The Editors

Sonia Fizek and Markus Rautzenberg

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