# Videogame Visions of Post-Climate Change Futures

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#### **ABSTRACT**

In this paper I describe my current research into videogame depictions of the future, and those that engage substantially with anthropogenic climate change, building upon an understanding of the role played by visions of the apocalypse as an outlet for expressions of popular fears and anxieties. The paper looks at games that have been released in the recent period, which has seen a rise in corporately funded campaigns undermining popular and scientific consensus on climate change, discussing three games in detail and the climate future they present; *Anno 2070* (2011) which depicts a flooded earth; *Fate of the World* (2011) which presents a player with the supreme difficulty of balancing development goals with a finite carbon budget; and *ARMA 3* (2013), which deploys visual depictions of renewable energy power generation (windmills, tidal power, solar arrays) to evoke a sense of futurity and in the process projects an unexpectedly optimistic vision of our climate future.

# Keywords

videogames, climate change, futurity, premediation, apocalypse, renewable aesthetics, *Anno 2070, Fate of the World, ARMA 3* 

## INTRODUCTION

It is fast becoming obvious that we are living in a slow apocalypse. This apocalypse takes the form of anthropogenic global warming and the world that it is predicted to precipitate. Estimated to have – at very best – only *somewhat* devastating impacts on the way that individuals and societies live and engage with their environment, at the extreme end of predictions it presents a vision of a future planet earth devoid of the capacity to sustain human life entirely. Videogames have frequently engaged with apocalyptic visions, though usually of a distinctly different character. The prominent place accorded visions of the nuclear post-apocalypse (and its aesthetic equivalents) is well documented in games, from the *Fallout* series (1997-2010), and the related visions of the *S.T.A.L.K.E.R.* series (2007-09). Similarly, visions of apocalypses ranging from alien invasion to zombie apocalypses abound in commercially successful game franchises, from *Gears of War* (2006-13), to *Resistance* (2006-12), *Left 4 Dead* (2008, 2009) and *Dead Rising* (2006-13), along with countless others.

A less commonly acknowledged and as yet unexamined trend is videogames' depiction of future visions of climate change, apocalyptic or otherwise. This paper presents a brief attempt to examine the few recent instances of videogame visions of climate change that

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have emerged during a period that has seen both some of the most clear and dire warnings from climate scientists as well as the most organized and well-funded corporate campaigns to sow doubt and dissent. The paper sets out to examine the aesthetic and thematic resonances in three games, *Anno 2070* (2011), *Fate of the World* (2011) and *ARMA III* (2013) as well as the stark differences that are apparent in their various treatments of this issue, and the different visions of our climate future that they present. I have elsewhere previously argued (Abraham, 2010) that the post-apocalyptic open-world racing game *FUEL* (2009), though developed by a French studio, captures aesthetic elements of the Australian landscape in many of its distinct and varied locations. This is likely due in part to the significant role played by Australian landscape itself in our apocalyptic imaginary, via such iconic films as *Mad Max* (1979) and *On The Beach* (1959).

Videogames have engaged with the issue of climate change largely through two registers: the first (and most obvious) in a mechanical way, either simulating climate change or certain aspects of it. The ominously titled *Fate of the World* offers a thoroughly systemic engagement with the issue, with the player tasked with mitigating the worst effects of climate change while also needing to balance those efforts against certain world development goals, such as increasing literacy and economic growth in countries across Africa and the third world. A strategy game, *Fate of the World* puts the player into a supreme-commander style role at the head of a worldwide organization reminiscent of the *X-Com* series (1994-2012), and gameplay revolves around utilizing limited resources and maintaining the delicate balance of pleasing member nations while also somehow keeping carbon emissions in check. More often than not, this is an impossible task, and the game has a certain air of despair about it, depicting the herculean task involved in curbing climate change successfully.

The *Anno* (1998-2012) series of trading game received its fifth installment in 2011, depicting a *Waterworld* (1995) like vision of Earth as flooded by polar icecap melt-water. Mechanically, the game involves city building and resource managing elements, and deploys only a fairly superficial difference between the two main rival factions – memorably described as "Eco Dudes and Smoke Belchers" by Jim Rossignol (2011) in a review of the game. The extent of its engagement with climate change boils down to clichéd aesthetic choices and gameplay elements compromised by the need for gameplay 'balance' between the two factions. Given the catastrophic nature of climate change events, which flood coastal cities and low-lying islands (Edwards, 2013), and which are predicted to force the movements of vast populations, it seems safe to assume that some social transformations would result, but little to none are depicted in *Anno 2070*.

The military simulation game ARMA 3 (2013) is not the first game one might consider when searching for an optimistic depiction of a post-climate change future, but across the game's two main island maps, the smaller Stratis and the sprawling Altis, is found one of the most subtly positive visions for the future of the climate in games or any media. Across the 270-odd square kilometers of Altis are dotted wind farms, solar arrays and giant thermal collectors of a type similar to the Ivanpah solar project in the Mojave desert, which has been described as a sublime piece of landscape art as much as it is a sustainable power plant. The aesthetic appearance of these sustainable energy plants gives the game most of its near-future feel, and in the process creates an optimistic vision of a world that has overcome the many obstacles in the way of a transition to low carbon energy production – quite unlike either the bleak procedural 'realism' of Fate of the World or the apolitical unreality of Anno 2070.

The paper argues for the importance of the examination of this theme in past, contemporary and future games for its contribution to our understanding of videogames place and relationship with popular visions of the future.

### BIO

Ben Abraham is a PhD candidate at the University of Western Sydney researching internet communities including games communities, and the political and philosophical issues around the responsibility of non-human actors. His writing has been published online at Gamasutra, Kotaku Australia, and in print with KillScreen Magazine and the Halo and Philosophy anthology.

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