**Mark Silcox, ed.** *Experience Machines: The Philosophy of Virtual Worlds*. Rowman & Littlefield 2017. 242 pp. $126.00 USD (Hardcover ISBN 9781786600677); $42.00 USD (Paperback ISBN 9781786600684).

Rarely does a thought experiment in philosophy have the potential to become reality. Yet this seems to be the case with Robert Nozick's 'Experience Machine' (EM). First introduced by Nozick in his 1974 book *Anarchy, State and Utopia*, the thought experiment asks us to imagine we have been given the chance of entering into a virtual world that has been especially designed to give us sensory experiences of our wildest fantasies. Nozick argues that we would not (and should not) choose to enter into the EM. The reasons he gives are well known: we want to *do* certain things, not just have the *experience* of them; we want to *be* a certain way, not just feel a certain way; and we want to have contact with a deeper *reality*, not just a manmade one.

Although Nozick's thought experiment has been extensively discussed, and is known by almost every philosopher and philosophy student, Mark Silcox's latest collection of articles *Experience Machines: The Philosophy of Virtual Worlds* offers a timely and much needed reappraisal. At the time of Nozick's passing in 2002, one could be forgiven for thinking that his conclusions about the EM had been vindicated. Science fiction movies such as *The Matrix* (1999) painted a picture where, given a choice, reality is clearly to be preferred to a virtual world—even if the experience of it is far inferior. Virtual reality technology was going through a dark period, where the hopes of the early nineties gave way to technological barriers and fears concerning the effect video games and other immersive media might have on society. But as Silcox highlights in his Introduction, there have been 'enormous cultural and technological changes' (2) since Nozick first discussed the EM, which make his conclusions about it seem far less certain today. The greater role computer simulations play in scientific research; the amount of time people spend using social media; and the more extensive place of video games in our culture, all give reasons to think that life inside a virtual world might not be as bad after all.

Following the Introduction, the book is divided into three parts, with the focus of Part I being 'Virtual Experiences and Human Well-Being.' Chapter 1 by Peter Ludlow references a character who chooses to re-enter the virtual world of *The Matrix* after being 'liberated.' Ludlow outlines how life inside a virtual world can be divided into five grades—each with varying degrees of withdrawal from the real world. Most of these provide opportunities for challenge and accomplishment, and can therefore promote individual well-being. Only the last of these, one that affords no interaction, agency, risk or harm, corresponds to life inside Nozick's EM. Whilst Ludlow agrees that nobody would choose to enter this kind of world, he does so for different reasons than Nozick. It is not because this world is *artificial* that we choose not to enter into it, but because it is one that does not allow for *choice* or individual *agency*.

Chapter 2 by Daniel Pietrucha goes much further in support of the EM. Pietrucha makes an insightful observation that in some instances, it is clearly rational to enter into the EM, e.g., when one is considering suicide or one's quality of life is low. In the case of suicide, Pietrucha asserts that the increase in well-being afforded by the EM is infinite compared to the alternative. But he also claims that it is rational to enter even if we are content with our current lives. We cannot see this because of an 'imaginative failure' on our part. I take some issue with this argument: if one cannot conceive of life inside the EM, then surely it is just as rational to *abstain* from entering it? Chapter 3 by Emiliano Heyns and Johnny Hartz Søraker argues that the EM does not refute hedonism but rather

requires hedonism to be redefined. They propose this be done by adopting *intrinsic attitudinal hedonism* according to which 'the pleasures relevant to assessing well-being hedonistically should be understood as propositional attitudes of "taking pleasure in a state of affairs" rather than sensations' (45). When suitably amended, it turns out that people can enjoy the EM, and whether nor not it is preferable just depends on what people individually 'take pleasure in.' In Chapter 4 Jon Cogburn shifts gear by focusing on a related thought experiment by Hilary Putnam: the 'brain in a vat'. Cogburn argues that Putnam's use of the brain in a vat scenario relies on a so-called 'inclosure paradox' making it logically analogous to Russell's paradox and the liar paradox.

Part II of the collection is concerned with real-world experience machines and their implications. Chapter 5 by E. M. Dadlez takes issue with Nozick's assertion that one cannot have knowledge in a virtual world. According to Dadlez 'virtual worlds offer the same prospect for the acquisition of moral and other insights as fictional worlds' (78). The author makes a distinction between two kinds of immersion in a virtual world: (i) Matrix-style immersion, where a person continues to have autonomous thoughts, and (ii) Monadic-style immersion, where the program determines a person's thoughts and feelings. She argues that in both cases a kind of empathetic knowledge is possible of 'what it is like' to live a certain life or be a certain kind of person. Alex Elder's chapter 6 looks at how emerging technology affects friendship. By adopting an idea from Aristotle that two people are friends only if they 'share experiences,' he contrasts the *experience of friendship* (which can be had from both social robots and artificial agents in virtual worlds) from *real friendship* (which can be had when avatars are controlled by other human beings).

Chapter 7 by Grant Tavinor launches a thorough defense of the value of video games, and responds to several criticisms levelled against them including that they are a wasted opportunity cost; gaming achievements are transitory and easily lost; and the goals in them are pointless and fictional. In chapter 8 Stefano Gauleni offers a phenomenological perspective on virtual worlds. He claims there is a tension in Nozick's EM that does not exist in virtual reality as participants in the EM are both willing to enter into it, and yet once inside, cannot recall making this decision. But in real-world experience machines, participants would be aware of this choice. Gauleni argues this is important as it can lead to feelings of *weltschmerz* or a 'longing for the real world.'

Part III emphasizes the problems and prospects in the design of virtual worlds. Brendan Shea uses chapter 9 to make a comparison between life inside a virtual world and the problem of evil. He argues that in order to make a world that is meaningful, some kind of moral or natural evil needs to be introduced. Considering how this is to be done, and what the benefits are, might have implications for theodicies in standard discussions of evil in philosophy of religion. In chapter 10 James McBain returns to the question of whether knowledge is possible inside a virtual world. He makes an interesting connection between the EM and Nozick's counterfactual theory of knowledge. One of the reasons why people inside a virtual world cannot gain knowledge is that their beliefs are not sensitive to the facts in the real world. McBain shows how, contra Nozick, knowledge inside a virtual world is possible using a Dretske-inspired information-theoretical account.

Michael LaBossiere considers what the grounds are for moral behavior in a virtual world in Chapter 11. LaBossiere provides an argument in favor of moral obligations toward computer-generated characters along the lines of Kant's treatment of animals. Kant believed we have duties towards animals because of their service to us, and because of the emotional impact cruel behavior towards them would have on our development. LaBossiere claims something similar is true of artificial agents inside virtual worlds. In chapter 12 Dan Weijers and Russell DiSilvestro consider the potential benefits and problems of virtual worlds as an end-of-life therapy. A surprising result is that virtual worlds might assist in the religious activities of patients, affording opportunities for theological and moral

reflection. Chapter 13 by Steven Montgomery is the final chapter in the collection. He raises many provocative issues surrounding how life inside an EM affects the nature of citizenship and political obligation. One important question concerns the relationship between individuals who live most of their lives inside a virtual world. Are they still citizens of the nation they are nominally in? Or does the virtual world itself count as a kind of nation to which they have new obligations? He also discusses how people returning to the real world after being in an EM for a long period of time will reintegrate, as 'like mythical children raised by wolves, they will struggle to understand the world they are in' (215).

Overall, this collection provides an interesting and stimulating discussion of the philosophical issues surrounding Nozick's EM and virtual worlds, which is more pressing given the increasing place of virtual reality in society. The organization of the book is a little chaotic, and those new to the topic will find the labels of the parts and chapters unhelpful in indicating their content. Perhaps a better strategy might have been to partition the chapters along familiar areas of focus, such as epistemology, ethics, politics and society, etc. That said, this is a welcome contribution and will provide important stimulation for what is bound to be a vital area of philosophical research in the future.

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