David J. Chalmers. Reality +: Virtual Worlds and the Problems of Philosophy. W. W. Norton & Company 2022. 544 pp. \$32.50 USD (Hardcover ISBN 9780393635805); \$20.00 USD (Paperback ISBN 9781324050346).

'What is Reality?' – It is one of the most fundamental and important philosophical questions and throughout the centuries. Countless philosophers have provided countless different answers to it. For most of us, however, the answer likely would not be 'virtual.' However, this is the idea that David J. Chalmers seeks to persuade us of in his book *Reality* +. Chalmers argues that, as he puts it 'Virtual Reality is genuine reality' (xvii). Nowadays, VR headsets are starting to become more common, mostly relating to gaming and other such social functions. Users of VR tend to distinguish between the 'real world' and the 'virtual world' that they experience whilst wearing the headset. Chalmers though seeks to do away with this distinction. For him, there is no reason we should not consider the reality inside to be as real as the reality outside.

Reality + is divided into seven sections that explore some of the philosophical issues that will undoubtedly arise as the level of immersion in virtual reality increases. In these sections, different subfields of philosophy are applied to the issue, such as epistemology, metaphysics, ethics, philosophy of mind, and more.

The first through the third sections focus on the 'Simulation Hypothesis' made famous in recent times by the Swedish philosopher Nick Bostrom, although the idea goes back centuries in both Western and Eastern philosophy. In this part of the book, Chalmers asks how we can know whether or not we are currently in a simulation and whether we can claim a simulation is 'real' or not. These sections are thoroughly entertaining and include some truly wacky, yet well-thought-out discussions that, for me, show philosophy at its best. For example, in chapter 7, Chalmers contemplates the idea that the divine being we classify as 'God' in traditional religion might actually be a hacker controlling the simulation of our universe.

The next sections move into the terrain of virtual reality proper and the philosophical issues surrounding it. In section four, Chalmers tries to answer the question of whether or not virtual reality headsets actually do show us a form of reality or whether they are just 'illusion machines.' He then talks about the currently very prevalent issue of misinformation and whether or not augmented reality devices could lead to it increasing, including so-called 'deep fakes' that could, Chalmers fears, become so realistic that more people may believe they are the real thing, or simply not know what to believe at all. Even so, is this inevitable, or avoidable?

In Part 5, we move on to issues of mind and consciousness. Since this area is what Chalmers specializes in, his expertise and knowledge truly shine in this part of the book and it makes for a very stimulating read. If a scenario occurred in the future where increasingly more of us sought a better form of life in a virtual world, how would our minds and bodies interact within this world? Can consciousness even exist in that virtual world as it does in the 'real' world and, if we had access to advanced augmented reality devices, would they extend our natural minds?

Section six is about ethics, and again, Chalmers raises some particularly important questions. How would we live well, as Socrates and other ancient philosophers would put it, in a virtual



world? If we reach the stage of technological advancement where we are able to create simulations of people that are equal to ourselves in virtually every way, bar the simulation, how should they be treated, should they have human rights? Within a virtual world, how should a better and more equal society be created and, more pressingly, how can social inequality and other such issues be avoided in this new world?

The seventh and concluding section of the book moves on to arguably 'deeper' philosophical issues. Chalmers asks how language would work in virtual worlds, before moving onto to 'The Dust Theory' which is, as he puts it, 'a large cloud of randomly scattered atoms of dust, outside space and time and with no cause and effect.' The main idea from this is that a cloud such as this could 'execute any possible algorithm and therefore simulate every possible world' (386). In both this and the next chapter, Chalmers discusses structuralism and philosophy of science, including whether or not reality itself has a structure formed of mathematics. In chapter 23, Chalmers theorizes a version of the Garden of Eden 'as a place where everything was exactly as it seemed to be, in our pre-theoretical picture of reality' before science showed that the world was far more complicated (423). He speaks about the idea of the 'manifest image' and the 'scientific image' made famous by the American philosopher Wilfrid Sellars, who characterized the 'manifest image' as 'the world as it appears to ordinary perception and thought' and the 'scientific image' is the world as it is characterized by science' (425). Issues surrounding this include such concepts as solidity, and colour in virtual reality and other such matters.

In the closing chapter, Chalmers asks how we can know that we are not Boltzmann Brains, made famous by the Austrian physicist of the same name, which theorizes that matter will come together in the exact form of a working brain for a second, before dissipating into nothing. This whole last section is a captivating read, but may go over the heads of the less experienced reader of philosophy due to the complexity of some of the issues discussed, but this is no judgement on what Chalmers writes, or his writing ability.

Chalmers' writing throughout the whole book is clear, engaging, and at times very funny. Some may criticize the book as being based on no evidence, but for me, it is philosophy as it should be, and Chalmers supports his views with evidence where he can, which is a lot of places. Chalmers shows that for philosophy to be interesting, it doesn't have to always take over the realm of science and be based entirely on 'facts.' One thing I particularly enjoyed whilst reading the book is how Chalmers combines modern pop culture with academic philosophical analysis. *Fortnite*, *Black Mirror*, *Pokémon GO* and more are mentioned in the same discussions as the ideas of such thinkers as Plato, Descartes, and Kant, which serves to make the book more relevant and relatable. To readers not familiar with philosophy, Chalmers' use of pop culture references will serve to show that philosophy can be a modern and up to date subject.

Chalmers also makes use of a wide range of thinkers from both East and West, including the ideas of Indian Buddhist and Chinese Taoist philosophers. Whilst not so much to make the book a work of 'comparative philosophy,' which it is not, it is enough to get people unfamiliar with them interested in finding out more about non-Western thought, which for me, is always a good thing.

To conclude, David J. Chalmers has written an extremely relevant, contemporary, and

sometimes very humorous book. Whilst some of the later sections, as mentioned, might be a little too complex for unfamiliar readers, they are by no means impossible to comprehend and this does not negate the fact that the vast majority of the book is brilliant for academic philosophers as well as the casually interested reader. He mixes pop culture with well-thought-out philosophical arguments and gives a very original take on the issue of reality, virtual and otherwise, that severs to make you see it in a new way. Before reading the book, I would have said that virtual reality went against 'base reality,' and I may not have called it 'reality' at all. After *Reality* +, I am not so sure! The questions Chalmers raises will undoubtedly arise in future as technology advances and our virtual reality devices become more complex. As well as participating new questions, Chalmers manages to inject old philosophical questions with a new dose of modern vigour. This makes Chalmers one step ahead and the book solidifies his reputation as one of the most brilliant philosophers around today. Above all, the book shows that our common-sense views about reality, long thought by now to be settled, are not nearly as black and white as we like to believe.

Lee Clarke, Nottingham Trent University