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Law in a 'Simulated' Universe: The Educative Value of the Metaphor

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Abstract

There are challenges to teaching law and legal theory to law students in the new millennium. It is a digital world, and the assumptions and foundations of the law do not mesh well with the shifts in identities and communities that are now in evidence. The idea of our universe being a simulation can be used as a metaphor to engage with digital natives about the fundamental uncertainty in the relationship between the law and the individual. The law and the legal theories of even the twentieth century do not suit the fluidity of today's youth. Considering the metaphor of a simulated reality offers a 'hook' for conversations around 'proper conduct' across multiple communities of identity. It is not Truth, as it all may be simulated; instead, the necessary uncertainty around the possibility allows challenges and acceptances without the need for harsh En*light*enment.

Keywords: Reality; law; simulation; legal theory; fun.

Introduction

To start with the obvious, we live in a changing world. The nature of society has changed radically with the rise of the digital sphere, specifically with respect to uncertainties around key institutions of governance. It is not clear that ideas about the law, and ideas about how the law is communicated, have changed enough to keep up with the new millennium. This article argues that there is value in speaking of law—and the relationship between the individual and the law—in a new way. That perspective centres on the possibility of our universe being simulated. It is not founded on certainty of the simulation, but the chance, the unknowable chance, of that being the case. As such, it is based on the use of a metaphor to understand law, particularly for law students. The use of metaphors, or hypotheticals, in legal theory has a long history. Not only has Plato's 'Simile of the Cave' been around for millennia, but also there have been more recent offerings such as Rawls's 'Veil of Ignorance'. The use of the possibility of a simulated universe allows for an acknowledgement of the underlying uncertainty in contemporary society in our theories of law.

Law, 'Reality' and Certainty

It seems almost unnecessary to say, but the law assumes reality is real. The provision around the offence of 'robbery', for example, in the *Crimes Act 1900* (NSW) reads as such:

Whosoever (a) robs or assaults with intent to rob any person, or (b) steals any chattel, money, or valuable security from the person of another, shall, except where a greater punishment is provided by this Act, be liable to imprisonment for fourteen years.³

³ Section 94.



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¹ See, for example, Bostrom, "Computer Simulation?" For a more complete, if more populist, discussion, see Chalmers, Reality. Chalmers does not consider law as a relevant problem of philosophy to be discussed, though he does discuss the potential role of government in virtual worlds: 356–360.

² The Veil is an aspect of his discussion of the 'Original Position': Rawls, Theory of Justice, 136–142. There is also the 'Experience Machine' of Nozick, Anarchy, State and Utopia, 42–45, but that will not be discussed here.

There is no doubt, here, about the existence of the chattels or the persons involved (being the offender and the victim). Further, while there is debate about the timing of death in the literature,⁴ statutes such as the *Crimes Act* do not deem it necessary to define 'death'.⁵ It is taken for granted that people live and that the end of that life is inevitable, that life is real and is also a potential site of legal interrogation.

Other relevant aspects of reality in law include assumptions around 'free will' and 'time' itself. With respect to the former, 'Generally speaking, informed adults of sound mind are treated as autonomous beings able to make their own decisions how they will act',⁶ and the:

law, as a normative science which must evaluate human conduct for practical purposes, accepts certain working hypotheses, one of which is the existence of free will. It judges the conduct of people upon assumptions of personal autonomy that may be rejected by a psychiatrist or a philosopher.⁷

While autonomy is acknowledged to be an assumption, there is no suggestion that a court could reject the hypothesis—to do so would be problematic for the criminal law. With respect to time, 'lawyers naturally adopt the spatial concept of time of ordinary thought and language'. Again, the language is not of absolute proof; however, the laws around causation, such as the test in the *Civil Liability Act* 2002, require a chronological ordering of events. Indeed, questioning the arrow of time would challenge the law at a fundamental level. Nonetheless, there is value in noting these aspects of life that are taken for granted by the courts.

Further, the law has a record of discounting the views and decisions of those with a different sense of reality than that which is 'normal'. To take an extreme example, ¹¹ a person who had a belief that their blood was evil and poisoned was assessed as being in a 'continuous state of disordered thinking'. ¹² This assessment means that they could no longer decide what was to happen to their own body; ¹³ that is, they were not deemed as legally capable of consenting to their own treatment. To be clear, the law did not let them decide because the law could not accept the parameters of their decision.

It is not surprising that the law assumes reality and emphasises certainty. It is, after all, an institution aimed at maintaining societal stability. As a result, it also may not be surprising that these assumptions are not acknowledged by either the courts or (most) law schools. Given that there is less certainty in society now than there used to be, it may be time to highlight that which has previously been hidden.

Uncertainty in the Twenty-First Century

Overall, there is a certainty about existence in the law. The world is as real, and as concretely knowable, as it was in Genesis, when God gave 'man ... dominion over the fish of the sea, over the fowl of the air, and over the cattle, and over all the earth'. ¹⁴ It is not clear that such an assumption remains valid in the twenty-first century. Two factors need to be considered here: first, there needs to be an engagement with what is meant by 'uncertainty'; and second, some of the aspects of modern life that bring certainty into question need to be highlighted.

⁴ See, for example, the discussion of 'cardio-respiratory failure', 'brain-stem death' and 'higher-brain death' in Wicks, "Legal Definition of Death."

⁵ Section 4; however, note the definitions of 'murder' and 'manslaughter': section 18.

⁶ Burns v The Queen [2012] HCA 35, [13], quoting the House of Lords decision in R v Kennedy (No 2) [2007] UKHL 38.

 $^{^{7}}$ Tofilau v The Queen [2007] HCA 39, [6].

⁸ Prowse v McIntyre [1961] HCA 79, [2].

⁹ Noting, though, the *Prowse* decision related to the limitations of actions, rather than causation.

¹⁰ 'A determination that negligence caused particular harm comprises the following elements: (a) that the negligence was a necessary condition of the occurrence of the harm': *Civil Liability Act* 2002 (NSW) s 5D (1). This statute is substantially uniform across the different Australian non-federal jurisdictions.

¹¹ Another, perhaps more obvious, example is the extent to which psychosis impacts criminal responsibility. For example, a 'person is not criminally responsible for an act or omission on account of unsoundness of mind if at the time of doing the act or making the omission he is in such a state of mental impairment as to deprive him of capacity to understand what he is doing, or of capacity to control his actions, or of capacity to know that he ought not to do the act or make the omission': *Criminal Code 1913* (WA) s 27(1).

¹² NHS Trust v T [2005] 1 All ER 387, 407.

¹³ Of note is the fact that the person concerned was diagnosed with a personality disorder. In terms of the Truth of the medical discourse, there is a tension between such diagnoses and those of mental illness (e.g., see Kendell, "Personality Disorder and Mental Illness"); of course, even the notion of 'mental illness' is historically contextualised (e.g., see Foucault, Madness and Civilization). See also Crocq, "Milestones." ¹⁴ Genesis 1:26. Of course, not all other belief systems are as didactic. For a gentle introduction to some of the ideas in Buddhism, see Hudson, "Buddhist Teaching."

Understanding of 'Uncertainty'

Specifically, there is value in considering the meanings of 'uncertain' and 'uncertainty'. With respect to the former, the dictionary offers, inter alia, 'subject to doubt' and 'not established or proved beyond doubt'. Other terms that deal with similar ideas include 'probabilities' and 'risk'. Clarifying the relationships between the concepts sets the scene for the discussion to come.

Considering 'risk' first, this is an idea with which the law has become comfortable. ¹⁶ For example, it is central to the operation of negligence and is so accepted that its use in the *Civil Liability Act 2002*¹⁷ does not require a definition in the legislation. ¹⁸ Further, the law categorises, or characterises, 'risk' as 'real', 'foreseeable', 'infinitesimal' and can assess its 'magnitude'. ¹⁹ Even in cases such as *Wyong Shire Council v Shirt*, the High Court does not define 'risk' itself. However, implicitly, it is the 'possibility, chance or likelihood'²⁰ of an event, usually harm, occurring. Therefore, it is based on a binary outcome—either the event has happened, or it has not—and if harm has occurred the binary is 'the event happened', but if other decisions were made it would not have happened. These are categorical outcomes. ²¹ There is no underlying doubt, in terms of an objective Truth. That is, either the event/harm occurred or it did not, and it can be perceived by an external neutral observer.

'Probability' has a more technical meaning in the sciences. It is 'out of all possible outcomes, the proportionate expectation of a given outcome'. ²² Obviously, this allows for more than two possible outcomes. For instance, with the classic example of rolling a twenty-sided die (to link it with a simile to follow), there are twenty possible outcomes, and there is also an (external) observer who can objectively report on the outcome of the roll. Probability theory has developed over the course of centuries and has now become a key basis for understanding the quantum world²³—to the extent that quantum theory is 'probabilistic'.²⁴ The classic example is that of Heisenberg's 'uncertainty principle', under which different observables of a particle are only probabilities, until observation happens. Once that occurs, its position, or its momentum, can be known, but not both.²⁵ This means that the 'observation', even if conducted by a sensor, is an 'intervention';²⁶ alternatively, 'measurement implies disturbance'.²⁷ The observer is an integral part of the process of observation, while being physically separate from that which is being observed.

'Uncertainty', as understood for the purposes of this analysis, is different to both 'risk' and 'probability'.²⁸ There are not categorical outcomes that are separate from an impartial observer (and there may not be an objective Truth). Further, there may be more than two outcomes, and there is a prospective basis to it, rather than the retrospective assessment of risk in law. With respect to the differences between uncertainty and probability, under the former, we also cannot know what the chances are of each outcome, even if there are only the two. Returning to the definition offered at the beginning of the section, given that

¹⁵ Oxford English Dictionary, s.v. "uncertain," meanings 3a and 4a, respectively.

¹⁶ It is also a concept with which commentators are comfortable. For example, there has been work that considers Rawls's Veil of Ignorance in terms of 'risk': Schildberg-Hörisch, "Veil of Ignorance."

¹⁷ For example, 'a person is not negligent in failing to take precautions against a risk of harm unless: (a) the risk was foreseeable (that is, it is a risk of which the person knew or ought to have known), and (b) the risk was not insignificant, and (c) in the circumstances, a reasonable person in the person's position would have taken those precautions': *Civil Liability Act 2002* (NSW) s 5B(1).

Though 'obvious risk' is. For example, see *Civil Liability Act 2002* (NSW) s 5F: 'an "obvious risk" to a person who suffers harm is a risk that, in the circumstances, would have been obvious to a reasonable person in the position of that person.'

¹⁹ All these characterisations are discussed in *Wyong Shire Council v Shirt* [1980] HCA 12, citing, inter alia, *Bolton v Stone* [1951] UKHL 2. In health law, there is also the concept of 'material risk'; see, for example, *Rosenberg v Percival* [2001] HCA 18, [11], quoting *Rogers v Whitaker* [1992] HCA 58.

²⁰ Nygh, Butterworths Australian Legal Dictionary, s.v. "risk."

²¹ And, of course, the deployment of risk assumes reality.

²² Vogt, Dictionary of Statistics and Methods, s.v. "probability."

²³ For a discussion of the differences between the two forms of probability, see Rau, "Quantum vs. Classical Probability"; see also Rédei, "Quantum Probability Theory."

²⁴ Hardy, "Towards Quantum Gravity," 3082. Expressed differently, 'quantum mechanics is fundamentally statistical': Peres, "Quantum Information," 95.

²⁵ More formally, there are 'projective measurement[s] ... with real eigenvalues a and a set of orthonormal eigenvectors $|a\rangle$. If such a measurement is applied ... it collapses into the state $|a\rangle$ with [a specific] probability': Janotta, "Generalised Probability Theories," 15.
²⁶ Peres, "Quantum Information," 98.

²⁷ Rau, "Quantum vs. Classical Probability," 2635.

²⁸ Kurtulmus uses the ideas of 'risk' and 'uncertainty' as the point of difference between Rawls's 'thick' Veil and Harsanyi's 'thin' veil of ignorance: "Uncertainty behind the Veil," 41. He defines the difference as 'when the probabilities of different outcomes are known to the decision-maker we have a *decision under risk*. When the decision-maker lacks such probability information we have a *decision under uncertainty*': n 2. Given the relative position of the observer is not relevant to his analysis, his distinction is of no assistance here.

'doubt' (at least when qualified by 'reasonable') is a term of art in the criminal law, there is value in focusing on 'uncertainty' alone for this analysis.

Twenty-First-Century State, Governance and Knowledge as Connected Uncertainties

The argument in this section is not that our society is founded on uncertainty; instead, it is that core aspects of it may be usefully considered through the prism of uncertainty. With respect to the changing world, the point here is that the bases of the changes evident now problematise society's institutions in the way that similar changes did not before.²⁹ As a precursor, though, there is value in briefly highlighting the slower rate of change that happened before this millennium.

Over the past few centuries, the Crown has 'evolved' into a democratic state. The king³⁰ was the focus of thought in the medieval period. Prior to the relative centralisation of power, under the Tudors, England was governed through an (at times uneasy) alliance between the monarch and the nobility. The tension worked both ways, as the 'barons did not seek to overthrow their kings so much as to control or influence them'.³¹ It was the capacity of the barons to raise armies, based on feudal obligations, to challenge for the right to control England, which underlay the agreements.³² Starting in the early modern period, the Crown used various mechanisms to facilitate its control, such as the royal courts of justice (pushing aside those of the manors, boroughs and hundreds), access to taxation revenue (through the Parliament) to fund (or threaten) wars, and the regulation of overseas trade.³³ Suffrage was expanded in the nineteenth and twentieth centuries, allowing a greater proportion of the population to have an indirect say in the governance of the nation.

In terms of the other institutions, the king was also the focus of the legal analysis of St Thomas Aquinas, as it was the king who was 'charged with the care of the community'. ³⁴ More specifically, the:

king... must... preside over all human activities, and direct them in virtue of his own power and authority.... And because the aim of a good life on this earth is blessedness in heaven, it is the king's duty to promote the welfare of the community in such a way that it leads fittingly to the happiness of heaven.³⁵

It was not the security, and financial health, of the population in the real world that was the concern. Instead, heaven was the True reality that was at stake. Given Aquinas's positions in the Catholic Church, the sentiment is not surprising. The Church, in turn, was central to the perpetuation of a particular moral framework (based on the Bible) and, until the Enlightenment, had a privileged role in the perpetuation of knowledge. Overall, then, the shifts in the roles of the Crown and the people have taken place over centuries.

Twenty-first-century life is radically different. A significant factor in this is the internet. Its capacity to facilitate the subversion of national laws, ³⁶ or to challenge jurisdictional limits, ³⁷ is well known. It has also enabled the rise of 'fake news' and the creation of new communities of identity. Not only is the content of websites of dubious quality, but also those who participate in them are not bound by national borders. The dominance of the employer–employee model in the economy has been reduced by the rise of the gig economy (with its workers being dependent contractors with online platforms, such as Uber and Airtasker). This, in turn, has the potential to impact the tax income of governments. ³⁸ Overall, then, there have been major shifts between

²⁹ In the past, even the House of Lords saw change as a positive. There were significant developments in the nineteenth century. However, at the end of it, Law Lords were not expressing doubt or fear at the speed of change. For example, one Law Lord said, 'Telegraphs, postal systems, railways, steam, have brought all parts of the world into touch. Communication has become easy, rapid, and cheap. Commerce has grown with our growth, and trade is ever finding new outlets and methods that cannot be circumscribed by areas or narrowed by the municipal laws of any country': *Nordenfelt v Maxim Nordenfelt* [1894] AC 535, 556, Lord Ashbourne. Even the mass killing machine at the heart of the trade restraint in that case was not described in terms of impending doom. Technological change and even the new limitations on the law were seen as a 'good thing'.

³⁰ Prior to the sixteenth century, there was only one queen who is said to have ruled England in her own right: Matilda, in 1141. She was never crowned and her dispute with her cousin Stephen (after the death of Matilda's father, King Stephen) is known as 'the Anarchy'.

³¹ Valente, Theory and Practice of Revolt, 12. Valente further notes that 'rebellion was not punished as treason' until the fourteenth century—reinforcing the fact that the Crown was not the absolute authority in England before that time.

³² With the War of the Roses being a specific example of an armed conflict between the Houses that led to a change in ruler. Conversely, the king could raise an army and stare down a threat from a noble, as Henry II did against the Earl of York: Warren, Henry II, 60.

³³ For an overview of how the Crown has changed in England over the centuries, using letters patent as a lens for viewing techniques of governance, see, Dent, "Because I Said So?"

³⁴ Reproduced in Selected Political Writings, 113.

³⁵ Aquinas, Selected Political Writings, 79.

³⁶ For example, the availability of goods through the Dark Web that are contrary to the laws of individual countries.

³⁷ A classic example relates to defamation law, as in *Dow Jones v Gutnick* [2002] HCA 56.

³⁸ See, for example, Organisation for Economic Co-operation and Development, Sharing and Gig Economy.

the individual and the state, and the individual and the market, with these shifts reflecting a move away from the certainties of the middle of the twentieth century.

More broadly, the secularisation of the state has, unsurprisingly, impacted the role of the established Churches. This is not a claim as to an increasing amorality of the populations; instead, it relates to the diversification of the foundations of any morality or ethics. While science may have informed the secularisation, that discourse is itself subject to significant questioning—with the origins, risks and vaccination strategies around COVID-19 as current examples. Further, other academic discourses such as postmodernism and postcolonialism also challenge dominant understandings of knowledge and identity. Critical race theory has even made it into the public sphere, with communities either accepting its value or denigrating the ideas behind it. In terms of the quotidian production and dissemination of information, the media is much more diversified than ever before, including the use of citizen journalists. Overall, many of the foundational beliefs of Western society no longer have the power (in the Foucauldian sense)³⁹ that they once did.

The certainty that seemed apparent, even as late as the 1990s, ⁴⁰ no longer can be assumed. Not only are there challenges to the pre-existing institutions, but also the rate of change itself is a challenge. Individuals may feel certain about some aspects of their lives (financial security, if they are in a well-paid permanent position), but not in all. There are global issues, such as climate change, that are beyond the control of individuals and even nation states and that are subject to contestation about knowledge (whether it be about outright denial, disagreements on modelling, or the validity of specific policies and mechanisms). Even the daily, and seasonal, personal experiences of weather prompt uncertainty about it as proof (or not) of climate change.

The 1990s is a key point of comparison, as it is the last decade before the internet significantly impacted society. It is trite, but still important, to say that the digital sphere is increasingly becoming our reality. Our interactions—personal, social and professional—are mediated by the technology. Our social media posts are assessed by the allocation of 'likes' and 'retweets', and our engagement in the gig economy is rated as a provider and, in some cases, as a consumer. What is posted online also evidences a changing, and more nuanced, understanding of privacy, with the click-wrap contracts that regulate access to platforms impacting the ideal of the negotiation of agreements. Even currency, the mainstay of monarchs and nation states, is at risk of being supplanted by cryptocurrency (though the risk is minimal at this stage). The ways of the twentieth century were not necessarily the best, but—in part due to the rate of change over the past couple of decades—uncertainty is now a defining feature of twenty-first-century culture.

This uncertainty extends to the level of the personal. Law can be thought of as attempts to impact the conduct, or decisions, of individuals. The shifts over the last couple of decades have meant that many of the bases of 'proper' conduct have changed. There is not the guidance of a dominant religion or even political ideology (beyond the amorphous idea of liberal democracy), positions as full-time employees in an economic rationalist economy are much less common, and the rise of the internet has rendered most claims to knowledge challengeable. Instead, people internalise the norms of their communities, no matter how multiple or geographically diffuse those communities are. Therefore, there is not the certain measure of human conduct as existed for Aquinas. The possibility of a simulated universe can help communicate that uncertainty to those who are learning about law.

Possibility of a Simulated Universe

The central idea of a simulated universe is that another civilisation (perhaps human, perhaps not)⁴² has, using computers beyond the capabilities of ours, set up our universe. One version is that of the 1999 film, *The Matrix*,⁴³ in which human bodies are being used, by an alien race, as an energy source. If we are simulated by an advanced civilisation, then there is no 'true' physicality to our Earth or the objects on it. There is no 'true' life or death, just a series of computer instructions (code) and their outcomes. That our life, death and physical reality may only exist in the computers and universe of the advanced civilisation⁴⁴ brings into question any intrinsic value of that which we experience as real. That is, to kill 'someone' in our world may produce neither a

³⁹ For him, power is a 'productive network' (Foucault, "Truth and Power," 119); it is constitutive of all subjects in a governmentalist world.

⁴⁰ Reference to Fukuyama's *The End of History and the Last Man* (1992) now seems almost parodic.

⁴¹ For a more complete understanding, see Dent, "Identity, Technology."

⁴² Bostrom, in his analysis, only speaks of a 'posthuman' civilisation: "Computer Simulation?" 255. Whether the simulation is alien or from our own species is immaterial to this analysis.

⁴³ The Wachowskis, The Matrix.

⁴⁴ Unless they, too, are simulated—instead of turtles all the way down, it may be computers all the way up.

physical effect in the world of the simulating civilisation, nor the destruction of any property with which we perceive ourselves as interacting. There is no true loss, or gain, in their world that attaches to our actions.

What is key is the fact that we would be avatars within the simulation. Our 'reality' only seems concrete given the fact that we have been created to see it as real. The simplest analogy is a computer game—like massive multiplayer online role-playing games (such as *World of Warcraft*)—though, more specifically, like the non-player characters (NPCs) in those games (so, more like the 2021 film *Free Guy*).⁴⁵ These NPCs do not have a player controlling them and they do not know that they are in a simulated setting. Their actions are instead controlled by the coding of the game. They act in their world, without the knowledge of it being a game, and have limited actions available to them (based, usually, on how the player characters interact with them). They, of course, do not realise that that their actions are so tightly constrained.

Building on this, the idea of individuals in our reality as NPCs—or to use a sui generis term, 'quasi-autonomous subroutines' (QASRs)—suggests that there is no such thing as unconstrained 'free will'. Our 'coding' may allow a degree of choice, but it also may not allow any at all.⁴⁶ This relates to any actions that we see ourselves as undertaking. This also means, for the purposes of this analysis, that any response to, or engagement with, statements of law cannot be articulated in terms of 'choice' or 'agency'. If there is no way of knowing the Truth of our reality, there is also no way of knowing the Truth of our independence⁴⁷ or of our relationship with law.

To continue with the analogy, the code of a game also sets out its starting parameters. That is, if we are QASRs, then we also cannot know how or when it started. As such, we do not know whether the simulation was created five minutes ago (with memories and data of our universe as it is exists implanted) or whether the simulation was started with the Big Bang, 48 or at any time in between. With respect to this article, then, there can be no certainty whether the laws that we experience were part of our initial coding, whether a range of settings were established in different groups to study the development of different laws, and/or whether the species was created as tabula rasa, and the law we have is the end point of (subjective) centuries of runtime. Importantly, there appears to be no way of knowing whether we are in a simulation. 49 In *The Matrix*, there was a physical reality containing humans separate from the simulation that allowed for the red and blue pills. If the simulation is total, then the limits of our perception—including those aided by our 'advanced' technology—only probe the limits of what has been created. Potentially, details of the creation are added as our theories and instruments develop, if the simulation is monitored. There also remains the possibility that the timescale of the simulators is different from ours (including the chance that relativistic spacetime is unique to our universe).

This can be broadened out to an understanding of 'Truth'. That there may be no reality ascertainable by humans separate from our constrained perceptions means that all claims to truth have to be seen as relative to our (unknown and unknowable) constraints. That any knowledge of the existence, or not, of a simulation is beyond our capabilities also adds caveats to any claims of fact. There may be a Truth to our reality, and there may be Truth in the reality of the simulating civilisation. At this point, there does not seem to be a way to verify either. The possibility of simulation, then, offers a fundamental uncertainty about ourselves, our experiences and our roles in those experiences. This may not impact how we act, but it could impact how we think about the constraints on our actions, both at the societal and the personal levels. Again, we cannot know.

Simulation as Metaphor for Law in the Twenty-First Century

The overall argument of this article is that the idea of our existence in a potentially simulated universe may be used as a metaphor for questioning the limits of law on individuals. To further set the scene for this conclusion, there is value in engaging with previous metaphors used in jurisprudence—those of Plato and Rawls. There is also an engagement with a potential kneejerk response to the possibility of the universe being simulated—a modified Pascal's Wager.

⁴⁵ Levy, Free Guy.

⁴⁶ It is somewhat liberating to consider that any errors in this article, and any critical responses to it, may be the result of factors outside the control of both the author and the readers.

⁴⁷ Plato also attacked empirical bases of knowledge in his dialogue *Theaetetus*. For a discussion of the links between this dialogue and *The Republic* (in which the Simile of the Cave appears), see Dorter, "Levels of Knowledge."

⁴⁸ Given the limited range of universal constants (such as the cosmological constant) that allow for human life—as discussed under the 'anthropic principle' (e.g., see Barrow, Anthropic Cosmological Principle)—several universes could have been simulated from the beginning, each with the different constants, to see what happens. In other words, that our universe features the constants that it does may simply be an artefact of the initial settings of the simulation.

⁴⁹ Though Chalmers argues that there is 'no escape from reality': Reality, 458.

Classic Metaphors

Plato discussed the allegory of the 'Cave' as part of a conversation between Socrates and Glaucon. 50 The basic idea of the allegory is that there are prisoners chained in a cave, and their sole understanding of reality comes from their interpretation of shadows thrown on a wall from a fire behind them. For them, as they were restrained to such an extent that they could not even turn their heads, what they saw was the limit of their experience of the world. Key, here, is the existence of a concrete reality separate from the illusion of the shadows and the capacity for education to shed a 'true' light on what the average citizen sees.

The value Plato saw in the allegory arose from the possibility of a prisoner breaking free from their chains and leaving the Cave—the 'epistemic ascent'51 into the true light of the Sun. There is no questioning of the existence of the Sun or the world beyond the cave; instead, the focus is on the potential for the enlightenment of the constrained. However, the allegory was contained in The Republic. As such, it relates the journey of men in the 'Ship of State ... the central metaphysical' idea of the text.⁵² It, in part, distinguishes the 'world of the intellect ... from] the world of the senses',⁵³ and, in part, reinforces the ideas of the 'Good'⁵⁴ and of the 'ideal [S]tate'.⁵⁵ Therefore, it goes to his description of how society should be run, and to the notions of 'justice' and the relationship between the state and individuals embedded within that society. 56 The analogy works because the reader, following the questioning of Socrates, is asked to consider the prisoners as hypothetical—the shadows not being the 'real things'—and with no doubt attached to the 'sunlight'. 57 For Socrates, Plato and their students, the allegory works because it is in contrast to the world as they know it to be.⁵⁸

The second metaphor is Rawls's Veil of Ignorance, linked with his 'original position'. Taken together, they form the basis of a 'fair procedure' for reaching agreement on the 'principles' of justice.⁵⁹ That is, parties in the original position are placed behind the Veil to arrive at rules that establish equitable outcomes. They then 'model impartiality' on the basis that 'individuals deliberate on the assumption that they could end up in anyone's position'.⁶⁰ Key, again, is the issue of knowledge. For Rawls, parties in the original position 'do not know how the various alternatives [they choose] will affect their own particular case'.⁶¹ A different take on this is that the metaphor also relies on the idea of a deliberately obscured Truth—a deliberately obscured reality. For Plato's allegory, the Sun was outside the Cave, and the prisoners did not even have the freedom to turn their heads. For Rawls, the constraints are both virtual and artificial, in that the parties 'possess all general information', 62 just not the information that defines themselves. That the hidden Truth relates to the parameters of the self, rather than of the world, may be seen in terms of the rise of the 'individual' in Western thought; however, the point here is that, for key decisions that impact their own welfare, they are 'blind'. The Veil is not about the value of knowledge (that which is hidden is revealable): it is about the power of knowledge to distort the level 'playing field'. The Veil, then, is a metaphor for the just distribution of resources one that assumes 'our own world'⁶³ is real. The Veil, necessarily, relates to a society grounded in reality, a society that has no doubt about its physical parameters. The point of this article is based on a rejection of the *certainty* of that which is obscured.

A Return to Pascal's Wager?

Given the uncertainty inherent in today's society, one approach could be to just assume that the world is not simulated, because there is no hard proof that it is. This has links with the early modern idea that is now known as 'Pascal's Wager'. 64 Pascal's Wager is an argument, or more properly a series of arguments, relating to how an individual should act in circumstances where the existence of God is not knowable. Cargile offers a form of the Wager using three premises and a conclusion:

1. If there is a God, we are incapable of knowing ... what he is, or whether he exists. ... 2. If you perform religious rites with enthusiasm, and never question the claims of some religion, you will come to be devoutly religious. ... 3. If you are devoutly

⁵⁰ Plato, The Republic, 316–325.

⁵¹ Ferejohn, "Knowledge, Recollection," 218.

⁵² Keyt, "Plato," 197.

⁵³ Russell, History of Western Philosophy, 139.

⁵⁴ Ferguson, "Plato's Simile," 15.⁵⁵ Ferguson, "Plato's Simile," 25.

⁵⁶ See, for example, Neu, "Plato's Analogy."

⁵⁷ Plato, The Republic, 317–318.

⁵⁸ For a discussion of the allegory and popular culture, see Partridge, "Plato's Cave and *The Matrix*."

⁵⁹ Rawls, Theory of Justice, 136.

⁶⁰ Kurtulmus, "Uncertainty behind the Veil," 41. This article discusses Rawls's 'Veil' in conjunction with the similar idea of Harsanyi.

⁶¹ Rawls, Theory of Justice, 136.

⁶² Rawls, Theory of Justice, 142.

⁶³ Roemer, "Egalitarianism," 181.

⁶⁴ Hacking notes that 'Pascal did not invent the notion that belief in God is better than disbelief because belief brings salvation if there is a God and costs little if there is no God': "Logic of Pascal's Wager," 186 n 2.

religious ... and there is a God, then he will send you to heaven ... Conclusion: Solely on grounds of rational self-interest, you should participate in religious rites.⁶⁵

Applying this to the analysis here produces a looser argument that, as we cannot know whether we are simulated, it is in our rational interests to assume that it is not.

However, the application of the argument assumes that there is nothing outside our reality. An alternative version of the application also offers the following:

- 1. If the world is simulated, we are incapable of knowing whether it is or not. ... 2. If we assume it is, and perform actions with enthusiasm, with those actions being in line with the claims that we are players in a game, we will come to be true players. ...
- 3. If we are true players ... and the world is simulated, then we will 'level up' and be closer to the simulators. ... Conclusion: Solely on the grounds of rational self-interest, we should act as if it is a game.

This version comes to a different conclusion than the first application, and it accords to writers, such as Bostrom, the status of priests, or purveyors of Truth.⁶⁶ It does not provide a way out of the uncertainty, but there is, nonetheless, value in considering the argument in greater depth.

It is now not unusual to consider the Wager as an early example of decision theory—a literature that 'addresses the question of how best to make choices in situations of risk or uncertainty'.⁶⁷ Linking this with the understanding of 'risk' above, the Wager may be employed to consider decisions for which there are only two propositions in play (God real/not, reality simulated/not)—but with no way of being able to attribute probabilities to each.⁶⁸ This, of course, has particular relevance in this analysis on the basis that compliance with the law is, necessarily, a matter of decisions on the part of individuals.

Two aspects of the Wager may be highlighted. First, Pascal's writing is historically contingent. His understanding of probability was that of the seventeenth century and not the twenty-first. Second, Pascal's purpose was also said to be to 'facilitate the conversion of unbelievers and religious skeptics, and perhaps the re-version of lapsed or lukewarm Christians'.⁶⁹ He was not seeking to further academic debate on uncertainty, but to argue for a return to practices, and practices that will lead to devotion. Further, the assessment of the Wager in light of what is 'reasonable', ⁷⁰ albeit in the context of attitudes to belief, risks anachronism, particularly for a legal audience. Decisions around uncertainty, in terms of guiding thought and action, in the early modern period may not be best assessed in the same terms as decisions around uncertainty now.

Returning to Pascal's purpose, the matter of 'faith' or 'belief' in the Wager cannot be ignored. He was talking to the 'sort of person who ... remains suspended between a state of faith and one of unbelief'. As an example, Pascal was not arguing that a deathbed conversion was sufficient to enter heaven. Instead, his argument is based on 'an *ongoing* action—one that continues until your death—that involves your adopting a certain set of practices and living the kind of life that fosters belief in God'. This meant, for some, giving up the pleasures, or the temptations, of the flesh to 'perform the rites'—this furthered the moral and spiritual health of the individual and the community. There was an intent behind the Wager that sought to facilitate and perpetuate specific practices aimed at a specific societal outcome—one that relied on certainty of the value of that outcome.

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⁶⁵ Cargile, "Pascal's Wager," 250.

⁶⁶ This, of course, directly links any simulating civilisation with the notion of God. However, there is no holy text that set out the purposes of the civilisation or the rules by which we are supposed to live—unless the holy books *do* come from the simulators.

⁶⁷ Rota, "Pascal's Wager," 2.

⁶⁸ With respect to the allocation of odds in the Wager, 'some critics question Pascal's assumption that a rational agent should assign positive probability to God's existence': Hájek, "Waging War," 29. Conversely, Hacking bases his analysis on 'dominance [which] does not consider how likely are various states of affairs'; 'expectation', which is based on 'average value' of an outcome; and 'dominating expectation ... [where] we do not know, or cannot agree on, the probabilities of the various states of affairs': "Logic of Pascal's Wager," 187. After his analysis, Hacking concludes that 'all three arguments are valid. None are convincing': 190.

⁶⁹ Rota, "Pascal's Wager," 4.

⁷⁰ Cargile, "Pascal's Wager," 255.

⁷¹ It should also not be forgotten that the Christian faith had other processes in place at the time to facilitate its perpetuation—notably, the Church (with its active priests) and the law itself acknowledged and supported the Church.

⁷² Hacking, "Logic of Pascal's Wager," 188, citing the Port Royal editors of Pascal's work.

⁷³ Hájek, "Waging War," 28.

A brief detour may be made to a history of probability. Pascal had faith in God; however, the study of probability arose, in the early modern period, out of games of chance. Hacking, we cannot entirely exclude astrology, magic, and signs even if we restrict ourselves to dicing. Attempts to foretell the future were to dabble in the work of God. Agamben highlights the link between dice and the growth in understandings of probability, citing the work, and vice, of Cardano. In particular, the issue was the incomplete game, where a game, involving multiple throws of the dice, was interrupted and a payout was to be calculated on the wins and losses in the game prior to its halt. Unsurprisingly, this involved known players and known possible outcomes with specific values (including financial value). The work of later thinkers, such as Pascal, was based on a radical reorientation to the future. Although singular events might appear random and unpredictable in the short term, over an extended period, they invariably fell into regular and predictable patterns. It was no longer the work of God, but of calculations; its target was no longer faith, but empirics.

The application of the Wager to the uncertainty around potentially simulated reality offers different outcomes: if we bet that the world is real, we may lose the benefits of enlightenment (of the true nature of the world), and if we bet that it is a simulation (one that is best characterised as a game), then we are left with courses of action that may challenge the stability of our community. Importantly, though, the Wager is about how people should conduct themselves. This is the value that the Wager has for this analysis, in that it opens up the possibility of considering what proper conduct should be when we cannot know, with certainty, what the basis for that conduct is. Pascal was arguing for actions based on religious requirements. The possibility of the world being simulated allows for us to think differently about how we should understand 'proper conduct' in the twenty-first century.

Value of Simulation as Educative Metaphor

This final section highlights how the uncertainty around the nature of our reality is of educative value to law students. Overall, the metaphor allows the conception of different settings to externalise the sense of self of students and the assumptions that they may have with respect to the law, morality and obedience. More specifically, the metaphor can be discussed in terms of its value at both a superficial and a deeper level of understanding.

Value of metaphor at the superficial level

At the most simplistic level, the mere possibility of a simulated universe problematises the assumptions in the law around the autonomous individual with the capacity for, and privileging of, rationality. Given the uncertainty, this is not to say that the law is necessarily wrong; instead, it highlights that law students should challenge these assumptions when learning the law. Obviously, if the world is simulated, then there is a lack of 'real' impact if a rule is broken. For example, it is easy to dismiss the thinking of a person who knows their blood to be evil; there is value, nonetheless, in being aware that the student's (or the law's) own thinking may be similarly challengeable when viewed from a different perspective. What a student sees as 'free will' in themselves may not be experienced by all, and getting them to question how they see the constraints (either explicit or implicit) on their decisions may expand their empathy for others.

Taking this a little further, the metaphor also suggests that there can be no certainty about the law or the society it purports to govern. Law students are taught to see the law as 'real', as having an effect in the 'real' world. This also brings in the above-mentioned assumptions around causation. A Newtonian view (because, science) of the universe is fully deterministic, with all actions being the result of the initial settings of reality.⁷⁹ There are no subsequent 'causes' to events that may be observed. While the courts may never accept such an understanding (as it would render them unnecessary), the idea that the specific actions of individuals can be understood solely in terms of the code that defines them (if they are QASRs) may limit the assumptions of students.

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⁷⁴ In the medieval period, Raymond Lulle is 'usually cited as the founder of the theory of combinations': Hacking, Emergence of Probability, 49. Lulle is closer in spirit to Pascal, as he was a 'pioneer of philosophical theology and logic, who continuously devised projects to convert Muslims and to reunite schismatic Christian churches': Blum, Philosophy of Religion, 1.

⁷⁵ Hacking, Emergence of Probability, 50. With little evidence whatsoever, the thought that the 'number of the beast' when written as 666 (Book of Revelation 13:18) referenced a bad outcome of the throwing of three dice for divinatory purposes.

⁷⁶ In the 'medieval period ... every earthly event and the fate of every individual was depicted as a symbolic representation of the will of God': Reith, "Uncertain Times," 386, citing Gurvitch.

⁷⁷ Agamben, What Is Real? 28. Hacking also referred to Cardano as a 'proud astrologer': Emergence of Probability, 56.

⁷⁸ Reith, "Uncertain Times," 388. Hacking cites David as saying that, in Cardano, for the 'first time ... we find an explicit idealization to a number of equal alternatives based on the abstraction of a fair die': Emergence of Probability, 54.

⁷⁹ The 'state of the universe at any time is wholly and unequivocally determined by the state of the universe in prior times and the physical laws of nature. ... [The] features of classical physics would leave little room' for the actions of individuals to cause events in the world: Hodgson, "Quantum Physics," 57–58. Further, quantum mechanics 'only postulates random or chance event, and we cannot be responsible for chance events': 73, citing Honderich. This renders quantum ideas unsuitable as a basis for causation.

Linking this back to the history of probability, the metaphor is about the uncertainty of reality. It is, then, a significant development from the early modern focus on assessing the chances of possible known outcomes occurring.⁸⁰ In itself, any recognition of shifts over time in conceptual frameworks is a positive. More specifically, the metaphor is not about what may happen in the future. Instead, the notion of a simulated universe brings the uncertainty back to the present. The game is not incomplete (an assessment of past action and a future end), the game is ongoing—individuals are, to use Black's terminology, ungovernable, ⁸¹ in part, because of the lack of certainty about present states (including identities, rules and the foundations of each). It is not about denying the known existence of individuals but denying the assumptions about outcomes and their value.

Finally, the possibility of simulation also facilitates the incorporation of popular culture in thinking about the law and decisions around the law.⁸² This may be most relevant when teaching legal theory—a subject that many students do not enjoy—and the addition of films into the teaching materials may help. *Free Guy*, of course, can raise the idea of simulation itself, with attendant discussions around the bases of, and constraints around, decision-making. *The Matrix* allows for a discussion of what it means to be truly human—that is, whether the desire to break free from the created world and live in Zion⁸³ is innate. To take a third example, *Dark City*⁸⁴ also engages with the links between memories, the self and action, with a different overlay of an advanced civilisation using technology to constrain humans.⁸⁵ All of these cinematographic representations of a false reality allow ready access to the ideas for student interpretation and discussion.⁸⁶

Value of metaphor at a deeper level

The idea that our reality is simulated also has value at a deeper level of analysis. Here, there are two sites of interest. They are the relationship between the law and the individual (including the impact of an individual's identities on that relationship) and the value of the metaphor for understanding what is meant by 'proper conduct' in today's (uncertain) digital society.

First, the assertion here is that there is an implicit relationship between the individual and the law now. In the past, the relationship was first between the individual and the Crown (and, during the feudal period, that relationship was mediated by the feudal lords), and then the relationship was between the individual and the state (in part as a result of the expansion of suffrage and the domination of industrial capitalism in the regulation of the social). Now, the state is no longer a monolithic entity that dominates governance. Instead, the rise of the internet means that any action may be subject to regulation by several states, and the digitisation of the self means that regulation has devolved, substantially, to the individual.

This, in turn, prompts two questions: first, what is meant by 'law'? The answer depends on who answers. An agent of the state, such as a police officer, will be clear on what they are to enforce. However, the vast majority of the population rarely interacts with such an agent—for example, most transgressions of the road rules are identified, and prosecuted, without human involvement.⁸⁷ The average person on the street may have little idea of all the laws that potentially may impact their behaviour;⁸⁸ though they are aware that there are laws and that they are controlled by the courts and supported by the arcane knowledge of lawyers. Individuals, in most modern democracies, could find out online but they do not. However, law students get a specific, and biased, education of capital-L Law. The Law for them⁸⁹ is the totality of express statements in legislation and precedent. It changes, but, regardless of the changes, it retains authority, and there is a statement to be found that articulates the relevant law.

82 This, in turn, allows an interrogation of the role of the media in the construction of reality and, as a consequence, the law. Baudrillard's notion of 'hyper-reality' (e.g., in *Simulations*) challenges the division between the real and the imaginary. More specifically, his idea of the 'simulacrum' refers to a fiction that is no longer linked with the real, or a 'transformation of [an] object into a sign for consumption' (Merrin, "To Play with Phantoms," 89), where the consumption is more real than the real. However, Baudrillard's theory reflects a twentieth-century mindset. For him, hyper-reality is linked with the media and the population of consumers with their shared experiences—the 'mass (age) is the message' (quoted in Luke, "Power and Politics in Hyperreality," 349). The version of simulation offered in the present article emphasises the individual, not the masses, allowing for a radically unique simulated reality. To focus on the work of Baudrillard, then, limits each individual's engagement with reality, law, and their relationship with both.

85 This, too, has been analysed in terms of Gnosticism: Wilson, "Gnostic Paranoia."

⁸⁰ For Agamben, the work of Cardano was based on the idea that 'probability is nothing other than a possibility qualified in a certain way': What Is Real? 28. The empirical aspect of the early modern analysis limited possibilities to that which is evident in the world = 'probability ... allows us to intervene in reality, as considered from a special perspective, in order to govern it': 35.

⁸¹ Black, "Critical Reflections on Regulation," 4.

⁸³ The name Zion is 'synonymous in Judaism and Christianity with the (heavenly) Jerusalem': Wagner, "Wake Up," 260. This also facilitates a discussion of religion, reality and the normative in law.

⁸⁴ Proyas, Dark City.

⁸⁶ For a recent discussion of the intersection between popular culture and law/legal theory, see Peters, A Theological Jurisprudence.

⁸⁷ That is, in many cases, breaches are identified by technology (speed, red light cameras) and the fines paid online.

⁸⁸ There is not even a requirement, for example, that dog owners know their obligations under the relevant legislation in their jurisdiction (e.g., the *Dog Act 1976* [WA]).

⁸⁹ And, of course, this author, by dint of their employment in a law school, is part of the problem.

The second prompted question is who is the 'individual'? The idea of the classic liberal individual is now out of date. People who, at least substantially, live in the digital sphere have multiple identities, more than just their online and their 'meat' identities. Their online identities are split by platform (e.g., Instagram v. TikTok), by interest/community and by income stream. The possible combination of identities means that digital individuals are closer to being unique than even Generation X. To think, in terms of the role and impact of law, that any specific legal subject is just like all the others (and has an equal capacity to choose compliance) simplifies a complex and dynamic interaction.

Returning to the idea of the relationship between the individual and the law, there is value in building on some of the ideas presented above. It is possible to say that, loosely, the 'uncertainty principle', from theoretical physics, applies. Either the relevant law or the diverse and diffuse individual can be known, but not both. That is, the detail of the law can be understood (as per the training of law students), or one identity of the individual can be known (their life as an Uber driver captured in their movements and ratings), but not the intersection of the two. As an Uber driver, the individual may be vigilant with respect to the road rules (potentially because unrequested non-compliance may go to their rating), whereas as a pet owner, on the way to the vet, the rules are less important. In contrast, the law only sees the single (legal) individual: the holder of the licence to drive. The relationship between observers and the subjects of their observation was also raised. With respect to the standard understanding of the road rules, there are impartial (technological) observers of infraction. For all humans, there is no one who is external to the system, if the world is simulated (or, at least, no one who is known to be human), so no observer of reality as a whole. For law students particularly, in their own lives, there also can be no objective observer. They are, inter alia, both subject and student. They are multiple in their identities and no observer can 'really' know them. However, as a student, they are measured by academics who are within, and part of, the system that preceded the digital world. There is no escape from that measurement, despite the fact that it does not fully consider the relationship between the student and the law, and it only looks at expressions of the law by one aspect of the student (the aspect that may not be a significant identity for them).

More broadly, the value of the metaphor, then, is that it emphasises the uncertainty of the relevance of the law as seen by the particular identity of the person. Law students may get a broader understanding of the role of law in society, if they accept that people do not always see the rules in the same way all the time. Expressed differently, the application of the law is uncertain because individuals are, ungovernable. Linking it with the idea of a simulated reality, we cannot know, when viewing QASRs from the outside, how they are programmed to react in each situation. If that cannot be known, then the impact of a particular law, or a particular reform to the law, cannot be known.

Finally, understanding the relationship between the law and the individual is an assessment that is external to that person. There is also value in considering how they may see the relationship between the extant law and how they see 'proper conduct'. This analysis is based on the idea that, while identities appear multiple to an observer, the individual may see themselves as coherent in their diffuse identities—they know, and may actively pursue, a range of interests in the range of circumstances they face. Of course, this is how (many/most) law students see themselves.

However, the different circumstances may mean that what constitutes proper conduct varies—privileging self-financial interest at times, group ethics at other times, and, on occasion, the reputation of their communities. This is not how law schools teach law (the focus is on the legal statements and any potential sanctions). It is also not how legal theory engages with compliance—Aquinas, with his minimal focus on the individual, is an extreme example. However, even Finnis, writing near the end of the twentieth century, implies a unitary self who is delimited in terms of the seven basic goods. Humans, in the twenty-first century, are not that straightforward (if they ever were).

Assuming that a given individual will, or even should, respond to the same law, in all circumstances, ignores this complexity. The possibility of a simulated reality allows for the possibility of individuals not seeing the outcomes of their actions, or inactions, as real. A driver who is focused on drifting their car may not see the risk to others as real (where those others are not part of the communities of identity of the driver). What matters is the conduct that they need to portray in their community—the road rules are not important. In such situations, it is not necessarily a matter of choice on the part of the driver. They see a particular set of obligations, not the legal ones, and that is what needs to be complied with.

Returning to the material above, this focus on proper conduct echoes Pascal's purpose. However, the application of the metaphor is not to guide the individuals who experience doubt with respect to the existence of God or reality. Its purpose is to guide the thinking of law students. The world and the people in it are more complex than the law and legal theory credits. Plato's Allegory focused on the regulation of the body and Rawls on the regulation of knowledge; the metaphor of simulated reality, instead, questions (regulation of) the self. The certainty espoused in law schools does not match the fundamental

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⁹⁰ Finnis, Natural Law, 446.

uncertainty in the digital world. It may reflect the experience of the monochromatic professoriate, but not the diverse and diffuse student body.

Conclusion: Not Knowing Is Fine

Again, this assessment is not based on an acceptance of our existence in a simulation. Instead, it is based on the possibility of such an existence—a possibility that has been made comprehensible by popular culture. It is also a possibility that is communicable without recourse to the formal texts of disciplines, ⁹¹ given the challenge to such authorised knowledges implicit in the metaphor. The uncertainty posed by the possibility mirrors the uncertainty that law students should be taught about the law's impacts (or lack thereof) on contemporary society. The law itself can be stated with a degree of clarity, but anything further is verging on (mediated) fiction. Of course, this article is written by someone older than millennials, perhaps with an anachronistic attachment to a unitary self (or an unrealistic perception of their singular lack of self). ⁹² This may impact how it is to be read by current, and future, law students with assumptions of multiple, equally valid, identities. The only response is that the code behind the author has produced the output. Self-aware responses from digital natives are welcomed.

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⁹¹ The metaphor of the non-player character in a simulated universe allows the protagonist to be active in its pursuit of possibilities—rather than the more passive reading of academic texts.

⁹² There is also the possibility that the deployment of a metaphor blinds its deployer to the embedded power relations inherent in the metaphor; see, for example, the argument of Mutua with respect to human rights: "Savages, Victims and Saviors." I do not resile from the possibility, but may be blinded to the impact of the use of the metaphor of the simulation.

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