



AN ECOSYSTEM OF INTERCONNECTEDNESS: PRIORITISING KEY LEGAL CONCERNS IN THE METAVERSE

BY PIN LEAN LAU

The recent hype surrounding the metaverse has deftly captured our interest, but we also need to be aware of any potential legal issues that might arise. This brief analysis sheds light on some of these concerns, and emphasises the critical role of law, governance and policy when dealing with transactions/interactions in the metaverse.

In the past couple of years, we have borne witness to the evolution of the metaverse. Interestingly, the metaverse is not a new phenomenon, but has been quietly building traction since the early 2000s. The coincidence of timing with the COVID-19 pandemic affecting the world population in 2020¹ and tech giant Facebook's re-branding of itself as Meta² are likely

contributory factors that catapulted the visibility of the metaverse into mainstream technological cultures and imaginings. A simple keyword search for “metaverse” in a web browser is likely to display at least 1.6 billion search results, demonstrating to us the rich trove of both knowledge and speculation about our digital futures in the metaverse.

In a previous article in *The Conversation*, the author raised three legal concerns that we should be aware of in the metaverse³. These include the “commercial” aspect of the metaverse as a marketplace, issues relating to data and the protection of data rights and privacy and, finally, avatar user interactions within the metaverse. Whilst it is not possible to uncover all the legal issues that could arise in the metaverse, the present article expands on two main concerns, and pivots the discussion towards an ecosystem of interconnectedness,

Crafting and modelling the success of the NFT space in the metaverse further requires **clear rules, stewardship and transparency, not unlike corporations in our “real” world.**

similar to an ecosystem of technologies⁴. This ecosystem encompasses the critical roles that can be played by leaders and policy makers, together with technology developers and manufacturers, and the immediate stakeholder at large – users or consumers of the metaverse.

Firstly, in considering the metaverse and commercial transactions that take place therein, it cannot be denied that it has opened up a boundless virtual reality space in which businesses can thrive. With a single digital currency, or non-fungible tokens (NFTs), leveraging blockchain technologies, the metaverse is highly powered through data and connected virtual worlds. Companies such as Sotheby’s now have Decentraland, the world’s first virtual gallery in the metaverse, a “digital twin” of its London offices.⁵ Rapper and hip-hop mogul Snoop Dogg can boast of his own SnoopVerse, where virtual pieces of land can be purchased.⁶ Sandbox, another digital world, is now one of the virtual “homes” of PwC’s Hong Kong branch.⁷ With many companies now clamouring to capitalise on the “perceived value of NFTs and the ability to invest in a non-existent asset”,⁸ it is prudent to take stock of the legal realities of this space.

In the context of NFTs, particularly collectible NFTs of digital art, music or other creative works, their release or launch may be akin to initial public offerings (IPO) of shares, offered for sale to the public via issuance of new stocks, generally traded on a stock exchange platform, such as the London Stock Exchange. IPOs and the like in our world are subject to strict legal rules, compliance with listing requirements, and banking and securities legislation. And whilst different trading platforms may each have their own laws and rules depending on jurisdiction, it is still unclear to us whether this may be applicable in the case of NFTs in the metaverse. For example, if information about a prospective new release of an NFT is leaked before its launch date, can appropriate action be taken against the party leaking such information?⁹ The question of insider trading also comes to mind.¹⁰ Because of the value attributable to NFTs, and the resulting emerging models of NFT-native properties that can expand into different products, activities, events and interactive experiences¹¹, maintaining and growing the NFT space should ideally have oversight and audit mechanisms to protect both NFT creators and investors. Crafting and modelling the success of the NFT space in the metaverse further requires clear rules, stewardship and transparency, not unlike corporations in our “real” world.

We should be also concerned that the virtual environment of the metaverse could be ripe for market place exploitation, similar to Silk Road¹² in the dark web. Silk Road was a dark web marketplace platform that dealt primarily in illegal drugs and contraband, weapons, prohibited pornography, sex trafficking and, allegedly, murder for hire. One of the reasons why Silk Road was able to operate successfully and under the radar was due to the lack of government oversight, the difficulties of enforcing laws within its space, and the ability of users to perform transactions using cryptocurrencies without involving



In an idealised regulatory metaverse space, adequate safeguards need to be put in place to ensure equitable access to all, taking control out of the hands of the powerful elites.

banks or financial institutions.¹³ Will the metaverse be susceptible to this kind of virtual marketplace too? What kind of laws can be put into place to provide adequate and effective safeguards for all users? Who would be an appropriate regulatory authority to govern and enforce any rules for the platform? This requires cooperation between creators, innovators, policy makers, legislators, users and the like, within the ecosystem of connectedness, moving towards a common goal and aim that fosters mutual benefits and interests.

Secondly, another main concern would be in connection with user interactions in the metaverse via avatars. Whilst interacting in a virtual space is not a new experience – for example, in massive multiplayer online role-playing gaming (MMORPG), such as *World of Warcraft*¹⁴ – the heightened immersion that can be experienced in the metaverse can raise novel questions relating to criminal law (assault and battery, or sexual harassment/offences) or tort law (defamation, negligence or breach of duty of care). As one example, what about interactions between avatars that either are, or border on, sexual harassment or, worse, sexual assault? Disturbing news has already emerged that sexual predators have begun to misuse the seemingly neutral space of the metaverse, with reported incidents of groping,¹⁵ sexual assault in *Horizon Venues*,¹⁶ and numerous other incidents of sexual assault.¹⁷ How can we even begin to explain that sexual assault in the metaverse is no different from sexual assault in reality, and that the trauma experienced by a victim is real? Are our existing laws on sexual harassment and sexual assault robust enough to tackle these kinds of actions in the metaverse? There is already enough literature to indicate that victim blaming continues to rear its ugly head, with


tech giant Meta allegedly making the claim that its users were not using it correctly.¹⁸ Notwithstanding the fact that Meta is making adjustments to its tools to protect its users, using a feature called “Safe Zone”,¹⁹ and taking some positive steps to assign moderators to the space, this may not be adequate, because the problem of sexual harassment does not go away.

This is where greater clarity is needed as to the role of the operator, data controllers, and processors, and whether an over-arching framework of harmonised policies of use, including terms and conditions and governing legislation, is necessary. Critical dialogues within the ecosystem of interconnectedness (described earlier) need to begin, drawing on the voices and needs of users and communities, and shared values and principles to inform appropriate standards of use, robust policies and oversight systems, and concrete sanctions accompanied by effective complaints or dispute resolution mechanisms. Whilst the current existing virtual worlds will, no doubt, each have their own user terms and conditions, it is vital to ensure that measures of enforcing compliance with these rules are in place. Each of these worlds’ terms and conditions need to meet the scrutiny of internationally accepted standards that protect fundamental rights and liberties, whilst allowing creators, innovators, operators, etc., to continue building creative innovations and carrying out beneficial research and development.

Collectively, we are at an infant stage in our exploration of the metaverse and what it means for the future. As technologies continue to grow and evolve, and as we navigate a balancing exercise with the Collingridge Dilemma,²⁰ there is no harm in equipping ourselves with the necessary knowledge, information, and readiness to welcome an equitable and conscious legal or regulatory framework of the metaverse. We are still light years away from formulating novel legal systems in the metaverse, bearing in mind not only key regulatory challenges²¹ but also the time that is needed to build our ecosystem of interconnectedness. Ultimately, in an idealised regulatory metaverse space, adequate safeguards need to be put in place to ensure equitable access to all, taking control out of the hands of the powerful elites.²² Just as we have come to recognise the systemic problems in our societies, cultures,





and institutions, so, too, we should be determined not to allow these same problems to find a home and metastasise in the metaverse. 



Dr. Pin Lean Lau is a Lecturer (Assistant Professor) in Bio-Law at Brunel Law School. She is also affiliated with the Centre for Artificial Intelligence: Social & Digital Innovations; a member of the Daughters of Themis: International Network of Female Business Scholars; and is the General Manager of the Interest Group on Supranational Bio-Law of the European Association of Health Law. Her research interests encompass European, international, and comparative law for genome editing; the governance of artificial intelligence systems; and the ELSIs (ethical, legal and social implications) of new and emerging technologies.

REFERENCES

1. WHO, "WHO Director-General's Opening Remarks at the Media Briefing on COVID-19 - 11 March 2020," March 11, 2020, <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>.
2. Scott Nover, "Why Facebook Decided to Change Its Name," Quartz, October 29, 2021, <https://qz.com/2081663/why-facebook-changed-its-name-to-meta/>.
3. Pin Lean Lau, "The metaverse: Three Legal Issues We Need to Address," *The Conversation*, February 1, 2022, <http://theconversation.com/the-metaverse-three-legal-issues-we-need-to-address-175891>.
4. Jeff Gallino, "The Future Belongs To Ecosystems," *Forbes*, July 23, 2021, <https://www.forbes.com/sites/forbestechcouncil/2021/07/23/the-future-belongs-to-ecosystems/>.
5. ICAEW Insights, "Doing Business in the Digital metaverse," ICAEW, September 6, 2021, <https://www.icaew.com/insights/viewpoints-on-the-news/2021/sep-2021/doing-business-in-the-digital-metaverse>.
6. Kylie Logan, "Snoop Dogg Is Developing a Snoopverse and Someone Just Bought a Property in His Virtual World for Almost \$500,000," *Fortune*, December 9, 2021, <https://fortune.com/2021/12/09/snoop-dogg-rapper-metaverse-snoopverse/>.
7. Consultancy.uk, "PwC Buys Virtual Land NFT in the Sandbox's metaverse," January 4, 2022, <https://www.consultancy.uk/news/30011/pwc-buys-virtual-land-nft-in-the-sandboxes-metaverse>.
8. Consultancy.uk
9. The New York Times, "Citigroup Is Fined \$2 Million for Leaking Confidential Facebook IPO Info, Analysts Fired," *The Mercury News* (blog), October 26, 2012, <https://www.mercurynews.com/2012/10/26/citigroup-is-fined-2-million-for-leaking-confidential-facebook-ipo-info-analysts-fired/>.
10. Alexander Kurov and Marketa Wolfe, "What's Insider Trading and Why It's a Big Problem," *The Conversation*,
11. Steve Kaczynski and Scott Duke Kominers, "How NFTs Create Value," *Harvard Business Review*, November 10, 2021, <https://hbr.org/2021/11/how-nfts-create-value>.
12. Linda Marric, "Silk Road Review: The True Story of the Dark Web's Illegal Drug Market," *New Scientist*, March 17, 2021, <https://www.newscientist.com/article/mg24933260-400-silk-road-review-the-true-story-of-the-dark-webs-illegal-drug-market/>.
13. David Kushner, "Dead End on Silk Road: The Fall of Internet Crime Kingpin Ross Ulbricht - Rolling Stone," February 4, 2014, <https://www.rollingstone.com/culture/culture-news/dead-end-on-silk-road-internet-crime-kingpin-ross-ulbrichts-big-fall-122158/>.
14. "World of Warcraft," World of Warcraft, accessed April 7, 2022, <https://worldofwarcraft.com/en-gb/>.
15. Tanya Basu, "The metaverse Has a Groping Problem Already," *MIT Technology Review*, December 16, 2021, <https://www.technologyreview.com/2021/12/16/1042516/the-metaverse-has-a-groping-problem/>.
16. Olivia Petter, "Why Is No One Taking Sexual Harassment In The metaverse Seriously?," *British Vogue*, March 20, 2022, <https://www.vogue.co.uk/arts-and-lifestyle/article/sexual-assault-in-the-metaverse>.
17. Louise Eccles, "My Journey into the metaverse — Already a Home to Sex Predators," *The Times*, January 22, 2022, sec. news, <https://www.thetimes.co.uk/article/my-journey-into-the-metaverse-already-a-home-to-sex-predators-sdkms5nd3>
18. Victor Tangermann, "Sexual Assault Is Already Happening in the metaverse," *Futurism*, December 16, 2021, <https://futurism.com/sexual-assault-metaverse>.
19. Verdict, "metaverse Is Already Limiting Virtual Sexual Assault," *Verdict* (blog), February 11, 2022, <https://www.verdict.co.uk/metaverse-meta-sexual-assault/>.
20. Wolfgang Liebert and Jan C. Schmidt, "Collingridge's Dilemma and Technoscience: An Attempt to Provide a Clarification from the Perspective of the Philosophy of Science," *Poiesis & Praxis* 7, no. 1–2 (June 2010): 55–71, <https://doi.org/10.1007/s10202-010-0078-2>.
21. Roger Brownsword and Morag Goodwin, *Law and the Technologies of the Twenty-First Century* (Cambridge University Press, 2012), <http://www.cambridge.org/catalogue/catalogue.asp?isbn=0521186242>.
22. Paul Farmer, *Pathologies of Power: Health, Human Rights, and the New War on the Poor* (University of California Press, 2003).