Beyond the Corporate Responsibility to Respect in the Dawn of a Metaverse

Kuzi Charamba
University of Hong Kong

I. Introduction

Technological advances in the 21st century pose new threats to human rights from business activities. In this new technological age, individuals and communities engage through an increasing myriad of digital means and platforms, all facilitated by a smaller, more powerful set of global BigTech companies, such as Microsoft, Apple, Google, Meta (formerly known as Facebook), and Amazon (MAGMA).[1] In so doing, however, our lives as workers, consumers, and citizens become subject to increasing corporate control through surveillance capitalism[2] and algorithmic governance.[3] When operating on platforms, it can be much harder for individuals to maintain privacy, express themselves freely, unionize, or avoid prejudicial bias when applying for credit or a job.[4] With the dawn of metaverses – 3D immersive digital environments in which you can interact with others via avatars and through virtual and augmented reality – upon us, some commentators anticipate that BigTech control over our (digital) lives could be all-consuming.[5] This could have both positive and negative ramifications. After all, a metaverse is a digital world in which all the hallmarks of the physical world, such as work, play, trade, friendship, and love, can be recreated.[6] Given the negative impacts and threats to human rights resulting from the current

[1] See e.g., Paul Mozur et al., "A Global Tipping Point for Reigning in Tech has Arrived", The New York Times, 20 April 2021 and Nienke Palstra, "Who runs the world…BigTech?", Global Witness, 30 July 2020.
[2] Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: PublicAffairs, 2019).
[3] Swati Srivastava, "Algorithmic Governance and the International Politics of Big Tech" (2021) Perspect polit 1–12; S C Olhede & P J Wolfe, "The growing ubiquity of algorithms in society: implications, impacts and innovations" (2018) 376:2128 Phil Trans R Soc A 20170364; Mireille Hildebrandt, "Algorithmic regulation and the rule of law" 11.
[4] See e.g. Cathy O'Neill, *Weapons of Math Destruction* (New York: Crown Books, 2016).
[5] John Dionisio, "The Metaverse could actually help people", MIT Technology Review, 27 October 2021 The Economist, "What is the metaverse?", 11 May 2021; Dan Milmo, "Enter the metaverse: the digital future Mark Zuckerberg is steering us toward", The Guardian, 28 October 2021. It should be noted that there is a difference between a metaverse and web3. The metaverse is an immersive digital reality that can be but is not necessarily an application built on web3, blockchain based infrastructure. A metaverse could also be constituted through virtual and augmented reality technologies, as is being done by Meta through their proposed offering, Horizon Worlds. See e.g. MetaQuest, 'Horizon Worlds', online: https://www.oculus.com/facebook-horizon/. The use of the term "digital" in parentheses is intentional, as it aims to highlight an uneasy tension and inability to separate the digital world from the physical world. It is difficult to say what the "real" world is, as that is increasingly subjective.
[6] Ibid.

dominance of BigTech companies, it is not difficult to imagine how we could be at the beginning of a 'Ready Player One'[7] dystopian reality: ensconced in digital, state-like walled gardens that are controlled by a handful of companies wielding sovereign-like authority. As such, it is important to revisit the adequacy of governance frameworks for the protection of human rights in a truly digital age.

Prevailing conceptions of human rights, as manifested in international human rights laws, are rooted in a unitary, vertical relationship between the state and an individual.[8] They reflect the idea that the state, as sovereign, is the predominant oppressive power acting on the individual.[9] As such, states have an international legal obligation to 'respect, protect, and fulfill' human rights.[10] Yet, corporations, who can also wield oppressive power against individuals, are subject merely to a 'responsibility to respect' human rights – a conduct-based moral responsibility of due diligence that requires them to consider and manage their impacts on individuals' human rights during their business activities. This distinction, which is reflected in the UN Guiding Principles on Business & Human Rights (UNGPs),[11] is neither theoretically justifiable nor congruent with societal realities today. As such, this paper will revisit some underpinnings of this distinction and juxtapose them against the current power and authority of corporations, particularly in this digital age. In so doing, I will question how we can understand corporate responsibility in relation to human rights in digital milieux and posit that we should consider a corporate responsibility to respect *and protect* (digital) human rights. This overall argument is constituted by sub-arguments that take

[7] *Ready Player One* is a 2018 American science fiction adventure film based on Ernest Cline's novel of the same name. The plot is as follows: "In 2045, people seek to escape from reality through the virtual reality entertainment universe called the OASIS (Ontologically Anthropocentric Sensory Immersive Simulation), created by James Halliday and Ogden Morrow of Gregarious Games. After Halliday's death, a pre-recorded message left by his avatar Anorak announces a game, granting ownership of the OASIS to the first to find the golden Easter egg within it, which gets locked behind a gate requiring three keys which players can obtain by accomplishing three challenges. The contest has lured several "Gunters", or egg hunters, and the interest of Nolan Sorrento, the CEO of Innovative Online Industries (IOI) who seeks to control the OASIS himself by inserting intrusive online advertising. IOI uses an army of indentured servants, and employees called "Sixers" to find the egg." See Wikipedia, "Ready Player One (Film), https://en.wikipedia.org/wiki/Ready_Player_One_(film).

[8] Kuzi Charamba, *Hired Guns and Human Rights: Global Governance and Access to Remedies in the Private Military and Security Industry* (Edward Elgar, 2020).

[9] Frances Raday, "Privatising Human Rights and the Abuse of Power", Canadian Journal of Law and Jurisprudence 13 (2000) 103 at 108–110.

[10] UNHRC, *General Comment No. 31: The Nature of the General Legal Obligation Imposed on States Parties to the Covenant*, UN Doc CCPR/C/21/Rev.1/Add. 1326 (2004).

[11] UNHRC, 'Protect, Respect and Remedy: a Framework for Business and Human Rights: Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises', UN Doc A/HRC/17/31, 2011, <www.business-humanrights.org/media/documents/ruggie/ruggie-guiding-principles-21-mar-2011.pdf> [Guiding Principles].

consequentialist, theoretical, and functional forms. The consequentialist sub-argument speaks to the factual outcome of greater risks to human rights within digital spaces that are facilitated by the nature of BigTech and, more generally, corporate activity within these spaces. The theoretical sub-argument engages with the proposition that corporations, in some ways, have upended the presumptive position of juridical subordinate to the state when considered in light of the authority that they hold within digital spaces to govern and determine individuals' actions, interactions, and transactions. Finally, the functional sub-argument speaks to the prevailing conceptions that we hold in relation to the exercise of regulatory authority. Prevailing conceptions posit that regulatory authority should be a function exercised by public actors in contradistinction to private actors. However, when one considers this position against the consequential and theoretical arguments presented within this paper, there are legitimate grounds to challenge prevailing orthodoxy and thus to consider the idea that private actors, because of the power and authority that they wield within particular spaces, should have some responsibility of regulating those spaces. This idea draws from the principle within financial regulation of 'same activity, same regulation'.[12] Emphasis is placed on the idea of exercising regulatory function as a responsibility rather than a privilege.

Subsequently, in relaying these arguments, the remainder of the paper will be structured as follows: Section Two provides an exposition of recent technological advances in society and how these are posing new risks to human rights. Section Three discusses the shortcomings of the human rights system and its inability to acknowledge the growing threat to human rights by corporations. Its demonstration of impacts to human rights within digital spaces provides the grounds for the consequentialist argument. In Section Four I present the arguments for upending the current system of human rights protection in light of corporate power in a metaverse. This is founded upon the theoretical and functional arguments. Finally, in Section Five, I engage with the interesting tangential development of web2 vs web3 realities, and how the distinction at present does not negate the force of the arguments presented towards considering a corporate responsibility to

[12] UK Finance, *Same Activity, Same Risk, Same Regulation* (2021); Financial Stability Board, *Decentralised financial technologies: Report on financial stability, regulatory and governance implications* (2019); Bank for International Settlements, "III. Big tech in finance: opportunities and risks," in Annual Economic Report (2019).
[12] See Leif Warner, "Rights" in Edward Zalta, ed, *The Stanford Encyclopaedia of Philosophy* (Fall 2011 Edition), online: Stanford Encyclopaedia of Philosophy http://plato.stanford.edu.

protect human rights in a metaverse. Importantly, this does not imply a diminution of existing state obligations to protect human rights.

II. Technological Advances, New Human Rights Risks, and the Consequentialist Argument

Commentators broadly acknowledge that we have entered a new technological era. Thomas Friedmann, perhaps one of the earlier commentators, referred to an early iteration of this period as 'Globalization 3.0'.[13] Klaus Schwab preferred the term, 'The Fourth Industrial Revolution',[14] and Azeem Azhar speaks more recently about the onset of 'The Exponential Age'.[15] While there are differences between these conceptual paradigms, collectively they attempt to describe a new state of development in our societies and economies which impacts the ways that we act, transact, and interact. These changes, driven by a shift towards digitalization and datafication, are changing the ways that we shop, work, socialize, bank, and love, among others.[16] Through emergent technologies such as artificial intelligence (AI), big data, cloud computing, the Internet-of-Things (IoT), and digital ledger technologies, which includes blockchain technology, there is so much more that we can do through our smartphones and other smart devices.[17] Through robotics and automation, we have been able to collectively increase productivity and economic output, make advances in biotechnologies, and enter the age of driverless transportation.[18] There is remarkable convenience in being able to bank, make contactless payments, and secure work or gig opportunities through your smartphone, particularly in the wake of the ongoing Covid-19 pandemic.[19] This innovation has also been a boon for economic growth and sustainable

[13] Thomas Friedmann, *The World is Flat: A Brief History of the 21st Century* (Gardner Books, 2005).
[14] Klaus Schwab, *The Fourth Industrial* (Penguin Books Limited, 2017).
[15] Azeem Azhar, *The Exponential Age* (Random House Publishing, 2021).
[16] Hannah Trittin-Ulbrich et al, "Exploring the dark and unexpected sides of digitalization: Toward a critical agenda" (2021) 28:1 Organization 8–25.
[17] Klaus Schwab, *The Fourth Industrial* (Penguin Books Limited, 2017).
[18] Ibid. UNCTAD, ed, *Catching technological waves: innovation with equity*, Technology and innovation report 2021 (New York Geneva: United Nations, 2021).
[19] See e.g. *Ibid*. See also OECD, *Digital Transformation in the Age of COVID-19: Building Resilience and Bridging Divides* (2020).

development opportunities, particularly in the developing world.[20] For example, AI and machine learning are being used in South Africa to develop systems that allow people to locate nearby mobile healthcare clinics in regions without primary healthcare facilities;[21] Zenvus in Nigeria seeks to improve decision-making for farmers by providing insights based on data collected from sensors and other means;[22] and Tala in Kenya uses a mobile app to assess and disburse loans to financially excluded and unbanked customers without a credit history by analyzing their Facebook and SMS data to determine their risk of default.[23] Conversely, however, these positive impacts are matched equally by nefarious actors and possibilities. Facial recognition technology, which is utilized by some governments, could help to further authoritarian rule and a diminution of individual liberties through stronger policing controls;[24] AI-generated 'deepfakes' could help to facilitate fraud and cybercrime;[25] and data mining through social media sites continues to pose a significant threat to electoral processes and political outcomes, as was the case with the Kenya 2017 election.[26] Women and girls, too, face particular risks online, as is evidenced by continuing reports of harassment and threats of violence in the 'manosphere',[27] the growing issue of revenge porn,[28] and AI-generated deepfake porn.[29] As such, technological innovation poses new kinds of risks and threats to human rights.

[20] UNSG Task Force on Digital Financing of the Sustainable Development Goals, *The People's Money: Harnessing Digitalization to Finance a Sustainable Future* (2020).
[21] See Ayomide Owoyemi et al, "Artificial Intelligence for Healthcare in Africa" (2020) 2 Front Digit Health 6.
[22] Zenvus, https://www.zenvus.com/.
[23] Tala, https://tala.co.ke/.
[24] Justin Sherman, "The Troubling Rise of Facial Recognition Technology in Democracies", World Politics Review, 23 April 2020.
[25] Valencia Jones, "Artificial Intelligence Enabled Deepfake Technology: The Emergence of a New Threat", Proquest (2020).
[26] Justina Crabtree, *Here's how Cambridge Analytica played a dominant role in Kenya's chaotic 2017 elections*, CNBC, March 23, 2018, online: CNBC <https://www.cnbc.com/2018/03/23/cambridge-analytica-and-its-role-in-kenya-2017-elections.html.
[27] See Charlotte Jee, "A feminist internet would be better for everyone", MIT Technology Review, 1 April 2021. The 'manosphere' is an informal term that refers to "a loose collection of websites and online groups dedicated to attacking feminists and women more generally."
[28] See e.g. UK Government, Revenge Porn: The Facts, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/405286/revenge-porn-factsheet.pdf . "Revenge Porn is the sharing of private, sexual materials, either photos or videos, of another person without their consent and with the purpose of causing embarrassment or distress. The images are sometimes accompanied by personal information about the subject, including their full name, address and links to their social media profiles."
[29] See e.g. Justin Sherman, "'Completely horrifying, dehumanizing, degrading': One woman's fight against deepfake porn", CBS News, 14 October 2021.

In previous iterations of industrial development, human rights risks from business activities were of a much more visceral nature. In the later parts of the 20th century and early 2000s, the idea of business-related human rights violations entailed garment sweatshops, factory catastrophes, such as at Bhopal, and child labor abuse in agricultural supply chains.[30] These human rights risks continue to be a significant concern globally. However, the onset of automation, robotics, and algorithmic governance have brought about new kinds of business-related human rights risks. Much of these risks is borne from the (mis)governance of the commodity that fuels this technology: data.[31] Increasing smartphone usage, enhanced biometric data collection, access to new fintech products, and digitization of more sectors of the economy and public services have resulted in the increased collection, processing, and storage of personal data which leave us prone to abuse and exploitation by both state and non-state actors. When done so for economic gain, Shoshana Zuboff refers to this as 'surveillance capitalism'.[32]

According to Zuboff, surveillance capitalism is a 'new economic order that claims human experience as free raw material for hidden commercial practices of extraction, prediction, and sales.'[33]

> '[It] unilaterally claims human experience as free raw material for translation into behavioral data. Although some of these data are applied to product or service improvement, the rest are declared as a proprietary *behavioral surplus*, fed into advanced manufacturing processes known as 'machine intelligence,' and fabricated into *prediction products* that anticipate what you will do now, soon, and later. Finally, these prediction products are traded in a new kind of marketplace for behavioral predictions [called] *behavioral futures markets*. Surveillance capitalists have grown immensely wealthy from these traditional operations for many companies are eager to lay best on our future behavior.'[34]

[30] See e.g. John Gerrard Ruggie, *Just Business: Multinational Corporations and Human Rights* (New York: W.W. Norton & Company, 2013).
[31] The Economist, "The world's most valuable resource is no longer oil, but data", 6 May 2017 edition.
[32] Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: Public Affairs, 2019).
[33] Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: Public Affairs, 2019) at 'The Definition'.
[34] Zuboff, at 8.

One area where this extractive use of data and algorithms has had deleterious human rights impacts is in relation to labor rights. Amazon and other large tech firms increasingly employ AI to manage and supervise their employees. Jeremias Adams-Prassl refers to this as the rise of the 'algorithmic boss': a scenario whereby the relationship between management and worker is increasingly intermediated by an algorithm which provides workers with and evaluates them on their targets, their work schedules, and their appraisals.[35] As Adams-Prassl elaborates, '[t]he labor market challenges inherent in a world of platform-based labor intermediation are considerable, from worker classification and collective rights protection through to health and safety, tax, and social security provisions'.[36]

In the pursuit of greater efficiencies, algorithms provide employers a means through which they can exert greater control over worker output without having to navigate the challenges that are inherent to human interactions. For example, algorithms have been used to screen applicants in the recruitment process, to make offers, and to determine appropriate salary levels.[37] On the other end of the spectrum, AI is used to fire workers if the system determines that they have not met set targets. For example, documents obtained by *The Verge* show how Amazon's system, 'tracks the rates of each individual associate's productivity … and automatically generates any warnings or terminations regarding quality or productivity without input from supervisors'.[38] This can have a detrimental impact on workers. For instance, some employees are reported to avoid bathroom breaks to ensure that they meet their expectations. Similar accounts of poor warehouse working conditions have emerged from Coupang,[39] the leading South Korean e-commerce firm and self-proclaimed 'Amazon of Korea'.[40] This raises several issues of worker health and safety. But more pertinently, the use of an algorithm to manage workers entails many of the known deficiencies inherent to AI in social relations. For example, Amazon was forced to stop using its recruitment tool after it was discovered that it was systematically rejecting female candidates for engineering

[35] Adams-Prassl J, 'What if your boss was an algorithm? Economic Incentives, Legal Challenges, and the Rise of Artificial Intelligence at Work (2019) 41(1) *Comparative Labor Law & Policy Journal* 123.
[36] Ibid., at 123.
[37] Ulrich Leicht-Deobald et al, "The Challenges of Algorithm-Based HR Decision-Making for Personal Integrity" (2019) 160:2 J Bus Ethics 377–392.
[38] Lecher C, 'How Amazon automatically tracks and fires warehouse workers for "productivity"', *The Verge*, 25 April 2019.
[39] S Kim, "This company delivers packages faster than Amazon, but workers pay the price", MIT Technology Review, 9 June 2021.
[40] Choe Sang-Hun and Lauren Hirsch, "South Korea's Answer to Amazon Debuts on Wall Street", The New York Tinmes, 12 March 2021, https://www.nytimes.com/2021/03/11/business/korea-coupang-ipo.html.

roles.[41] This kind of algorithmic bias is also prevalent in relation to race, sexual orientation, and disabilities.[42] In reflection, Michelle Bachelet, the UN Human Rights Commissioner, comments that '[r]eal world inequalities are reproduced within algorithms and flow back into the real world. Artificial intelligence systems cannot capture the complexity of human experience and need. Digital systems and artificial intelligence create centers of power, and unregulated centers of power always pose risks – including to human rights.'[43]

Beyond labor concerns, human rights in the digital space can also be threatened when freedom of expression is curtailed on social media platforms, or hatred and incitement to violence promoted.[44] This was a particular issue in relation to both the Rohingya crisis in Myanmar[45] and the storming of the Capitol in Washington DC on January 6, 2021 as Facebook admitted to allowing the discontent to foment on their site.[46] Similarly, misinformation and disinformation can impact peoples' civil rights as their election results can be undermined,[47] as well as their social, economic, and health rights, for example, through misinformation campaigns regarding the safety of Covid-19 vaccines and the impacts that this may have on the local economy.[48] Misinformation also plays

[41] Maya Oppenheim, 'Amazon scraps "sexist AI" recruitment tool', *The Independent*, 11 October 2018. The challenge of discriminatory algorithms can be particularly challenging to overcome. In a related study, Anja Lambrecht and Catherine Tucker found that an ad campaign for STEM careers was inadvertently discriminatory against women. This happened because younger women are a prized demographic and are more expensive to show ads to. An algorithm that simply optimizes cost-effectiveness in ad delivery will deliver ads that were intended to be gender-neutral in an apparently discriminatory way, because of crowding out. The authors show that this empirical regularity extends to other major digital platforms. See Anja Lambrecht and Catherine Tucker, 'Algorithmic Bias? An Empirical Study into Apparent Gender-Based Discrimination in the Display of STEM Career Ads (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2852260.

[42] Reeve Givens A, 'How Algorithmic Bias Hurts People with Disabilities', *Slate*, 6 February 2020; The issue of hiring bias was recently highlighted by the Black Lives Matter (BLM) movement and the calls to ensure that AI-facilitated hiring does not discriminate based on race, gender, and sexual orientation. In particular, the BLM movement stressed the importance of racial equality and representation in both tech and non-tech hiring. See, for example, High P, 'Technology's Role In Driving Progress In Black Lives Matter', *Forbes*, 30 July 2020, <www.forbes.com/sites/peterhigh/2020/07/30/technologys-role-in-driving-progress-in-black-lives-matter/?sh=2a485b1b687e>.

[43] Michelle Bachelet, "Human Rights in the Digital Age – Can the make a difference?", Keynote Speech, 17 October 2019.

[44] See e.g. Jacopo Bellasio et al, "Human Rights in the Digital Age" 86.

[45] Alexandra Stevenson, "Facebook Admits It Was Used to Incite Violence in Myanmar", The New York Times, 6 November 2018.

[46] Craig Timberg, Elizabeth Dwoskin & Reed Albergotti, "Inside Facebook, Jan. 6 violence fueled anger, regret over missed warning signs", The Washington Post, 22 October 2021.

[47] Anne Applebaum, "Democracy is Surprisingly Easy to Undermine", The Atlantic, 17 June 2021.

[48] ECLAC-PAHO, *Covid-19 Report: The prolongation of the health crisis and its impact on health, the economy and social development*, 14 October 2021, https://repositorio.cepal.org/bitstream/handle/11362/47302/1/S2100593_en.pdf.

an insidious role among younger generations who are more susceptible and gullible.[49] A survey from Common Sense Media showed that 60% of teenagers who use YouTube to follow current events turn to influencers rather than news organizations.[50] Influencers, in turn, are able to accrue large numbers of followers for things that may have little to do with the political and social issues that they provide commentary on. Their lack of evidence or expertise in consequential subject matter does not deter their followers from believing and spreading those positions, all while the positions of true subject matter experts struggle to gain similar traction. Finally, human trafficking also continues to be a scourge that is facilitated on social media platforms such as Facebook and Instagram.[51] As we transition to a new technological advancement, metaverses, these risks will only be amplified, and they form the basis of the consequentialist argument. This line of reasoning highlights the factual outcome of greater risks to human rights within digital spaces that are facilitated by corporations and thus seeks accountability for the impacts that corporations cause.

A metaverse is 'a 3D immersive environment shared by multiple users, in which you can interact with others via avatars. A metaverse can, with the support of the right technology, feel like real life, with all the usual elements of work, play, trade, friendship, love—a world of its own.'[52] While metaverses are still very much in their infancy, companies such as Meta, Microsoft, and Nvdia are investing significant resources towards their development.[53] Mark Zuckerberg, CEO of Meta, has commented on creating a metaverse as 'a system that is already much like Facebook's now-familiar communities, photos, videos, and merchandise, but instead of looking at that content, [feeling] as if you were inside and surrounded by the content'.[54] Similarly, Satya Nadella, CEO of Microsoft, has described their offering of a metaverse as 'a system in which users can engage with data, processes, and each other as richly in virtual form as in reality, only with greater speed and

[49] Jennifer Neda John, "Why Generation Z falls for online misinformation", MIT Technology Review, 30 June 2021, https://www.technologyreview.com/2021/06/30/1026338/gen-z-online-misinformation/.
[50] Common Sense Media, "New Survey Reveals Teens Get Their News from Social Media and YouTube", 12 August 2019, https://www.commonsensemedia.org/about-us/news/press-releases/new-survey-reveals-teens-get-their-news-from-social-media-and-youtube.
[51] Clare Duffy, "Facebook has known it has a human trafficking problem for years. It still hasn't fully fixed it", CNN, 25 October 2021, https://edition.cnn.com/2021/10/25/tech/facebook-instagram-app-store-ban-human-trafficking/index.html.
[52] John Dionisio, "The Metaverse could actually help people", MIT Technology Review, 27 October 2021.
[53] Megan Bobrowsky, "BigTech seeks its next fortune in the metaverse", The Wall Street Journal, 9 November 2021; The Economist, "Big tech's supersized ambitions", 22 January 2022 edition, https://www.economist.com/leaders/2022/01/22/big-techs-supersized-ambitions.
[54] John Dionisio, "The Metaverse could actually help people", MIT Technology Review, 27 October 2021.

flexibility.'[55] These conceptions of a metaverse bear close resemblance to depictions in sci-fi plots such as *Ready Player One* and Neal Stephenson's *Snow Crash*.[56] On one hand, such depictions are alluring, given their potential to provide us with new ways to form global 'cloud communities',[57] interact, and transact. Yet, on the other hand, given companies' declared ambitions to commercialize this space,[58] the depictions may also portend technological dystopias in which the current threats to human rights in the digital age are magnified.

For example, given the ambitions for a metaverse to be an immersive world in which people will be able to connect in more enhanced ways through virtual and augmented reality, we can anticipate the development of 'cloud communities'.[59] One such community could be a global grouping of individuals who identify as LGBTQ+ and have been longing for association but have been denied it due to their conservative, repressive, or authoritarian governments. The formation of a cloud community could be one way for them to do so. Pseudonymously or anonymously, through the creation of avatars, and perhaps even with haptic technology, individuals could engage in events and associate with other members on a global basis. This is powerful. One heterosexual couple's avatars have already got married in a metaverse,[60] and so why not individuals whose governments are yet to legalize same sex marriages, or still police same sex relationships through their criminal law, for example. Equally powerful, therefore, is the opposite force in which members of those communities are denied association and expression in the digital space, persecuted, or subject to violence and hatred. An early tester of Meta's metaverse, Horizon Worlds, has already revealed

[55] John Dionisio, "The Metaverse could actually help people", MIT Technology Review, 27 October 2021.
[56] Neal Stephenson, *Snow Crash* (Bantam Books, 1992).
[57] Liav Orgad & Rainer Bauböck, eds, "Cloud Communities: The Dawn of Global Citizenship?" 81. "Conceptually, cloud communities have traditional characteristics of political communities, but not necessarily a physical territory. The communal bond can be global in nature – such as a shared concern about climate change, ageing, veganism and animal rights (i.e., a universal community, open to everyone) – or ascriptive, such as a Jewish / Bahá'í faith / Diasporic Cloud Nations, a form of 'transnational nationalism' (i.e., a selective community, open only to certain members). It can be thematic or geographic – region, country, state, city, village – based on a shared interest or territorial identity, even if not corresponding to existing borders or legally recognised communities. Membership is based on consent; a person can be a member of several communities or none."
[58] See e.g., Martin Schwirn, "The developing metaverse: Commercial realities of extended realities", Computer Weekly, 5 January 2022, https://www.computerweekly.com/feature/The-developing-metaverse-Commercial-realities-of-extended-realities.
[59] Orgad & Bauböck, *supra* note 57.
[60] Steven Kurutz, "Getting Married in the Metaverse", The New York Times, 8 December 2021. It should be noted that while the marriage is not legal in their home jurisdiction of New York, the act and event were still significant for the couple.

that her avatar was virtually groped by a stranger within that metaverse.[61] The incident, acknowledged by Meta, took place during Meta's beta testing of Horizon Worlds and was reported on November 26, 2021.[62] While it may be difficult to decouple conceptually our digital and physical selves, recent research shows that incidents in virtual reality can elicit strong negative emotional responses that could be harmful for users in the physical world if not managed properly.[63] Indeed, David Chalmers goes so far as to argue that virtual reality is genuine reality.[64] Consequently, whoever controls the exercise of rights, liberties, or police powers in those spaces, therefore, has considerable governance authority and matching responsibility.

Yet, the exercise of such governance authority by corporate actors is hardly unprecedented. These forays into uncharted digital spaces share many parallels with early expeditions of 'Company-States' that ventured into new lands in the 17th and 18th centuries, exercising sovereign powers.[65] While they had their incorporation within their European country of origin, companies such as the English East India Company were granted charters to 'settle, fortifie, and plant'[66] which matched Company leaders' ambitions for 'some place wee might call our owne.'[67] The parallels between Company-States and metaverse creating corporations today are rooted in the companies' clear incorporation within a jurisdiction, and yet having the freedom to create new worlds with governance authority and responsibility over all those who inhabit those spaces. In some idealized conceptions, a metaverse is envisaged to be a decentralized space in which users are participants and owners of identities, property, and artefacts, the latter currently envisaged through the innovation of both fungible and non-fungible tokens (NFTs).[68] However, we would be remiss if we were to overlook the particular capacity of 'individual' entities such as Meta and Microsoft to

[61] Jonathan Chadwick, "Early tester of Meta's Horizon Worlds metaverse app reveals her avatar was 'GROPED' by a stranger - raising concerns about the safety of the virtual world", MailOnline, 17 December 2021.
[62] Ibid.
[63] Raymond Lavoie et al, "Virtual experience, real consequences: the potential negative emotional consequences of virtual reality gameplay" (2021) 25:1 Virtual Reality 69–81.
[64] David Chalmers, *Reality +* (New York: W.W. Norton & Company, 2022).
[65] Philip Stern, *The Company-State: Corporate Sovereignty and the Early Modern Foundations of the British Empire in India* (New York: Oxford University Press, 2011).
[66] *Ibid*.
[67] *Ibid*.
[68] Tim Ferris, author, "Chris Dixon and Naval Ravikant — The Wonders of Web3, How to Pick the Right Hill to Climb, Finding the Right Amount of Crypto Regulation, Friends with Benefits, and the Untapped Potential of NFTs (#542)", The Tim Ferris Show, 28 October 2021, https://tim.blog/2021/10/28/chris-dixon-naval-ravikant/; Crypto.com, "NFTs: The Metaverse Economy", The Financial Times, https://www.ft.com/partnercontent/crypto-com/nfts-the-metaverse-economy.html.

create vast spaces, their own metaverses, in which other individuals could interact and transact. In this way, these companies would 'modulate between positions of deference and defiance, between claims to be a 'mere merchant' and an 'independent sovereign'.'[69] As Stern elaborates further in his account of the *Company-State*:

> 'Approaching the Company as a form of state and sovereign, which claimed final jurisdiction and responsibility over people and places, suggests that the history of state formation and of political thought, only relatively recently extended to include the ideas and institutions of empire, might be extended even further, beyond the national form of those states and empires to apply to a range of corporate communities. Such bodies politic possessed institutional and political cultures that both shaped and were shaped by the ideas, expectations, and behaviors of their leaders, corporators, and subjects. Though undoubtedly conditioned by the prolific political economists and philosophers within its ranks, the ideologies of the Company-State, and perhaps even those thinkers, arose not in abstraction but in direct response to the opportunities, challenges, and problems that Company leaders confronted.'[70]

This strikes of déjà vu as we recall the power that executives such as Mark Zuckerberg have to determine the Community Rules of engagement on their platform and who gets to participate on it.[71] The hazard and arbitrariness of this is not lost when one considers their decision to ban Donald Trump after the storming of the Capital on January 6, 2021,[72] while simultaneously being aware that there was content on its site that was fomenting political division that contributed to the very

[69] Stern, *supra* note 65.
[70] *Ibid* at 14.
[71] Chris Hughes, "It's Time to Break Up Facebook", The New York Times, 9 May 2019, https://www.nytimes.com/2019/05/09/opinion/sunday/chris-hughes-facebook-zuckerberg.html: "Mark's influence is staggering, far beyond that of anyone else in the private sector or in government. He controls three core communications platforms — Facebook, Instagram and WhatsApp — that billions of people use every day. Facebook's board works more like an advisory committee than an overseer, because Mark controls around 60 percent of voting shares. Mark alone can decide how to configure Facebook's algorithms to determine what people see in their News Feeds, what privacy settings they can use and even which messages get delivered. He sets the rules for how to distinguish violent and incendiary speech from the merely offensive, and he can choose to shut down a competitor by acquiring, blocking or copying it."
[72] Elizabeth Dwoskin, "Trump is suspended from Facebook for 2 years and can't return until 'risk to public safety is receded'", The Washington Post, 4 June 2021, https://www.washingtonpost.com/technology/2021/06/03/trump-facebook-oversight-board/.

same event.[73] Similarly, as whistleblower Frances Haugen testified that while Facebook executives were actively pushing to get more children on to Instagram, they were also actively concealing and disregarding internally produced research that warned them of the deleterious impacts that this could have on young girls' mental health.[74]

A metaverse is being presented as a unique digital space, a normative order that is distinct from the limitations of the physical world and its associated juridical orders. Yet, the two are intricately still connected, as participants in the former remain tethered to the latter. Similarly, while governance in one can be distinct from governance in the other, the two spaces are intricately connected by virtue of the concurrent inhabitance of both spaces by its participants. Subsequently, as BigTech firms and other corporations, such as decentralized autonomous organizations (DAOs)[75] seek to advance into and commercialize this new digital space, a kind of terra nullius where they can shape and exercise governance authority and powers that impact participants in myriad ways, it is worthwhile for us to consider the adequacy of our existing governance frameworks and systems for human rights protection. The goal should not be to unduly restrict innovation and the undeniable associated benefits, but rather to find and apply appropriate rail guards that can mitigate negative risks and ensure accountability for any harm caused.

III. An Overview of International Human Rights Law and its Applicability to Private Actors

[73] Mike Isaac, "Whistle-Blower to Accuse Facebook of Contributing to Jan. 6 Riot, Memo Says", The New York Times, 23 October 2021, https://www.nytimes.com/2021/10/02/technology/whistle-blower-facebook-memo.html.
[74] Georgia Wells et al., "Facebook knows Instagram is toxic for teen girls, company documents show", The Wall Street Journal, 14 September 2021.
[75] *A decentralized autonomous organization (DAO) is a group organized around a mission that coordinates through a shared set of rules enforced on a blockchain.* See Linda Xie, "A Beginner's Guide to DAOs", https://linda.mirror.xyz/Vh8K4leCGEO06_qSGx-vS5lvgUqhqkCz9ut81WwCP2o. They are constituted by decentralized internet-based communities that are organized through code to facilitate the collective management of common goods, including cultural and intangible works, natural resources, economic and industrial production, and social systems. See also Aragon, "What is a DAO?", 27 September 2021, https://blog.aragon.org/what-is-a-dao/ and Philippe Honigman, "What is a DAO?", Hackernoon, 4 July 2019, https://hackernoon.com/what-is-a-dao-c7e84aa1bd69.

The international law of human rights consists of legal obligations that are assumed primarily by the state.[76] In this Westphalian system, states have an obligation to 'respect, protect, and fulfil' human rights.[77] This requires states to adopt legislative, judicial, administrative, educative, and other appropriate measures across all arms of government – the executive, legislature, and judiciary – to fulfil their legal obligations.[78] Further, states then commit themselves to ensuring that their public officials comply with those obligations. One of the ways that they do this is through the principle of due diligence, whereby states commit to take preventive steps to ensure adherence to their international legal obligations.[79] This commitment can have an indirect effect of constraining private-party actions as states seek to ensure that their actions comply with international human rights obligations. Where private parties fail to conduct themselves in accordance with those obligations, as may be provided for in a national law, this can result in the state breaching its international legal obligations.[80] For example, in the case of *Velasquez Rodriguez v Honduras*, the Inter-American Court of Human Rights held that state responsibility may arise:

> 'not because of the act itself, but because of a lack of due diligence to prevent the violation or to respond to it as required by [the human rights treaty] … [the] state is obligated to investigate every situation involving a violation of rights under the [*American Convention on Human Rights*]. If the state apparatus acts in such a way that the violation goes unpunished and the victim's full enjoyment of such rights is not restored as soon as possible, the state has failed to comply with its duty to ensure the free and full exercise of those rights to persons within its jurisdiction. *The same is true when the state allows private persons or groups to act freely and with impunity to the detriment of the rights recognized in the Convention*.'[81]

---

[76] This is reflected in the fact that states "possess the totality of international rights and duties recognized by international law". See International Court of Justice, *Reparations for Injuries Suffered in the Service of the United Nations, Advisory Opinion of April 11, 1949*, ICJ Reports 1949, 174 at para. 180.
[77] UNHRC, *General Comment No. 31: The Nature of the General Legal Obligation Imposed on States Parties to the Covenant*, UN Doc CCPR/C/21/Rev.1/Add. 1326 (2004).
[78] Ibid at paras 7-8.
[79] Susan Marks & Fiorentina Azizi, "Responsibility for Violations of Human Rights Obligations: International Mechanisms" in James Crawford, Alain Pellet & Simon Olleson, eds, *The Law of International Responsibility* (New York: Oxford University Press, 2010) at 729–31.
[80] Antonio Cassese, *International Law*, 2nd ed (New York: Oxford University Press, 2005) at 250.
[81] *Velasquez Rodriguez v Honduras* (1989) 28 ILM 294 at [172] and [176] emphasis added.

Similarly, in *A v UK*, the European Court of Human Rights found the United Kingdom (UK) to be in breach of its convention obligations for failing to provide adequate protection for a boy who was caned by his stepfather.[82] Even though the stepfather's actions were found to be legal at the time, as the then applicable national legislation allowed for 'reasonable chastisement', the UK was deemed to have failed to protect the child and thus had violated its international legal obligation.[83] Private actors do not have direct human rights obligations under international human rights law.[84]

The modern idea of human rights is based on the protection of an individual's dignity and autonomy from oppressive power.[85] Predominant conceptions of human rights in the aftermath of World War II, as manifested in international human rights law, however, are rooted in a unitary, vertical relationship between the state and an individual. These conceptions are largely premised on the idea that the sovereign is the only oppressive power acting on the individual. In this view, the sovereign, if left unchecked and unrestrained, wields socio-economic and legal power that is disproportionately greater than an individual's and threatens the individual's dignity and autonomy.[86]

[82] *A v United Kingdom* (1999) 27 EHRR 611.

[83] Other examples of state responsibility where the state failed to constrain private-party actions and ensure their consistency with international human rights law include *Young, James & Webster v UK Eur Ct* Series A, Vol 44: UK government must outlaw or prohibit union infringement of the right of individual employees not to associate and their right not to join a trade union in closed shop arrangements; *Y v United Kingdom*, Application. 14229/88; Report of 8 October 1991: state held responsible for breach of obligation under the ECHR in that the English legal system did not prohibit the corporal punishment of pupils in private schools; *Airey v Ireland*, Eur Ct (1979) Series A, Vol 32: state held responsible for not guaranteeing access to justice for a wife abused by her husband; and *X and Y v The Netherlands*, Eur Ct (1985) Series A, Vol 91: state responsible for not providing effective procedures for private initiation of prosecution proceedings against the son-in-law of the director of a private nursing home for his sexual assault of a sixteen-year-old, mentally handicapped inmate.

[84] UNHRC, *General Comment No. 31: The Nature of the General Legal Obligation Imposed on States Parties to the Covenant*, UN Doc CCPR/C/21/Rev.1/Add. 1326 (2004) at para 8; CESCR, *General Comment 18 The Right to Work (Art. 6 of the Covenant)*, UN Doc. E/C.12/GC/18 (2006) at para 52.

[85] Indeed, the United Nations Declaration on Human Rights embodies this goal by declaring that human rights flow from "the inherent dignity of the human person". See also Jack Donnelly, *Universal Human Rights in theory and Practice* (Ithaca: Cornell University Press, 1989) at 17, where he describes a position that is commonly held by most human rights proponents today: "We have human rights not to the requisites for health but to those things `needed' for a life of dignity, for a life worthy of a human being, a life that cannot be enjoyed without these rights" (original emphasis).

[86] See Frances Raday, "Privatising Human Rights and the Abuse of Power" (2000) 13:1 CJLJ 103.

But as we all know, states are not the only perpetrators of human rights violations. Indeed, there can be more than one source of oppressive power.[87] As Roderick Macdonald lucidly puts it, '[i]n our day, the most grievous and most frequent abuses of civil liberties occur in the exercise of private power. The occasions for discriminatory state action are both comparatively few and subject to relatively formalized procedures for their exercise, when contrasted with an employer's power to dismiss, a landlord's power to exclude the needy, or an entrepreneur's refusal to provide services'.[88] Cases of harm and negative externalities in the course of business activities, particularly in developing countries, are widespread, well-documented, and accepted as a cause for concern.[89] The continued attribution of human rights obligations on the basis of an actor's status as either public or private,[90] therefore, is neither theoretically justifiable nor congruent with societal realities today.[91]

One example where this public-private distinction is made, but with diminishing theoretical justification, is in the contrast between 'torts' and 'human rights', and more specifically in the case of *Al Shimari v CACI*.[92] In *Al Shimari*, allegations of torture were brought against private military contractors for abusing detainees, along with US soldiers. The applicants founded their claim on the bases of common law tort and torture, but the district court stated that the claim of torture was only permissible by virtue of the *Alien Tort Statute*'s specific inclusion of international law as applicable grounds. Barring this allowance, the harm inflicted would have been classified solely as a tort and not as a human rights violation. A claim of human rights violations against private

[87] See Robert McCorquodale, "Non-State Actors and International Human Rights Law" in Sarah Joseph and Adam McBeth, eds, *Research Handbook on International Human Rights Law* (Cheltenham, UK & Northampton, MA: Edward Elgar Publishing Ltd, 2010); Dawn Oliver & Jorg Fedtke, eds, *Human Rights and the Private Sphere: A Comparative Study* (London: Routledge-Cavendish, 2007); Aharon Barak, "Constitutional Human Rights and Private Law" in Daniel Friedmann and Daphne Barak-Erez, eds, *Human Rights in Private Law* (Oxford, UK: Hart Publishing, 2001); Andrew Clapham, *Human Rights in the Private Sphere* (New York: Oxford University Press, 1993); and Manfred Nowak & Karolina Miriam Januszewski, "Non-State Actors and Human Rights" in Math Noorman, August Reinisch & Cedric Ryngaert, eds, *Non-State Actors in International Law* (Oxford & Portland, Oregon: Hart Publishing, 2015).

[88] Roderick Macdonald, "Postscript and Prelude—The Jurisprudence of the Charter: Eight Theses" (1982) 4 Sup Ct Rev 321 at 347.

[89] For an up-to-date running tab of activities, see the website of the London-based Business and Human Rights Resource Centre, online: http://www.business-humanrights.org/UNGuidingPrinciplesPortal/Home.

[90] My use of the public-private dichotomy in this paper will be synonymous with the state-versus-non-state divide.

[91] Clapham, supra note 83 at 134 comments in this regard that "there should be protection from all violations of human rights, and not only when the violator can be directly identified as an agent of the State".

[92] *Al Shimari v CACI*, Case No. 1:08-cv-00827-GBL-JFA (2015). This discussion is drawn from Kuzi Charamba, *Hired Guns and Human Rights: Global Governance and Access to Remedies in the Private Military and Security Industry* (Edward Elgar, 2020).

contractors is further complicated by the fact that the claimant must prove that the private actor was performing an 'inherently governmental function'.[93] And even if this was the case, the defendants would then be able to challenge any claim against their actions on the grounds of the 'political question doctrine'.[94] The political question doctrine bars courts from reviewing the merits of a claim on the grounds of lacking subject-matter jurisdiction—the claim is deemed to be non-justiciable. This is what happened in *Al Shimari*. The court accepted CACI's claim that the court lacked subject-matter jurisdiction as CACI was acting under the 'direct' and 'plenary' control of the US military and because national defense interests were 'closely intertwined' with the military decisions governing the defendant's conduct.[95] Weaving private party actions into governmental function in this manner served to absolve the private actors of responsibility for human rights violations, to perpetuate the idea that only public actors can commit human rights violations, to undermine the rule of law, and ultimately, to deny the claimants' access to justice.

However, in the recent decision of *Nevsun Resources Ltd. v Araya*, the Canadian Supreme Court upended this public-private distinction between torts and human rights violations stemming from customary international law.[96] In that case, three Eritrean workers claimed that they were indefinitely conscripted through Eritrea's military service into a forced labor regime where they

[93] For various definitions of an 'inherently governmental function', see e.g. Kate Manuel, "Definitions of "Inherently Governmental Function" in Federal Procurement Law and Guidance", Congressional Research Service, 23 December 2014, https://sgp.fas.org/crs/misc/R42325.pdf.

[94] "The political question doctrine, at its core, recognizes as nonjusticiable any question whose resolution is committed to a coordinate branch of government and whose evaluation by a court would require the application of standards judicially undiscoverable or judicially unmanageable." *Al Shimari I*, 658 F (3d) at 421; see *Baker v Carr*, 369 US 186, 198 (1962); see also *Vieth v Jubelirer*, 541 US 267, 277 (2004). In *Baker*, the hallmark political question doctrine case, the US Supreme Court set forth the boundaries of the political question doctrine. Baker, 369 U.S. at 209. The court defined a political question as any case that presented one of the following attributes: (1) "a textually demonstrable constitutional commitment of the issue to a coordinate political department"; (2) "a lack of judicially discoverable and manageable standards for resolving it"; (3) "the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion"; (4) "the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of government"; (5) "an unusual need for unquestioning adherence to a political decision already made"; or (6) "the potentiality of embarrassment from multifarious pronouncements by various departments on one question". Baker, 369 U.S. at 217. This is also cited in *Al Shimari v CACI*, Case No. 1:08-cv-00827-GBL-JFA at 7.

[95] *Al Shimari v CACI*, Case No. 1:08-cv-00827-GBL-JFA. This was the two-factor test developed by the US Court of Appeals for the Fourth Circuit, in light of *Baker*, for cases involving government contractors in *Taylor v Kellogg Brown & Root Services, Inc.*, 658 F (3d) 402 (4th Cir 2011). The court noted that an affirmative answer to either of these two parts would render the claim non-justiciable. More specifically, the court held that "if a military contractor operates under the plenary control of the military, the contractor's decisions may be considered as de facto military decisions". 658 F (3d) at 410.

[96] *Nevsun Resources Ltd. v. Araya*, 2020 SCC 5 (CanLII).

were required to work at a mine in Eritrea. They claimed that they were subjected to violent, cruel, inhuman, and degrading treatment. The mine was owned partly by a Canadian mining company, Nevsun Resources Ltd, and partly by the Eritrean government. Subsequently, after fleeing Eritrea and becoming refugees, the Eritrean workers initiated legal proceedings against Nevsun for breaches of customary international law prohibitions against forced labour, slavery, cruel, inhuman or degrading treatment, and crimes against humanity. They also sought damages for breaches of domestic torts including conversion, battery, unlawful confinement, conspiracy, and negligence. As part of their defence, Nevsun argued that the claims based on customary international law should be struck because they have no reasonable prospect of success. The chambers judge dismissed Nevsun's motion to strike, and the Court of Appeal agreed. The Supreme Court upheld those decisions. Writing for the majority, Abella J. stated that customary international law forms a part of the Canadian common law through the doctrine of adoption absent legislation to the contrary. And what was particularly striking of the customary international legal norms that were raised was their status as peremptory norms, or *jus cogens*, clearly identifiable norms from which no derogation is permitted. Judicial action to ensure that these norms be respected under Canadian law was paramount. Such a stance could thus result in the direct remediation by the company based on a breach of customary international law. Abella J. reasoned as follows:

> '[126] While courts can, of course, address the extent and seriousness of harm arising from civil wrongs with tools like an award of punitive damages, these responses may be inadequate when it comes to the violation of the norms prohibiting forced labour; slavery; cruel, inhuman or degrading treatment; or crimes against humanity. The profound harm resulting from their violation is sufficiently distinct in nature from those of existing torts that, as the workers say, "[i]n the same way that torture is something more than battery, slavery is more than an amalgam of unlawful confinement, assault and unjust enrichment". Accepting this premise, which seems to be difficult to refute conceptually, reliance on existing domestic torts may not "do justice to the specific principles that already are, or should be, in place with respect to the human rights norm".[97]

[97] Craig Scott, "Translating Torture into Transnational Tort: Conceptual Divides in the Debate on Corporate Accountability for Human Rights Harms", in Craig Scott, ed, *Torture as Tort: Comparative Perspectives on the*

> [127] The workers' customary international law pleadings are broadly worded and offer several ways in which the violation of adopted norms of customary international law may potentially be compensable in domestic law. The mechanism for how these claims should proceed is a novel question that must be left to the trial judge. The claims may well be allowed to proceed based on the recognition of new nominate torts, but this is not necessarily the only possible route to resolving the Eritrean workers' claims. A compelling argument can also be made, based on their pleadings, for a direct approach recognizing that since customary international law is part of Canadian common law, a breach by a Canadian company can theoretically be directly remedied based on a breach of customary international law.…
>
> [129] Effectively and justly remedying breaches of customary international law may demand an approach of a different character than a typical "private law action in the nature of a tort claim'.[98]

The Supreme Court's position on this matter is striking and paves the way for new precedent that could have significant repercussions for private actor liability in relation to human rights violations. It is significant because of how it expands access to justice, but even more so conceptually because it takes direct aim at the normative sacred lamb that only states can be liable for human rights violations under international law, and the subordination of a private individual's potential impact on another's dignity.[99] Notwithstanding, the case is an exception to prevailing orthodoxy and is emblematic of the challenges in relying upon piecemeal reform by either court

---

Development of Transnational Human Rights Litigation (2001), 45, at 62, fn 4; see also Sandra Raponi, "Grounding a Cause of Action for Torture in Transnational Law", in Craig Scott, ed, *Torture as Tort: Comparative Perspectives on the Development of Transnational Human Rights Litigation* (2001), 373.

[98] *Vancouver (City) v Ward*, [2010] 2 S.C.R. 28, at para 22, citing *Dunlea v Attorney-General*, [2000] NZCA 84.

[99] As the Court did not address directly Nevsun's liability, the eventual trial of the matter would have been followed very closely indeed. This did not come to pass, however, as Nevsun is reported to have settled the case outside of court for an undisclosed sum. See Yvette Brend, "Landmark settlement is a message to Canadian companies extracting resources overseas: Amnesty International", CBC News, 23 October 2020, https://www.cbc.ca/news/canada/british-columbia/settlement-amnesty-scc-africa-mine-nevsun-1.5774910.

judgments or individual state legislation to address corporate human rights risks in a globalized economy.[100]

IV. Establishing a Corporate Responsibility to Protect Human Rights in the Digital Age

Given the impacts that corporations can have on human rights, global actors have been trying for many years to reach an accord on the appropriate approach towards the regulation of transnational business.[101] A brief discursive history of regulation within the area shows an oscillation between the use of 'soft law' instruments to try to coax powerful transnational enterprises into becoming good corporate citizens, and then, once frustration took hold because of the evident futility, calls for harder, legally binding obligations. Examples of the early 'soft' instruments include the ILO 'Tripartite Declaration on Multinational Enterprises and Social Policy',[102] the OECD 'Guidelines for Multinational Corporations',[103] and the later United Nations 'Global Compact'.[104] The instruments were received with much fanfare but were often derided by civil society groups that wanted to see more 'hard law' at work. Subsequently, the regulation oscillated back with the drafting of the UN's 'Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regards to Human Rights' (UN Norms).[105] There was much hope for

[100] There is a noticeable trend towards increased national corporate due diligence legislation from states and bodies such as France, the Netherlands, California, the EU, and the UK. While these developments should be applauded, they will require many more states to take similar action in a coordinated and concerted manner. Anything less will result in fragmentation, regulatory arbitrage, and largely inefficient governance regime, given the global nature of supply and value chains. For more information mandatory human rights due diligence initiatives, see the Business and Human Rights Resource Centre, *National and Regional Developments on mHRDD*, https://www.business-humanrights.org/en/big-issues/mandatory-due-diligence/national-regional-developments-on-mhrdd/.

[101] John Gerard Ruggie, "Global Governance and 'New Governance Theory': Lessons from Business and Human Rights" (2014) 20 Global Governance 5.

[102] ILO, 'Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy', 16 November 1977, 17 ILM 422, 1978.

[103] These were published in 1976 as an annex to the OECD 'Declaration on International Investment and Multinational Enterprises'.

[104] UN 'Global Compact', <www.unglobalcompact.org/>. This is broad in its scope and applicability to multinational corporations. Its 10 principles, which are drawn from 'The Ten Principles of the United Nations Global Compact' are derived from the 'Universal Declaration of Human Rights', the International Labour Organization's 'Declaration on Fundamental Principles and Rights at Work', the Rio Declaration on 'Environment and Development', and the United Nations 'Convention Against Corruption', and touch on human rights, labour rights, the environment and anti-corruption.

[105] 'Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights', 26 August 2005, UN Doc E/CN.4/Sub.2/2003/12/Rev.2, 2003 [UN Norms].

the UN Norms, but the instrument's attempt at internationalizing and legalizing corporate social responsibility also proved to be futile.[106] Corporations were to have 'the obligation to promote, secure the fulfilment of, respect, ensure respect of and protect human rights recognized in international as well as national law', the same obligations that states would assume.[107] Such top-down imposition of legal obligations on corporations was not effective, and it is likely that ongoing discussions for a treaty on business and human rights may encounter similar headwinds.[108]

In 2005, therefore, Professor John Ruggie was appointed to the position of UN Special Representative of the Secretary-General on human rights and transnational corporations and other business enterprises to try to pave a way forward on the matter. After six years and two renewals of his position, Professor Ruggie produced the UN 'Guiding Principles on Business and Human Rights' (Guiding Principles) in 2011.[109] The Guiding Principles were unanimously endorsed by the United Nations Human Rights Council and swiftly embraced by governments, standard-setting bodies, corporations, and civil society organizations.[110]

The Guiding Principles are structured around the 'Protect, Respect, and Remedy' framework, which consists of three pillars:

(1) The state duty to protect against human rights abuses by third parties, including business, through appropriate policies, regulation, and adjudication.

---

[106] Ruggie, *supra* note 30.
[107] Art. 1 UN Norms.
[108] See e.g. commentary by Ben Grama et al, "Third Revised Draft Treaty on Business and Human Rights: Comments and Recommendations" (2021) SSRN Journal, online: <https://www.ssrn.com/abstract=3949535>.
[109] UNHRC, 'Protect, Respect and Remedy: a Framework for Business and Human Rights: Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises', UN Doc A/HRC/17/31, 2011, <www.business-humanrights.org/media/documents/ruggie/ruggie-guiding-principles-21-mar-2011.pdf> [Guiding Principles].
[110] For an up-to-date running tab of activities, see the website of the London-based Business and Human Rights Resource Centre, < www.business-humanrights.org/UNGuidingPrinciplesPortal/Home>. Prominent examples of their usage include the new provisions in the OECD 'Common Approaches for Export Credit Agencies' requiring assessments of social risks, which affect access to capital at the national level; the new 'International Finance Corporation Sustainability Principles and Performance Standards' as well as the associated 'Equator Principles'; and the 'ISO26000', a new social responsibility guidance adopted by the International Organization for Standardization (ISO). The Guiding Principles have also been endorsed by the European Commission, as well as the United States through Section 1502 of the Dodd-Frank Wall Street Reform Act, and will soon be endorsed by the Association of Southeast Asian Nations (ASEAN) as well as the African Union. See also John Ruggie, 'Global Governance and 'New Governance Theory': Lessons from Business and Human Rights' (2014) 20 Global Governance 5 at 11–12.

(2) An independent corporate responsibility to respect human rights, which means to avoid infringing on the rights of others and to address adverse impacts with which companies are involved.
(3) The need for greater access by victims to effective remedy, both judicial and non-judicial.[111]

Pillar One is a codification of existing international legal obligations on states; Pillar Two represents the moral responsibility of corporations to be good corporate citizens, as is expected of them; and Pillar Three is a call for both of those groups to provide access to remedies to victims of human rights violations.

Developed following a philosophy of 'principled pragmatism',[112] the Guiding Principles are the 'global authoritative standard on business and human rights'.[113] The pillars reflect the consensus and desire among global actors to collaborate on the issue of business and human rights and their inception should be lauded. Yet, they still engender a system that places the predominant responsibility to protect human rights on states. The corporate responsibility to respect is primarily a moral one of due diligence, an expectation that companies identify, manage, and remedy their potential and actual human rights impacts. This overall approach provides a potential path towards assisting companies to be responsible actors while acting within a state's jurisdiction. But is this still appropriate when we step into a digital realm in which the Westphalian paradigm is not easily transposed?

The Westphalian paradigm is important to consider because it underpins the current international legal human rights framework[114] and is the basis through which the theoretical and functional arguments for a corporate responsibility to protect are engaged. In this paradigm, the individual, as either a natural or corporate person, is subordinate to the authority of the state. This entails two

[111] Para 6, UN Guiding Principles.
[112] Ruggie, *supra* note 30. Professor Ruggie described 'principled pragmatism' as "an unflinching commitment to the principle of strengthening the promotion and protection of human rights as it relates to business, coupled with a pragmatic attachment to what works best in creating change where it matters most – in the daily lives of people."
[113] *IBA Practical Guide on Business and Human Rights for Business Lawyers.* (2016).
[114] Richard Falk, "The interplay of Westphalia and Charter Conceptions of the International Legal Order" in Richard Falk & Cyril Black, eds, *The Future of the International Legal Order* (Princeton: Princeton University Press, 1969).

presumptions. First, that there is parity between the corporation and the natural person, at least from the state's perspective. Both are subjects and subject to its jurisdiction, within its jurisdiction. Second, there is a power dynamic that is built into this formula, that the state carries more power than the individual (natural or corporate). While this remains true for the natural person, it is increasingly less true for corporations.[115]

Theoretically, these presumptions and dynamic are upended in possible conceptions of a metaverse. While corporations and natural persons interact with one another in the jurisdiction of a state, as individuals, in a metaverse individuals will be inhabiting worlds and spaces created by programmers and corporations. This can invoke a Westphalian-like paradigm in which the corporation assumes the authoritative role and the avatar (the natural person's digital representation) is subordinated to the power of the corporation. The corporation determines the circumstances within which the person can exist within that space in ways that are significantly distinct from, for example, merely entering the physical premises of a corporation in the physical world. To participate within the realms of a metaverse, digital persons may need to abide by the rules, or laws, that are instituted by the corporation, not unlike platforms today. This can relate to how they act, transact, or interact, and considers the basis upon which someone can own property and use (crypto)currency. Whether there will be a tax is still to be determined, but this could be a 'subscription fee', or acceding your (monetizable) data to the corporation. The corporate creator of this digital space, this metaverse, assumes the de facto role of sovereign. This is the crux of the theoretical argument. By this analysis alone, there are grounds to submit that corporations in this position should have to assume the protection of (digital) human rights, at least in this space and under similar circumstances. Some commentators have already called for some variation of a digital bill of rights.[116]

---

[115] See e.g. Noreena Hertz, *The Silent Takeover* (London: Arrow Books, 2001) at 8, who reports that in 2001, fifty-one of the 100 largest economies in the world were corporations, while the other forty-nine were states; the largest one hundred corporations controlled 20 per cent of global foreign assets; the general sales of Ford and General Motors were greater than the GDP of the whole of sub-Saharan Africa. It is significant that this was drawn from 2001. By 2018, it was 157 corporations out of 200 entities, either states or corporations combined. Global Justice, "69 of the richest 100 entities on the planet are corporations, not governments, figures show", 17 October 2018, https://www.globaljustice.org.uk/news/69-richest-100-entities-planet-are-corporations-not-governments-figures-show/.

[116] See e.g. Raph Koster, "Declaring the Rights of Players", Raph Koster's Website, 27 August 2020, online: https://www.raphkoster.com/games/essays/declaring-the-rights-of-players/.

Functionally, this description is a loose list of some of the characteristics that we typically associate with the powers of a state, hence the reference to de facto sovereign status. However, one could take this analysis one step further with regards to whether corporations could be considered as states, as derived from public international law. Article 1 of the *1933 Montevideo Convention on the Rights and Duties of States* provides the widely held definition of a state, which is:

a. a permanent population;
b. a defined territory;
c. government; and
d. capacity to enter into relations with the other states.

While it is still some time away for a proper determination of whether these criteria will be met, it is possible to envisage a situation in which corporations could have created digital spaces or metaverses in which they could be defined as states under this definition. Indeed, if companies such as Meta and Microsoft are building their own versions of a metaverse, it is likely that these will be distinct spaces that digital persons can inhabit. Meta and Microsoft would serve as 'governments' and agreements between the companies specifying levels of interoperability and portability would determine an individual's ability to 'travel' across these spaces and interact as one would do in the physical world when they leave and enter a different state, country, or jurisdiction.

This functional exercise of authority that is typically associated with the state is the basis of the final argument for a corporate responsibility to protect. The exercise of authority to govern individuals, their actions, and their spaces is an exercise of regulation. Where the ability to exercise that authority is concentrated within an actor, it is incumbent upon that actor to exercise that authority in a way that maintains order for all individuals participating within that space. The need for order, which entails some respect for participants' rights, is an implicit or explicit condition of all participants who to take part in that space. Where no other actor can exercise that authority, as is the case within a metaverse created and facilitated by a corporate actor, then the exercise of that authority is a responsibility. Such is the position that we know the state to assume, and such is the concomitant responsibility that is placed upon it. This same logic should apply to corporate actors

in similar circumstances. This a challenge to prevailing notions of how regulatory authority should be accorded along public-private lines.[117]

This reasoning draws in part from approaches to regulation within financial sectors. There, regulators adopt the principle of 'same activity, same regulation'. [118] This idea has been referred to recently within the context of BigTech and new FinTech companies beginning to offer financial services.[119] While BigTech companies may have initially begun as intermediaries facilitating financial services between customers and traditional financial institutions, they have increasingly begun to start offering their own financial products, starting with payments and extending into credit, insurance, savings, and investments.[120] On occasion, this is facilitated using their own balance sheets. As they assume these functions, financial regulators are forced to consider the risk that they pose to consumers and financial markets notwithstanding that they may not meet the strict definition of a relevant financial institution, such as a bank or a money transmitter, for example. Consequently, there is a focus on developing regulatory responses on the basis of the activities conducted by the actor, rather than the status of the actor.[121] Similarly, there is a need for us to recognize the actions and functions that are being fulfilled by corporate actors within digital spaces and to accord responsibilities accordingly. This begs the question as to what that responsibility should entail. Given the earlier discussion of corporate power within a metaverse, I would argue that this should at least entail a responsibility to respect and protect human rights within a digital space. This responsibility is supplementary to all other existing and applicable regulation upon the corporation and does not detract from any other protections available to individuals, such as the state's obligation to protect human rights.

[117] Many authors have challenged the continued relevance of the public-private distinction in relation to the exercise of regulation, and more specifically in the context of law making, a domain that is typically reserved for or associated with the state. Some examples include Sarah Michele Ford, "RECONCEPTUALIZING THE PUBLIC/PRIVATE DISTINCTION IN THE AGE OF INFORMATION TECHNOLOGY" (2011) 14:4 Information, Communication & Society 550–567.
[118] UK Finance, *Same Activity, Same Risk, Same Regulation* (2021); Financial Stability Board, *Decentralised financial technologies: Report on financial stability, regulatory and governance implications* (2019);
[119] Bank for International Settlements, "III. Big tech in finance: opportunities and risks," in Annual Economic Report (2019).
[120] See e.g., Jon Frost et al, "BigTech and the changing structure of financial intermediation" (2019) 34:100 Economic Policy 761–799; Erik Feyen et al, "Fintech and the digital transformation of financial services: implications for market structure and public policy" 64.
[121] Fernando Restoy, "Fintech regulation: how to achieve a level playing field" 27.

V. Web2 or Web3 – does it make a difference?

An interesting tangential discussion is the underlying stage of web development that metaverses will be developed in – web2 or web3. Over the course of its existence, the internet has undergone several stages of development. In recognition of that, commentators seem to have settled upon three iterations: web1, web2, and web3.[122] Web1, which spanned roughly between 1990 and 2005, was premised on open protocols that were decentralized and community governed.[123] This was the 'read only' era when the internet consisted mostly of read-only home pages,[124] or the equivalent of an online Yellow Pages. Most of the value accrued to the edges of the network — users and builders.[125] Web2 can be classified as the 'read-write' era of the internet and is marked by the rise of social networking and user generated content.[126] Occurring approximately between 2005-2020, web2 is the era in which users are able to interact with one another mostly by posting media content on to websites and platforms.[127] However, given the economic model associated with platforms, value during this era accrued to a handful of companies, such as Google, Amazon, and Facebook, rather than to the users.[128] Indeed, this version of the internet produced tremendous wealth and power for these companies as their platforms are centralized silos that benefit from network effects and thus a concentration of users and activities that generate troves of monetizable data.[129] However, the next iteration of the internet, web3, is predicted to upend this model as it 'combines

[122] See e.g. Gilad Edelman, "The Father of Web3 Wants You to Trust Less", Wired, 29 November 2021, https://www.wired.com/story/web3-gavin-wood-interview/; Aaron Mak, "What Is Web3 and Why Are All the Crypto People Suddenly Talking About It?", Slate, 9 November 2021, https://slate.com/technology/2021/11/web3-explained-crypto-nfts-bored-apes.html; Graham Cormode & Balachander Krishnamurthy, "Key Differences between Web 1.0 and Web 2.0" (2008) 13:6 First Monday, https://firstmonday.org/ojs/index.php/fm/article/view/2125/1972.
[123] Chris Dixon, "Why Web3 Matters", Future, 7 October 2021, https://future.a16z.com/why-web3-matters/.
[124] Jamie Carter, "Back to basics: is Web 1.0 making a comeback?", Tech Radar, 18 April 2015, https://www.techradar.com/news/internet/web/is-web-1-0-making-a-big-comeback-1291121.
[125] Chris Dixon, "Why Web3 Matters", Future, 7 October 2021, https://future.a16z.com/why-web3-matters/.
[126] William Hosch, "Web 2.0", Encyclopedia Britannica, https://www.britannica.com/topic/Web-20.
[127] William Hosch, "Web 2.0", Encyclopedia Britannica, https://www.britannica.com/topic/Web-20.
[128] See R. Srinivasan, *Platform Business Models: Frameworks, Concepts and Design* (Springer Nature, 2021) and Geoffrey G. Parker, Marshall W. Van Alstyne & Sangeet Paul Choudary, *Platform Revolution* (W.W. Norton and Company, 2016).
[129] See e.g., BIS, "III. Big tech in finance: opportunities and risks" (2019) 26. In this latter report, analysts at the Bank for International Settlements discuss the expansion of BigTech firms into other sectors, such as finance, through this business model. See also Ian Pollari, "The rise of digital platforms in financial services" 2.

the decentralized, community-governed ethos of web1 with the advanced, modern functionality of web2.'[130]

Web3 is a decentralized world built primarily on blockchain technology and facilitated by tokens.[131] This transition is significant because it could potentially mark the end of BigTech's hold over the internet. Web3 could enable individuals to create new spaces and realities that they own and can freely interact and transact in without the feudalistic oversight or rent seeking that is characteristic of current web2 platforms i.e., BigTech firms.[132]

A metaverse constructed in web2 would deploy new innovations in augmented and virtual reality to create immersive digital landscapes and experiences. However, the deployment of such technological innovation does not necessarily impact the underlying economic and operational model that birthed BigTech firms and their enjoyment of a 'winner-takes-all' environment. The principal factors that explain why this would continue to be the case are the continuation of platforms, the utilization of data to foster network effects, and an aggressive approach towards the acquisition of or strategic mergers with perceived rivals.

Platforms are a digital infrastructure that enable intermediation among sets of users to transact or interact over a service of perceived value.[133] Examples of this could be buyers and sellers, as on E-Bay and Amazon, or drivers and ride-hailers on Uber or Lyft. Platforms are successful business models in a tech-driven world because of their ability to amass copious amounts of data. Data is important not only because it fuels the underlying technology to be more efficient and effective, but also because it gives the company the means to enhance and offer a product or service that is better tailored to its target market. As the platform's users find greater utility in the services being offered, this attracts more users onto the platform in an exponential rate and begins to generate 'network effects'. Network effects occur when increasing numbers of individuals decide to use a product or service because of the utility that arises from more people using it. For example, on an online marketplace such as Amazon, buyers are inclined to use it because of the large number of

[130] Chris Dixon, "Why Web3 Matters", Future, 7 October 2021, https://future.a16z.com/why-web3-matters/.
[131] Ephrat Livni, "Welcome to 'Web3'. What's that?", The New York Times, 5 December 2021.
[132] The Economist, "Chris Dixon & Packy McCormick on the future of crypto", The World Ahead 2022, 8 November 2021; Thibault Meunier, "Web3 – a vision for a decentralized web", Cloudfare, 1 October 2021, https://blog.cloudflare.com/what-is-web3/.
[133] See R. Srinivasan, *Platform Business Models: Frameworks, Concepts and Design* (Springer Nature, 2021) and Geoffrey G. Parker, Marshall W. Van Alstyne & Sangeet Paul Choudary, *Platform Revolution* (W.W. Norton and Company, 2016).

sellers and goods for sale on the site. The more buyers who use the site, the more sellers will be attracted to post their wares on the site, and so on. As more users transact on the platform, the company can gather more data, and as they gather more data, they are able to offer more services, thus attracting more users. It is a virtuous cycle.

Network effects have enabled BigTech companies to dominate their markets and to make horizontal plays into associated industries and sectors, such as music, finance, and groceries. For example, although Amazon started off selling books, it soon moved into a wide array of fields such as finance by offering co-branded credit cards, cloud services through Amazon Web Services, and video streaming through Amazon Prime Video. Facebook, similarly, after starting from its humble dorm room origins as a site to view other college students, soon became a tech behemoth that facilitates its own marketplace and was in the process of developing its own digital currency, Diem (also formally known as Libra).[134]

Finally, BigTech firms have also been able to grow significantly because of their aggressive approach towards mergers and acquisitions. Meta, for example, acquired Instagram back in 2012 when it was valued at $1 billion and had 13 employees. Today, the firm is worth $20 billion and has over one billion active users. The deal, however, has been under considerable regulatory scrutiny because of the anti-competitive allegations involved.[135] More recently, Meta acquired eight firms that specialize in augmented and virtual technologies in order to advance their offerings in their metaverse.[136] Microsoft, too, recently acquired Activision

When viewed collectively, these factors help to explain why and how BigTech firms could create large, all-encompassing digital spaces that could facilitate so many activities for the benefit of their users. Further, with the scale of their resources and the benefit of first mover-advantage, BigTech

[134] Sam Dean, "Why Facebook wants its own currency — and why that scares its critics", The Los Angeles Times, 18 June 2019, https://www.latimes.com/business/technology/la-fi-tn-facebook-libra-crypto-bitcoin-launch-20190617-story.html. Meta has since decided to shut down the Diem project. Antonio Ruiz Camacho, "Meta's crypto project Diem to shut down after regulator pushback", CNET, 1 February 2022, https://www.cnet.com/personal-finance/crypto/metas-crypto-project-diem-to-shut-down-after-pushback-from-regulators/#:~:text=With%20the%20liquidation%20of%20Diem's,project%20comes%20to%20an%20end.&text=Diem%2C%20the%20cryptocurrency%20project%20backed,continuing%20resistance%20from%20federal%20regulators.

[135] Casey Newton & Nilay Patel, "'Instagram can hurt us': Mark Zuckerberg emails outline plan to neutralize competitors", The Verge, 29 July 2020.

[136] The Economist, "What America's largest technology firms are investing in", 22 January 2022, https://www.economist.com/briefing/2022/01/22/what-americas-largest-technology-firms-are-investing-in.

firms could create walled gardens that crowd out smaller competitors, limit the options available for users, and continue to generate significant revenues. Interoperability and portability are not something that they would be incentivized to promote or embed within their metaverses as their goal would be to concentrate activity on their platforms and minimize their churn rate. Consequently, a metaverse built in web2 could only lead to either a continuation or more acute problems that result from current BigTech practices.

A metaverse constructed in web3, on the other hand, is presented as a contradistinction to web2. It is an idealized application and more democratic vision of what can be achieved in this next phase of the internet. This metaverse conception also immerses us in a digital reality in which we can act, transact, and interact, but as autonomous persons with the ability to own our own property through the use of self-sovereign identity and private keys.[137] Transactions involving one's property are maintained and immutably recorded on the blockchain, all with the benefit of not requiring an intermediary, such as a BigTech platform.[138] In a fully realized web3, commentators equally envisage being able to use that property in a range of scenarios and across digital spaces through built-in full interoperability and portability.[139] This new digital reality thus opens up a tremendous wealth of opportunities for individuals to engage beyond the dominance of BigTech. While some commentators rightly idealize a new utopian internet paradigm that is decentralized and thus breaks the grip of current BigTech giants, an 'Open Metaverse',[140] it is difficult to ignore the sheer might and resources that these companies are deploying in their quests to stake their part in the creation of metaverses today. Indeed, one cannot overlook or underestimate what BigTech firms have been able to achieve during this web2 era. Consequently, one should bear two points in mind.

---

[137] See e.g. Satoru Hori, "Self-sovereign identity: the future of personal data ownership", World Economic Forum, 12 August 2021, https://www.weforum.org/agenda/2021/08/self-sovereign-identity-future-personal-data-ownership/; Marcos Allende Lopez, *Self-Sovereign Identity: The Future of Identity: Self-Sovereignty, Digital Wallets, and Blockchain*, Inter-American Development Bank (2020), https://publications.iadb.org/publications/english/document/Self-Sovereign-Identity-The-Future-of-Identity-Self-Sovereignity-Digital-Wallets-and-Blockchain.pdf.

[138] Marcos Allende Lopez, *Self-Sovereign Identity: The Future of Identity: Self-Sovereignty, Digital Wallets, and Blockchain*, Inter-American Development Bank (2020), https://publications.iadb.org/publications/english/document/Self-Sovereign-Identity-The-Future-of-Identity-Self-Sovereignity-Digital-Wallets-and-Blockchain.pdf.

[139] Tim Ferris, author, "Chris Dixon and Naval Ravikant — The Wonders of Web3, How to Pick the Right Hill to Climb, Finding the Right Amount of Crypto Regulation, Friends with Benefits, and the Untapped Potential of NFTs (#542)", The Tim Ferris Show, 28 October 2021, https://tim.blog/2021/10/28/chris-dixon-naval-ravikant/.

[140] See e.g. Crucible, "The Open Metaverse", https://crucible.network/open-metaverse/.

First, given that a fully realized web3 is still a very distant proposition, for at least technological, computational, and usability reasons, it is likely that the first metaverse offerings will be based on a web2 model. The reality of decentralized applications at present, even with early stage web3, is that you still need a centralized platform to help facilitate exchange.[141] Second, even if web3 is fully realized, the paradox of decentralized practices and communities, is that they require some centralized, shared understanding of how members within that community should behave – the rules and protocols that will hold them together in a kind of aporia.[142] This is an opinion shared by analysts at the Bank for International Settlements on the parallel development of 'DeFi', or decentralized finance, a new of form of intermediation in crypto markets that operates on similar technologies underlying web3 development.[143] They counsel that an 'unregulated' DeFi network could pose risks to broader financial stability.[144] This is the 'DeFi illusion'.[145] I would extend this line of reasoning to social inequities as well, as decision-making processes, whether by humans or by code, are prone to inherent prejudice and bias that can impact an individual's human rights – civic, social, political, or economic,[146] and accentuate inequities. Digital communities need shared values that include a respect for and perhaps an obligation to protect the wellbeing of its members. Consequently, there should be some guiding principles that ensure that (digital) human rights are respected as innovation continues to advance.

[141] See e.g. Moxie Marlinspike, "My first impressions of web3", 7 January 2022, https://moxie.org/2022/01/07/web3-first-impressions.html.

[142] The aporia in this case refers to the design and desire of decentralized autonomy of the actors within the metaverse on one hand, but the need to have some shared rules which may limit their autonomy in order to ensure collective and individual wellbeing, yet wanting to maintain autonomy. This tension can only be resolved through the creation of some shared governance rules, principles, or values. A similar conclusion was reached by the classic libertarian scholar, Robert Nozick, as he questioned the extent to which

[143] See for e.g. Sirio Aramonte, Wenqian Huang & Andreas Schrimpf, "DeFi risks and the decentralisation illusion" (2021) 16. At 21, "Decentralised finance (DeFi) is touted as a new form of intermediation in crypto markets. The key elements of this ecosystem are novel automated protocols on blockchains – to support trading, lending and investment of cryptoassets – and stablecoins that facilitate fund transfers. There is a "decentralisation illusion" in DeFi since the need for governance makes some level of centralisation inevitable and structural aspects of the system lead to a concentration of power. If DeFi were to become widespread, its vulnerabilities might undermine financial stability. These can be severe because of high leverage, liquidity mismatches, built-in interconnectedness and the lack of shock absorbers such as banks. Existing governance mechanisms in DeFi would provide natural reference points for authorities in addressing issues related to financial stability, investor protection and illicit activities."

[144] *Ibid.*

[145] Ibid.

[146] See e.g. Lawrence Lessig, "Code is Law: On Liberty in Cyberspace", Harvard Magazine, 1 January 2000, https://www.harvardmagazine.com/2000/01/code-is-law-html and O'Neill, *supra* note 4.

VI. **Conclusion**

The idea of applying human rights obligations to corporations is one with growing traction, but also one that has met resistance for reasons of jurisprudence and vested interests.[147] There is equally legitimate concern that simply saying that private actors should be subject to human rights obligations is much easier than making it happen. This is true. The concept of human rights as it currently stands under international law is much broader than just prohibitions or negative obligations. The 'respect, protect, fulfill' framework applicable to human rights entails both negative and positive obligations. States have obligations to 'adopt legislative, judicial, administrative, educative and other appropriate measures in order to fulfil their legal obligations'.[148] Concurrently, states also have the right to limit individuals' rights and apply exceptions to the application of human rights. In the physical world, corporations do not have the authority to curtail peoples' rights and freedoms in this way. In a digital realm or metaverse, however, they can. In a metaverse, corporations could have the prerogative to limit an individual's (digital) human rights in a manner 'prescribed by law' and for reasons 'necessary to protect public safety, order, health, or morals or the fundamental rights and freedoms of others'.[149] This flies in the face of prevailing international human rights law theory and foundations. Consequently, perhaps it is time for us to consider at least an obligation to respect and protect (digital) human rights. This is noting that under current international human rights law doctrine the obligation to respect means that the duty bearer must refrain from interfering with or curtailing the enjoyment of human rights. The obligation to protect requires duty bearers to protect individuals and groups against human rights abuses. And the obligation to fulfil means that duty bearers must take positive action to facilitate the enjoyment of basic human rights.[150] To argue for the final element, the obligation to fulfil, may be one step too far as it can invoke notions of citizenship and civic duties in exchange for state benefits. These aspects of constitutionalism are fascinating corollary ideas to consider seriously, but beyond the scope of what can be addressed reasonably in this paper.

[147] Ruggie, *supra* note 30.
[148] UNHRC, *General Comment No. 31: The Nature of the General Legal Obligation Imposed on States Parties to the Covenant*, UN Doc CCPR/C/21/Rev.1/Add. 1326 (2004) at para 7.
[149] This is the typical language for limitations in the ICCPR. This is drawn from Article 18(3) ICCPR.
[150] UN Office of the High Commissioner on Human rights, 'International Human Rights Law', <www.ohchr.org/en/professionalinterest/pages/internationallaw.aspx>.

Nevertheless, as Michelle Bachelet counsels, '[a]s the digital frontiers expand, one of our greatest challenges as a human rights community will be to help companies and societies to implement the international human rights framework in the land we have not yet reached.'[151]

As part of this conclusion, three final points bear mentioning. First, while there is both normative and practical merit in the public-private distinction as a concept for evaluating the allocation of regulatory authority, legitimacy, and function, the broader pace of technological innovation, privatization, and globalization means that we should review its application for suitability periodically.

Second, while a premise of my argument takes aim static interpretation and application of the public-private distinction in the formulation of regulation, another premise is along more functional lines. It employs a functional approach to regulation, as is the practice within financial system regulation, where regulation which focuses on the activities of actors as opposed to the actor. This is summed up in the regulatory principle 'same activity, same regulation'.[152] By application, in this article I merely point out the new governance and police powers of corporations in digital spaces and question whether this should merit a reconsideration of the responsibilities that should hold in light of the potential impacts.

Finally, it should be noted that none of this should imply a diminution of existing state obligations to protect human rights. The extension of a corporate obligation to respect and protect does not extinguish a right holder's ability to pursue alternative remedial avenues where a duty bearer may have violated their human rights. Considered from the perspective of Hohfeld's claim-right, the claimant is merely exercising her claim-right against a corporation that owes her a duty—a duty of care, a duty not to commit harm, or a duty to respect her human rights, for example.[153] The fact that she exercises her right in this instance does not extinguish any of the other claim-rights that she may have against other duty holders.

---

[151] Michelle Bachelet, "Human Rights in the Digital Age – Can the make a difference?", Keynote Speech, 17 October 2019.
[152] UK Finance, *Same Activity, Same Risk, Same Regulation* (2021); Financial Stability Board, *Decentralised financial technologies: Report on financial stability, regulatory and governance implications* (2019); Bank for International Settlements, "III. Big tech in finance: opportunities and risks," in Annual Economic Report (2019).
[153] See Leif Warner, "Rights" in Edward Zalta, ed, *The Stanford Encyclopaedia of Philosophy* (Fall 2011 Edition), online: Stanford Encyclopaedia of Philosophy http://plato.stanford.edu.