

‘International commercial arbitration, the final frontier. It’s continuing mission...to boldly go where no arbitrator has gone before.’¹

The purpose of this paper is to consider arbitration in the Metaverse and to examine whether the existing arbitration rules are fit for purpose in this new virtual space. This dissertation has sought to answer the following questions:

1. Does arbitration have a use in the Metaverse?
2. Can existing arbitration rules be applied in the Metaverse?
3. Can the New York Convention be applied in the Metaverse?
4. Does arbitration currently exist in the Metaverse?
5. How can an arbitral award be enforced in the Metaverse?
6. Will the Metaverse influence the independence and impartiality of arbitrators?
7. Will the Metaverse have an impact on the arbitrability of disputes?
8. Is there a need for Emergency Arbitrators in the Metaverse?
9. How will multiparty arbitrations be dealt with in the Metaverse?
10. Is arbitration a viable alternative to domestic courts in the Metaverse?

It is proposed that this paper will demonstrate that with necessary adaptations, the process of arbitration is better suited to resolving disputes in the Metaverse than domestic courts alone.

1. The Evolution of International Arbitration and the Metaverse

The foundations of what may be described as international arbitration can be traced back as far as 1800BC to the Mari Kingdom in modern day Syria, where arbitration was used to settle disputes with other kingdoms.²

¹ Amended opening quotation of Capt. James T. Kirk, of the Starship Enterprise (Star Trek, TV Series 1966-69).

² Barrett J, A History of Alternative Dispute Resolution: The Story of a Political, Cultural, and Social Movement (Jossey-Bass A Wiley Imprint 2004) <<http://www.mediationhistory.org/wp->

Since these ancient times, the process of arbitration has steadily evolved but its underlying procedures have largely remained the same. So, what could change in the future? Well, possibly everything.

The latest wave of human innovation is Artificial Intelligence (AI).³ AI has given life to the Metaverse which is ‘a vision for a network of digital worlds through which we will navigate seamlessly using virtual reality and augmented reality devices to connect with others’.⁴

It has been predicted that by 2026, 25% of the population will be spending at least one hour a day in the Metaverse by engaging in shopping, education, social media or entertainment.⁵ Some law firms have already established themselves in the Metaverse with the creation of virtual offices.⁶ It is estimated that exchange traded funds in the Metaverse could amass to \$80bn in assets by the end of 2024, with a recorded \$54bn being spent on virtual goods in 2020 alone.⁷ This level of trade will inevitably lead to disputes within the Metaverse, which may be classified into four broad categories: intellectual property, real estate, marketplace, and non-monetary.⁸

It is also presumed that an increase in blockchain transactions will increase the level of arbitral disputes.⁹ These digital disputes will consist of international

content/uploads/2020/10/A-History-of-Alternative-Dispute-Resolution-The-Story-of-a-Political-Social-and-Cultural-Movement-by-Jerome-T.-Barrett-Joseph-Barrett-z-lib.org_.pdf>

³ “Waves of Change: Understanding the Driving Force of Innovation Cycles” (*World Economic Forum*, September 10, 2024) <<https://www.weforum.org/agenda/2021/07/this-is-a-visualization-of-the-history-of-innovation-cycles/>>

⁴ Walsh L, “What Is the Metaverse – and Will It Help Us or Harm Us?” (University of Cambridge, July 27, 2023) <<https://www.cam.ac.uk/stories/metaverse>>

⁵ Wiles J, “What Is a Metaverse? And Should You Be Buying In?” (Gartner, October 21, 2022) <<https://www.gartner.com/en/articles/what-is-a-metaverse>> accessed October 3, 2024

⁶ “Metaverse - Rose Law Group” (Rose Law Group, August 14, 2024) <<https://www.roselawgroup.com/areas-of-practice/metaverse/>>

⁷ Moy C, “Opportunities in the Metaverse: How Businesses Can Explore the Metaverse and Navigate the Hype vs. Reality” [2022] J.P.Morgan <<https://www.jpmorgan.com/content/dam/jpm/treasury-services/documents/opportunities-in-the-metaverse.pdf>> accessed October 3, 2024

⁸ Allouzi AS and Alomari KM, “Adequate Legal Rules in Settling Metaverse Disputes: Hybrid Legal Framework for Metaverse Dispute Resolution (HLFMDR)” (2023) 7 *International Journal of Data and Network Science* 1627 <<https://doi.org/10.5267/j.ijdns.2023.8.001>>

⁹ Potin NM -p., “The Digital Revolution: Blockchain and Artificial Intelligence in International Arbitration” (SHS Cairn.info) <<https://shs.cairn.info/revue-confluence-2024-1-page-165?lang=fr&tab=auteurs>>

parties, involving cross-border transaction, products with protected intellectual property and technologies, as well as sensitive trade secrets.¹⁰

The Metaverse will raise a host of new issues in arbitration, not least of which being proof of liability, where the proximity to the creator's original act becomes less clear. This issue is further complicated by the presence of multiple service providers in the development of intellectual property and the difficulty in identifying a continuum of liability to the end user of such technologies. The European Commission's White Paper notes that these novel features:

make it difficult to trace back potentially problematic decisions made with the involvement of AI systems. This in turn may make it difficult for persons having suffered harm to obtain compensation under the current EU and national liability legislation.¹¹

The Move from the Physical to a Virtual World.

There is a necessity to consider whether existing methods and rules of international arbitration will function in the Metaverse. To date, most international arbitrations are *substantively* governed by the national law chosen by the parties to the underlying agreement. In addition, such arbitrations are *procedurally* governed by the laws of the country of the 'seat' of the arbitration. The issue of the seat of arbitration goes to the heart of enforcement of awards and so its interpretation is critical to the entirety of the process.

The Model Law defines international commercial arbitration in Article 1(3) in terms of disputes between parties whose businesses are in different states or relating to more than one country.¹² The ICC rules do not require parties to be

¹⁰ Khasawneh NA, "Arbitration and the Advent of New Technologies" (Global Arbitration Review) <<https://globalarbitrationreview.com/guide/the-guide-telecoms-arbitrations/second-edition/article/arbitration-and-the-advent-of-new-technologies>>

¹¹ Department of Business, Enterprise and Innovation, "WHITE PAPER On Artificial Intelligence - A European Approach to Excellence and Trust" (Digital Single Market and International Digital Economy Policy Unit Department of Business Enterprise and Innovation 2020) COM (2020)65 <https://opac.oireachtas.ie/AWData/Library3/Documents%20Laid/pdf/BEIdocId200320_200320_113820.pdf>

¹² UNCITRAL United Nations Commission on International Trade Law, UNCITRAL Model Law on International Commercial Arbitration 1985: With Amendments as Adopted in 2006 (United Nations Publication 2005) <https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/19-09955_e_ebook.pdf>

of different nationalities for arbitration to be considered of an international nature and includes a contract that is 'concluded between two nationals of the same State for performance in another country'.¹³ The rules are currently drafted in terms of physical countries and do not make any reference to potential new virtual spaces in the Metaverse.

Professor Fouchard has argued that international arbitration does not require a juridical link with a country on the premise that the process is based upon the will of the parties (known in French as '*l'autonomie de la vonte*').¹⁴ This theory is perhaps best espoused in the 2007 French Court of Cassation's decision of *Putrabali*¹⁵ where it determined that an international arbitral award could be enforced in France despite the fact that the English High Court had already set it aside.

As against such unbridled autonomy Lord Mance, a former judge of the UK Supreme Court has stated that:

We-judges, arbitrators and lawyers-are engaged in a common exercise, the administration of justice for the benefit of litigants and society. A degree of order, coordination and interdependence is necessary and desirable if this exercise is to be conducted efficiently and economically in a globalised world.¹⁶

This observation was made in 2016, but the 'globalised world' to which Lord Mance referred is now about to utterly change and include a virtual realm, very possibly outside the order, coordination and interdependence which a traditional nation state once held power over.

This burgeoning wild west of digital commerce will need a new sheriff that can quickly educate itself on the intricacies of a virtual world and adopt novel mechanisms to regulate it. While domestic courts will always maintain an

¹³ Commerce ICO, ICC Arbitration: The International Solution to International Business Disputes, vol 301 (ICC Publication 1977) p. 19.

¹⁴ Fouchard P, L' Arbitrage Commercial International, vol 2 (Dalloz 1965)

¹⁵ Cour de Cassation, 1st Civil Chamber, 29 June, 2007, 2 decisions, Société Putrabali Adyamulia c. SA Rena Holding et autre, No 05– 18.053 and No 06–13.293, Dalloz, 2007, note X Delpech

¹⁶ Mance J, "Arbitration: A Law unto Itself?" (2015) 32 Arbitration International 223 <<https://doi.org/10.1093/arbint/aiv072>>

important role in regulating the Metaverse, international arbitration is arguably more suitable to the role of virtual enforcer as, 'adaptability and access to expertise are [arbitration's] hallmarks.'¹⁷

2. Arbitration Hearings in the Metaverse

On 11th November 2022 the first legal trial was held in the Metaverse in a local court in China.¹⁸ This was followed by Colombia's Magdalena Administrative court hearing a traffic dispute in the Metaverse with the parties appearing as avatars in a virtual court. The proceedings were watched on YouTube by 68,000 people.¹⁹

During the onset of the COVID-19 pandemic concerns arose surrounding such virtual trials and several leading arbitral institutions issued protocols for remote hearings.^{20 21} These protocols were necessary to ensure equal treatment of the parties. Interestingly it has been suggested that the shortcomings of these arbitral online hearings may be ameliorated by photorealistic avatars in the Metaverse, to bring an element of humanisation that online meetings fail to achieve.²²

Automated online dispute resolution is now extensively used by eBay. Given that 60 million disputes arise each year, it appears unimaginable that these could be handled by humans in a traditional manner. Professor Richard

¹⁷ *"Mitsubishi Motors Corp. v. Soler Chrysler-Plymouth, Inc., 473 U.S. 614 (1985)" (Justia Law)* <<https://supreme.justia.com/cases/federal/us/473/614/>>

¹⁸ "The First Metaverse Trial Opened in a Local Court in China | Odr.Info" (November 11, 2022) <<https://odr.info/the-first-metaverse-trial-opened-in-a-local-court-in-china/>>

¹⁹ Bello C, "Meet Victoria Quiñones, Colombia's New 'Metaverse Judge'" Euronews (April 28, 2023) <<https://www.euronews.com/next/2023/04/27/meet-victoria-quinones-colombias-new-metaverse-judge>>

²⁰ International Chamber of Commerce (ICC), "VII: Conduct of the Arbitration: C: Hearings - Virtual Hearings," NOTE TO PARTIES AND ARBITRAL TRIBUNALS ON THE CONDUCT OF THE ARBITRATION UNDER THE ICC RULES OF ARBITRATION (International Chamber of Commerce (ICC) 2021) <<https://iccwbo.org/wp-content/uploads/sites/3/2020/12/icc-note-to-parties-and-arbitral-tribunals-on-the-conduct-of-arbitration-english-2021.pdf>>

²¹ Honcharenko K and McBrayer M, "Guidance Note on Remote Dispute Resolution Proceedings" (The Chartered Institute of Arbitrators 2020) <https://www.viac.eu/images/COVID19/CIArb_remote-hearings-guidance-note.pdf> accessed October 3, 2024 CI Arb, Guidance Note on Remote Dispute Resolution Proceedings.

²² Jagati S, "Metaverse Still Not Ready for Virtual Weddings and Legal Proceedings" (Cointelegraph, August 13, 2022) <<https://cointelegraph.com/news/metaverse-still-not-ready-for-virtual-weddings-and-legal-proceedings>> accessed October 3, 2024

Susskind, a leading commentator on AI, has stated that in the 2020's he expects that:

online courts and ODR services will be telepresence-enabled; that is, they will make extensive use of advance immersive video and metaverse.²³

The Dubai International Arbitration Centre (DIAC) has already launched its own platform in the Metaverse for dispute resolution. The DIAC platform employs state-of-the-art technology to create an immersive environment that enables seamless communication, document sharing, and real-time interaction among participants.²⁴

Decentraland, a decentralised autonomous space in the Metaverse, permits users to implement arbitration under the rules of the ICC. Parties are contractually obliged to appoint three arbitrators, hold proceedings in English, with the seat of the arbitration being Panama.²⁵ US investment company Everyrealm, which operates virtual real estate in the Metaverse, compels parties to attempt negotiation first. If that fails Everyrealm offers the option of a JAMS arbitration under its *Optional Expedited Arbitration Procedure* conducted in New York County.²⁶

Blockchain Arbitration.

Another fascinating development of arbitration in the Metaverse is the emergence of what has become known as blockchain arbitration. In this process, randomly selected peers are incentivised to act like a large arbitral tribunal in determining disputes. They are economically rewarded via crypto technologies and are paid in the event their determination aligns with the

²³ Susskind R, *Tomorrow's Lawyers: An Introduction to Your Future* (3rd edn, Oxford University Press 2023)

²⁴ Khilawala S, "Dubai International Arbitration Centre Launches Its Metaverse for Next-Generation Dispute Resolution" *ACE Times* (March 30, 2023) <<https://www.zawya.com/en/press-release/government-news/dubai-international-arbitration-centre-launches-its-metaverse-for-next-generation-dispute-resolution-gtl665he>>

²⁵ Decentraland.Org, "Terms of Use" (Decentraland, 2024) <<https://decentraland.org/terms/#18-binding-arbitration-and-class-action-waiver>> accessed October 3, 2024

²⁶ "EveryRealm | Terms of Service" (EveryRealm, August 11, 2023) <<https://www.everyrealm.com/terms-of-service>> accessed October 3, 2024 - See Clause 16.

majority decision. Once a decision is made, it can be enforced through smart contracts using blockchain,²⁷ which is discussed more extensively below.²⁸ This is not a futuristic conceptual idea. Providers such as Kleros²⁹, CodeLegit³⁰ and Aragon³¹ presently offer these services to tackle high-volume, low-cost disputes with moderate complexity.

Parties to arbitrations in the Metaverse should be mindful of the *Silicon Valley Arbitration and Mediation Centre published AI Guidelines* on the 30th April 2024 (SVMA AI Guidelines).³² These guidelines set out that all parties using AI in connection with an arbitration should make reasonable efforts to understand each AI tool's relevant limitations, biases, and risks and, to the extent possible, mitigate them.³³ The parties to arbitration are held responsible for ensuring their use of AI tools is consistent with their obligations to safeguard confidential information³⁴ and disclosure³⁵.

Virtual Awards.

It is worth considering whether these novel virtual awards may be subject to challenge in domestic courts. For example, many common law jurisdictions consider that failure to give an oral hearing to a party that has requested one,

²⁷ Paula IÁ and Soler CB, “Disputes in the Era of Meta Worlds: The Role of Arbitration” [2022] *Uria Menéndez* 35 <<https://www.uria.com/documentos/publicaciones/8224/documento/iao10-um.pdf?id=13158&forceDownload=true>>

²⁸ See section ‘Smart Contracts and Enforcement’.

²⁹ Kleros.IO, *DISPUTE REVOLUTION: THE KLEROS HANDBOOK OF DECENTRALIZED JUSTICE* <<https://blog.kleros.io/content/files/ipfs/QmZeV32S2VoyUnqJsRRCh75F1fP2AeomVq2Ury2fTt9V4z/dispute-resolution-kleros.pdf>>

³⁰ Datarella GmbH, “CodeLegit - Legal Libraries for Smart Contracts - DATARELLA” (DATARELLA, March 4, 2019) <<https://datarella.com/codelegit-legal-libraries-for-smart-contracts/>> accessed October 9, 2024

³¹ Aragon, “What Is Aragon Court | Aragon User Documentation” (*Aragon*, 2023) <<https://legacy-docs.aragon.org/products/aragon-court/aragon-court>> accessed October 9, 2024

³² The full version published on 30 April 2024 offered helpful practical examples —, *SVAMC Guidelines on the Use of Artificial Intelligence in Arbitration* (1st edn, Silicon Valley Arbitration & Mediation Center, Inc 2024) <<https://svamc.org/wp-content/uploads/SVAMC-AI-Guidelines-First-Edition.pdf>>

³³ SVAMC, “Part 1: Guidelines Applicable to All Participants in International Arbitrations,” *SVAMC Guidelines on the Use of Artificial Intelligence in Arbitration* (1st edn, Silicon Valley Arbitration & Mediation Center, Inc 2024) <<https://svamc.org/wp-content/uploads/SVAMC-AI-Guidelines-First-Edition.pdf>>

³⁴ SVAMC, “Part 2: Guidelines for Parties and Party Representatives,” *SVAMC Guidelines on the Use of Artificial Intelligence in Arbitration* (1st edn, Silicon Valley Arbitration & Mediation Center, Inc 2024) <<https://svamc.org/wp-content/uploads/SVAMC-AI-Guidelines-First-Edition.pdf>>

³⁵ SVAMC, “Part 3: Guidelines for Arbitrators,” *SVAMC Guidelines on the Use of Artificial Intelligence in Arbitration* (1st edn, Silicon Valley Arbitration & Mediation Center, Inc 2024) <<https://svamc.org/wp-content/uploads/SVAMC-AI-Guidelines-First-Edition.pdf>>

to be a violation of due process. US courts have already recognised such a denial of an oral hearing as grounds for setting aside an arbitral award.³⁶ Similarly procedural objections in civil law jurisdictions may be raised based on *drot de la défense*, where a party is not afforded a full opportunity to present their case. Importantly, Article 34(2)(a)(iv) of the Model Law exposes awards to challenge where the procedure adopted in the arbitration is not in conformity with the agreement of the parties or, failing such agreement, with the law. It is also worth noting that arbitrations that randomly select peers do not consider the independence or impartiality of such parties, which may also be a ground for objection.³⁷

Interestingly CodeLegit have attempted to tackle some of these issues by the implementation of its own Blockchain Arbitration Rules (based on the Model Law), whereby arbitrators are required to have certain qualifications (e.g. they may be jurists or expert technicians).³⁸ While the arbitrator issues the award it is CodeLegit itself which has the power to modify the smart contract.

In considering these options it should be noted that an arbitrator's mandate is a personal one (*ntuitu personae*). Extreme caution needs to be exercised therefore when dealing with such generative AI solutions to ensure that such responsibility is not wholly delegated. In this regard, it is interesting to note that the Model law does not actually specify that an arbitrator must be a human, although several countries have made this a mandatory requirement.³⁹ It should also be borne in mind that many legal models are written in the context of

³⁶ See *Parsons Whittemore Overseas Co. Inc. v Société Générale de l'Industrie du Papier (RAKTA)*, 508 F.2d 969 (2d Cir. 1974).

³⁷ UNCITRAL, UNCITRAL Model Law on International Commercial Arbitration 1985: With Amendments as Adopted in 2006 (UNITED NATIONS PUBLICATION 2006) <https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/19-09955_e_ebook.pdf> See Art. 12(1) The UNCITRAL Model Law and the UNCITRAL Arbitration Rules set an internationally recognised standard by providing that an arbitrator may be non-eligible when there are "justifiable doubts as to [their] impartiality or independence".

³⁸ Reuter M, "CodeLegit Conducts First Blockchain-Based Smart Contract Arbitration Proceeding" (DATARELLA, March 27, 2019) <<https://datarella.com/codelegit-conducts-first-blockchain-based-smart-contract-arbitration-proceeding/>>

³⁹ The arbitration acts of Brazil, Ecuador, Columbia and Peru contain specific reference to the arbitrator being "human".

natural persons and so would create issues with determinations made by AI generative tools in the Metaverse.⁴⁰

3. Enforcement of Arbitral Awards in the Metaverse

Sir Robert Jennings, former President of the International Court of Justice stated:

International commercial disputes do not fit into orthodox moulds of dispute procedures. They lie astraddle the frontiers of foreign and domestic law and raise questions that do not fit into the categories of private international law either. Not least they raise peculiar problems of enforcement.⁴¹

The ‘peculiar problem of enforcement’ to which Sir Jennings refers is about to become even more peculiar with the imminent advent of the Metaverse, as the very geography of a dispute will enter a new world of virtual dimensions.

The New York Convention in the Metaverse.

The New York Convention⁴² is considered the cornerstone of international arbitration because it provides a framework for enforcement among member states. These powers of enforcement within the Convention lay the bedrock of confidence upon which international trading contracts are entered into.

Article V.1(e) of the New York Convention provides that the recognition and enforcement of an arbitral award may be refused if the award has been set aside or suspended by a competent authority of the country in which, or under the law of which, the award was made.⁴³ While it may be argued that cases

⁴⁰ Hope J, Calissendorff and Schöldström P (eds), “Chapter 7: Can a Robot Be an Arbitrator?,” *Stockholm Arbitration Yearbook 2019* (Kluwer Law International BV 2019) <https://static1.squarespace.com/static/57fe4d37c534a5c932910b78/t/5d2f04ff5c6d260001d10b5c/1563362560203/ch.+6_lucy+greenwood.pdf>

⁴¹ Nigel Blackaby, “C. The Legal Framework of International Arbitration,” *Redfern and Hunter on International Arbitration (Hardback + LawReader Pack)* (7th edn, Oxford University Press, USA 2023), p. 21.

⁴² United Nations, “Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York, 1958)” [2015] UNCITRAL.UN <<https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/new-york-convention-e.pdf>>

⁴³ See also Model Law, Art. 36(1)(v)

such as *Putrabali*⁴⁴ are rare, they may become more commonplace in a decentralised Metaverse where differing service providers physically exist in multiple jurisdictions and attempted enforcement takes place.

Unlike defined states in the New York Convention, with obvious borders and domestic courts, it remains to be seen who will own vast tracts of the Metaverse. As noted by Professor Tom Furness:

One popular theory is that the Metaverse will be owned by the community, where the 'land' owners create the rules and regulations within the Metaverse, especially if decentralised platforms become more prominent, as this is their operating model.⁴⁵

A second consideration regarding the actual control (as opposed to ownership) of such spaces must be considered. This stems from the fact that the Model Law is based upon the presumption that the “state” is the controlling force within its jurisdictional boundaries. This may not necessarily be the case in the Metaverse.

Mustafa Sulleyman has argued that:

Technology has already created modern empires of a sort.....New, private interests will step into spaces vacated by overstretched and strained governments. This process won't, like the East India Company⁴⁶, come enforced at the barrel of a musket, but it will, exactly like the East India Company, create private companies with the scale, reach, and power of governments.⁴⁷

This unusual phenomenon will become prevalent in the Metaverse where large corporations may effectively create microstates. In this race of technological

⁴⁴ *Putrabali* (n 15).

⁴⁵ Rosa N, *Understanding the Metaverse: A Business and Ethical Guide* (John Wiley & Sons 2022) p. 53.

⁴⁶ By 1800 the East India Company, a private company based in London and owned by a limited number of shareholders, controlled vast swaths of the Indian subcontinent.

⁴⁷ Mustafa Suleyman and Michael Bhaskar, “The Future on Nations,” *The Coming Wave* (Bodley Head 2023) p. 189.

advancement corporate algorithms with the ability to control assets in this virtual world, and not necessarily domestic courts, will exert influence and power.

There are already defined virtual spaces in the Metaverse such as Decentraland,⁴⁸ Roblox⁴⁹, Sandbox⁵⁰ and Meta Horizon Worlds⁵¹ which are all owned by private corporations. Republic Realm has built a virtual shopping centre in the Metaverse, leased space to JP Morgan and even built virtual villas.⁵²

There are currently over 170 signatories to the New York Convention and it is assumed that such states impose the law within their jurisdictions. But with the advent of the Metaverse the very definition of jurisdiction may change, and within time we may very well have to consider adding the private 'East India' corporations of the Metaverse to this signatory list.

The Metaverse is not however the exclusive domain of autocratic corporations divorced from the nation state. Small and large groups of individual users are already coming together to self-organise and create their own rules for these virtual societies. Like large virtual corporate spaces, these decentralised spaces will also enjoy a degree of autonomy in this new virtual state that may remain out of the reach of the New York Convention. The acceleration of exponential technological growth may remove the necessity of the nation states infrastructure, as "off-grid" entities in the Metaverse flourish and become in the words of Sulleyman:

⁴⁸ Jardi Y, "Decentraland Whitepaper 2.0" (*Decentraland*, 2017) <<https://decentraland.org/whitepaper2.pdf>> accessed October 5, 2024

⁴⁹ Blockchain Council, "Roblox Metaverse - Blockchain Council" (*Blockchain Council*, September 17, 2024) <<https://www.blockchain-council.org/metaverse/all-you-need-to-know-about-the-roblox-metaverse/>> accessed October 5, 2024

⁵⁰ Sandbox, "The Sandbox: Play. Create. Own. Govern. Earn. Welcome to the Metaverse" (*Sandbox*, 2011) <https://installers.sandbox.game/The_Sandbox_Whitepaper_2020.pdf> accessed October 5, 2024

⁵¹ Facebook, "Meta Horizon Worlds" (*Meta*, April 3, 2020) <https://www.meta.com/en-gb/experiences/meta-horizon-worlds/2532035600194083/?utm_source=www.google.com&utm_medium=oculusredirect#description> accessed October 5, 2024

⁵² Stein J, Yorio J and Durgee A, "Realm Metaverse Real Estate: A Diversified Portfolio of Digital Real Estate NFTs across Various Metaverses" (*Republic*, March 2017) <<https://republic.com/realm-metaverse-realestate>> accessed October 5, 2024

A state, and yet not a state, capable of cherry-picking responsibilities and activities to the benefit of its own interests...⁵³

Such organisations byelaws may compel members to abide by arbitral decisions by coding compliance structures into smart contracts. Inter-platform agreements may also be developed to encourage enforcement with a similar co-operative effect that currently exists between states under the New York Convention.

Smart Contracts and Enforcement.

The Metaverse currently utilises the capabilities of digital technology, such as smart contracts to determine disputes.⁵⁴ Smart contracts are coded to enforce obligations agreed to by the parties and do not necessarily require a centralised authority.⁵⁵ To enforce arbitral determinations, parties may also submit monies to escrow accounts in advance of such determinations. It has been argued that blockchain technologies could possibly enforce an award by the attachment of digitally designated assets.⁵⁶

The Hedera Hashgraph platform in the Metaverse facilitates arbitration coding by inserting it into smart contracts on its blockchain. The arbitrators under this process are permitted to amend the code or even to reverse a transaction.⁵⁷

As an alternative, an arbitrator may be granted a limited power to simply release funds following the determination of a smart contract or select from a range of outcomes. It has also been suggested that an arbitrator may be given the power

⁵³ Suleyman M and Bhaskar M, “Chapter 11: The Future on Nations,” *The Coming Wave* (Bodley Head 2023) p.197.

⁵⁴ Vijayan S, “Autonomous Arbitration in the Era of the Metaverse” (*Kluwer Arbitration Blog*, March 11, 2022) <<https://arbitrationblog.kluwerarbitration.com/2022/03/11/autonomous-arbitration-in-the-era-of-the-metaverse/#:~:text=As%20the%20metaverse's%20borders%20become,to%20unlock%20total%20autonomous%20arbitration>> accessed October 5, 2024

⁵⁵ De Filippi P, Mannan M and Reijers W, “Blockchain Technology and the Rule of Code: Regulation via Governance” (Hal Open Science 2022) <<https://hal.science/hal-03883249/document>> accessed October 5, 2024

⁵⁶ Paula IÁ (n 27).

⁵⁷ Madsen P, “Hedera Technical Insights: Code Is Law, but What If the Law Needs to Change?” (Hedera, December 5, 2018) <<https://hedera.com/blog/code-is-law-but-what-if-the-law-needs-to-change>> accessed October 3, 2024

to amend the very code of the smart contract, with such a power being specifically coded into the contract itself.⁵⁸

4. Independence and Impartiality of Arbitrators in the Metaverse

Most arbitration institutions have enshrined the concepts of independence and impartiality⁵⁹. These dual requirements underpin the confidence of the process of arbitration. The ICC Rules of Arbitration require that ‘every arbitrator must be and remain independent of the parties involved in the arbitration’⁶⁰, and that before appointment or confirmation, the arbitrator must sign a statement of acceptance, availability, impartiality and independence.

Notably however Article 11(1) of the Model Law sets out that ‘No person shall be precluded by reason of his nationality from acting as an arbitrator, unless otherwise agreed by the parties’. Nationality therefore does not *prima facie* give rise to objections regarding impartiality or independence.

However, the concept of nationality is currently based on established countries with borders. As the Metaverse develops and parties spend increasing time in virtual spaces, a person’s identity and influences will conceivably extend to where they spend the preponderance of their time, which may be in a virtual space, possibly as an avatar. Impartiality may have to be reconsidered in relation to a bias against a particular avatar as opposed to, for example, a particular ethnic background.

The use of AI tools in the Metaverse by an arbitrator may have its own inherently programmed bias, as they merely process the available data which can contain defects or bias. In this regard, it is worth noting that the current configuration

⁵⁸ Scott K and others, “ARBITRATION FOR CRYPTOASSET AND SMART CONTRACT DISPUTES” (Clifford Chance 2022) <<https://www.cliffordchance.com/content/dam/cliffordchance/briefings/2022/01/arbitration-for-cryptoasset-and-smart-contract-disputes.pdf>> accessed October 5, 2024, p. 7.

⁵⁹ ICC Rules, Art. 11.1, UNCITRAL Rules, Arts. 11 & 12, LCIA Rules, Art. 14.1, ICDR Rules, Art. 14.1, HKIAC Rules, Art. 11.1, CIETAC Rules, Art. 24.

⁶⁰ Art. 11(1), ICC Arbitration Rules.

of AI programs gives binary responses based on probability, which may lack legitimacy and leave an arbitrator's award open to challenge.⁶¹

Under the IBA's '*Guidelines on Conflicts of Interest in International Arbitration*' (which relate to physical arbitrators), an arbitrator must consider, 'are the facts and circumstances disclosed likely to give rise *in the eyes of the parties* to doubts as to my impartiality and independence'.⁶² This approach notably requires a subjective analysis. In future this will need to be redefined to include the concept of independence and impartiality in fully virtual arbitrations, where the *SVMA AI Guidelines*⁶³ may also be applied, which require the type of AI used to be disclosed and a consideration of its inherent limitations and biases.

5. The impact of the Metaverse on Arbitrability

The New York Convention and the Model Law are expressly restricted in their application to disputes that are 'capable of settlement by arbitration'.⁶⁴ Technological advancement will require the concept of arbitrability to be reconsidered, particularly in unregulated technological fields.

Arbitrability is inherently linked to public policy, which will now have to consider its moral standing in virtual realms. Earlier this year Disney originally tried to defend a wrongful death action in the US by attempting to enforce an arbitration clause and draw the matter out of the domestic courts. While this argument was ultimately withdrawn by Disney, it was described by the plaintiff's lawyers as:

...so outrageously unreasonable and unfair as to shock the judicial conscience.⁶⁵

⁶¹ Scherer M, "Artificial Intelligence and Legal Decision-Making: The Wide Open? Study on the Example of International Arbitration" (Legal Studies Research paper, Queen Mary University of London, School of Law 2019) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3392669>

⁶² IBA Council, "IBA Guidelines on Conflicts of Interest in International Arbitration" (International Bar Association 2024) <<https://www.ibanet.org/document?id=Guidelines-on-Conflicts-of-Interest-in-International-Arbitration-2024#:~:text=Explanation%20to%20General%20Standard%203,be%20relevant%20in%20their%20vie w.>> accessed October 5, 2024 (3) Disclosure by the Arbitrator, letter (a).

⁶³ *SVAMC Guidelines* (n 32).

⁶⁴ New York Convention, Arts II(1) and V(2)(a); Model Law, Arts 34(2)(b)(i) and 36(1)(b)(i).

⁶⁵ Yeung J and Passantino J, "Disney Reverses Course on Bid to Block Wrongful Death Lawsuit by Widower Who Had Disney+" (*CNN Business*, August 20, 2024)

One can quickly see how similar issues that appear at the crossroads of public policy and arbitration, will migrate into the Metaverse where corporations like Disney have invested \$1.5bn.⁶⁶

Recently British police investigated a disturbing incident of virtual sexual assault in the Metaverse causing trauma ‘similar to that of someone who has been physically raped’.⁶⁷ The issue however is that current English law requires there to have been physical contact to prosecute rape.

These novel lacunas in the law will invariably raise complex issues of arbitrability where public policy is forced to consider whether it should permit new causes of action arising in the Metaverse, to be privately sanctioned in an arbitration.

6. The Role of the Emergency Arbitrator in the Metaverse

With the advent of incoming technologies and virtual realms, the appointment of Emergency Arbitrators will also need to be reconsidered. The reason for this is that the removal of valuables, such as crypto currency is now instantaneous. By the time a traditional arbitral tribunal is convened the dispute may be moot, with no assets remaining in the virtual space. Similarly, the deletion or concealment of digital evidence may take place at the push of a button and cause issues for forensic examination within the Metaverse.⁶⁸

<https://edition.cnn.com/2024/08/19/business/disney-arbitration-wrongful-death-lawsuit-intl-hnk?cid=ios_app> accessed October 21, 2024

⁶⁶ Park G, “Why Disney Just Invested \$1.5 Billion into the Metaverse: If the Metaverse Has a Future, Disney and Epic Appear to Believe It’s in Entertainment — Not Work” The Washington Post (February 8, 2024) <<https://www.washingtonpost.com/entertainment/video-games/2024/02/08/disney-epic-games-metaverse/>>

⁶⁷ Vallance BC, “Police Investigate Virtual Sex Assault on Girl’s Avatar” (January 2, 2024) <<https://www.bbc.com/news/technology-67865327>>

⁶⁸ International Criminal Police Organization, “METAVERSE: A LAW ENFORCEMENT PERSPECTIVE: Use Cases, Crime, Forensics, Investigation, and Governance” (INTERPOL 2024) 23COM004383 <<https://www.interpol.int/content/download/20828/file/Metaverse%20-%20a%20law%20enforcement%20perspective.pdf>> accessed October 6, 2024, p. 17.

Most arbitral institutions including the ICC⁶⁹, the LCIA⁷⁰ and the International Centre for Dispute Resolution⁷¹ have already recognised such risk in the real world and have made provision for the appointment of Emergency Arbitrators. Article 43.1 of the *Swiss Rules of Arbitration* permit *ex parte* relief.⁷² The Emergency Arbitrators decision is made on an interim basis and is not binding on the arbitral tribunal. This means that parties still need to rely on national courts to enforce such interim awards.

It remains unclear as to whether such interim ‘orders’ will be universally enforceable on the basis that they may not in fact be ‘awards’ for the purposes of the New York Convention.⁷³ It is noteworthy in this regard that Article 2.1 of the Singapore International Arbitration Act 2012 was amended to ensure that an order of an Emergency Arbitrator is treated the same as those made by the Arbitral Tribunal.⁷⁴

This present risk of unenforceability of such orders in the physical world, is exacerbated in a virtual realm due to the speed at which circumstances can change, and the unique procedural and jurisdictional objections that may be raised in the Metaverse. The answers to these difficult questions may be found in blockchain contract management, with instantaneous interim injunctive relief written into its code.⁷⁵

⁶⁹ ICC Rules, Art. 29 and Appendix V.

⁷⁰ LCIA Rules, Art. 9A provides for the expedited formation of an arbitral tribunal, while Art. 9B provides for the appointment of an emergency arbitrator at any time prior to the formation or the expedited formation of the arbitral tribunal.

⁷¹ ICDR Rules, Art. 7.

⁷² Swiss Arbitration Centre, “Swiss Rules of International Arbitration” (Swiss Arbitration 2021) <https://www.swissarbitration.org/wp-content/uploads/2024/09/Swiss-Arbitration-Centre_International-Swiss-Rules-2021-EN.pdf> accessed October 9, 2024

⁷³ DrT and Shebaro M, “ENFORCEABILITY OF THE EMERGENCY ARBITRATOR DECISIONS” (2024) 2023 BAU Journal - Journal of Legal Studies S - مجلة القانونية الدراسات: <<https://doi.org/10.54729/2958-4884.1126>>

⁷⁴ Authority, “International Arbitration (Amendment) Act 2012 - Singapore Statutes Online” (Singapore Statutes Online, June 1, 2012) <<https://sso.agc.gov.sg/Acts-Supp/12-2012/Published/20120528?DocDate=20120528>> accessed October 6, 2024

⁷⁵ See section ‘Smart Contracts and Enforcement’.

7. Multi-Party Arbitrations in the Metaverse

International Arbitration is based upon on the consent of the parties⁷⁶. Issues arise where a third party does not consent to joining the arbitration or where an objection is raised to the consolidation of two or more arbitrations. Notably there is no power in the Model Law or the UNCITAL Rules to consolidate cases, although certain arbitral institutions such as the ICC⁷⁷ and LCIA⁷⁸ do permit such consolidation at the invitation of the parties.

In virtual spaces, which comprise of hosting servers and multiple creators, it may become increasingly difficult to both identify legitimate defendants and then subsequently draw them into a consensual arbitration process. In the physical world this issue has been advanced by joining parties who are 'assumed' to have given consent⁷⁹.

Several jurisdictions have accepted joinder by 'implied consent' or where a party has a direct relationship with a signatory to the arbitration agreement, has a direct commonality in the subject matter and where such a composite reference would serve justice.⁸⁰ Given the inter-related composition of parties in the Metaverse, similar doctrines may be developed exclusively in this virtual world.

Class Actions in the Metaverse.

In advance of the incoming promulgation of trade in digital spaces, it is also worth considering the issue of class arbitrations. Class actions have relevance in consumer disputes. In *Green Tree Financial Corporation v Bazzle*⁸¹ the US Supreme Court opened the door to such arbitrations, finding that it was for the

⁷⁶ Camilla G and Natalia C (eds), "Wiki Note: Consent to Arbitration" (Jusmundi, April 29, 2024) <<https://jusmundi.com/en/document/publication/en-consent-to-arbitration>> accessed October 9, 2024

⁷⁷ See Article 10 of ICC Rules of Arbitration.

⁷⁸ See Article 22A of the LCIA Rule of Arbitration.

⁷⁹ Brekoulakis S, "Rethinking Consent in International Commercial Arbitration: A General Theory for Non-Signatories" (2017) 8 Journal of International Dispute Settlement 610 <<https://www.clearygottlieb.com/-/media/files/nyaw-2020/brekoulakis-rethinking-consent-in-intl-comm-arb--a-general-theory-for-nonsignatories-pdf.pdf>>

⁸⁰ H, Srinivas C and Sabharwal M, "Joinder of Parties in Arbitration Proceedings" (IBANET) <<https://www.ibanet.org/article/ef21c5af-3917-4ba5-b278-6f2790a47a03>> accessed October 6, 2024

⁸¹ *Green Tree Financial Corp. v. Bazzle*, 539 U.S. 444 (2003)

arbitrator, as opposed to a court, to determine whether a class arbitration was possible.

The 'Directive on representative actions for the protection of the collective interests of Consumers'⁸² recently extended the concept of class actions to the European Union in consumer disputes and creates the possibility for international enforcement.⁸³

Google, Meta and Microsoft are all currently investing heavily in the Metaverse⁸⁴, and this will invariably lead to a rise in consumer claims that may be readily amenable to some form of class arbitration through a variety of mechanisms outline above.

8. Conclusion

Arbitration may be a preferable mechanism for dispute resolution in the Metaverse. The arbitrator can determine awards that may then be enforced through blockchain technologies and smart contracts. National courts may develop protocols to interact with the virtual arbitration where appropriate.

In future, there could be a requirement to revise the New York Convention to include virtual 'States'. The existing rules of international arbitration will also need amendment to take account of the coming wave of technological development. Arbitration institutions such as the ICC and prominent arbitration rules such as CIArb's, will have a leading role in adapting to these changes. In considering such amendments, extreme caution must be exercised to maintain ethical standards and procedural fairness.

⁸² EUR-Lex, "DIRECTIVE (EU) 2020/1828 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 November 2020: On Representative Actions for the Protection of the Collective Interests of Consumers and Repealing Directive 2009/22/EC" (European Union 2020) Document <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32020L1828>> accessed October 6, 2024

⁸³ Strong, "ENFORCING CLASS ARBITRATION IN THE INTERNATIONAL SPHERE: DUE PROCESS AND PUBLIC POLICY CONCERNS" (2008) 30 University of Pennsylvania Journal of International Law <<https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1136&context=jil>> p. 89.

⁸⁴ Walbank J, "Top 10 Companies Investing in the Metaverse in 2023" (Mobile Magazine, January 20, 2023) <<https://mobile-magazine.com/articles/top-10-companies-investing-in-the-metaverse-in-2023>> accessed October 6, 2024

While arbitration in the Metaverse raises many concerns, none of them should dissuade the further exploration or development of arbitration in this new virtual world of commerce. As Robert F. Kennedy's stated in his farewell address in Warsaw, Poland given in 1964:

Just because we cannot see clearly the end of the road, that is no reason for not setting out on the essential journey. On the contrary, great change dominates the world, and unless we move with change, we will become its victims.⁸⁵

⁸⁵ "Kennedy Exhorts the Poles to Further U.S.-Soviet Friendship" *The New York Times* (July 2, 1964) <https://www.nytimes.com/1964/07/02/archives/kennedy-farewell-statement-warsaw-poland>, reported in *The New York Times* on July 2, 1964.

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<[https://search.coe.int/cm/#{%22CoEIdentifier%22:\[%220900001680af0734%22\],%22sort%22:\[%22CoEValidationDate%20Descending%22\]}](https://search.coe.int/cm/#{%22CoEIdentifier%22:[%220900001680af0734%22],%22sort%22:[%22CoEValidationDate%20Descending%22]}>)>

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