

A legal status for Avatars in the Metaverse from a Private Law perspective

Abstract

Avatars, or digital representations of ourselves in the Metaverse are often seen as a fun and unique aspect of virtual worlds, but the legal implications of their use — and potential misuse— remain largely unexplored. In this paper, I address various issues relating to the utilization of avatars in online virtual platforms by individuals, highlighting both their potential benefits advantages and potential problems. In that context, I provide a very much needed clarification of what the Metaverse entails, and I propose a Private Law-oriented framework for thinking and regulating certain aspects of digital avatars in a legally feasible manner.

Sumario

Los Avatares, o las representaciones de nosotros mismos en el Metaverso, con frecuencia son vistos como aspectos divertidos y únicos de los mundos virtuales, no obstante, las implicaciones jurídicas de su uso —y abuso— aún son un área mayormente inexplorada. En este artículo presento varias de las dificultades jurídicas que plantea el uso de los avatares en el en las plataformas del Metaverso, resaltando tanto sus potenciales beneficios como problemas. Para ello, ofrezco una muy necesaria aclaración de lo que es el Metaverso, y propongo un marco para analizar lo que podría ser una regulación de los Avatares de forma jurídicamente viable, especialmente desde el punto de vista del Derecho Privado.

Title: *Un régimen jurídico para los avatares en el Metaverso desde la perspectiva del Derecho Privado.*

Keywords: Metaverse, Avatar, Private Law, Civil liability, Legal Personhood, Digital Assets, NFT, Product liability, Artificial Intelligence.

Palabras clave: *Metaverso, Avatar, Derecho Privado, personalidad jurídica, responsabilidad civil, activos digitales, NFT, responsabilidad por productos defectuosos, inteligencia artificial.*

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1. Introduction*

The emergence of the so-called Metaverse (capital M) and its growing reception introduce a new scenario for diverse interactions, with implications at social, industrial, commercial, medical, educational, and even governmental levels. It allows and enables the execution and enforcement of contracts, the creation, distribution, and sale of various digital goods and services, and, of course, the infringement of rights, as well as other legally protected interests. The Metaverse's development is still in its early development stages, but its potential significance for human existence is already considerable; with over a 400 million unique average monthly users worldwide by 2023¹, several companies and public figures have taken an interest in waging into it: Facebook rebranded as Meta², JPMorgan has launched a virtual office³, famous artists are holding massive events online, sometimes, by means of their own digital counterparts (avatars)⁴, the so-called *avatar marketing* has risen as a real brand endorsement strategy⁵, and so on.

Avatars, which are digital representations of individuals in the Metaverse are often seen as a fun and distinctive aspect of virtual worlds. However, the legal implications of their use—and potential misuse—remain largely unexplored. Whereas participating in a virtual world using a virtual avatar can be an engaging experience, in these environments, virtual avatars act as representations of individuals, allowing users to interact simultaneously in the same digital realm. As of today, there is a lack of effective regulation to fully protect avatars in the Metaverse, should they be granted such protection. Some attempts have tangentially addressed some of the main issues. However, legal frameworks have not adequately addressed avatar activities that mirror real-world activities, despite initiatives like the Digital Services Act by the EU, or the World Economic Forum's Global Principles on Digital Safety⁶.

In this paper, various issues relating to the utilization of avatars in the Metaverse are addressed, highlighting both their potential advantages and potential problems. In that context, a much-needed clarification of what the Metaverse entails and some proposal from a Private Law-

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¹ According to the The Metaversed research, available at: <<https://www.metaversed.consulting/blog/the-metaverse-reaches-400m-active-users>> (Accessed: 18 March 2024).

² <<https://about.fb.com/news/2021/10/facebook-company-is-now-meta/>> (Accessed: 18 March 2024).

³ <<https://www.jpmorgan.com/content/dam/jpm/treasury-services/documents/opportunities-in-the-metaverse.pdf>> (Accessed: 18 March 2024).

⁴ For example, Ariana Grande performed in a virtual concert in Fortnite on the 2021 Rift Tour <<https://routenote.com/blog/ariana-grande-fortnite/>> (Accessed: 18 March 2024); as well as The Weeknd, John Legend, and Justin Bieber, who have also performed live in Wave <<https://wavexr.com/>> Paris Hilton recently announced the launch of her own Roblox virtual world called *Slivingland* <<https://www.thedrum.com/news/2023/08/11/1111-media-unveils-paris-hilton-themed-slivingland-roblox>> (Accessed: 18 March 2024).

⁵ DE BRITO SILVA, Marianny Jessica/DE OLIVEIRA RAMOS DELFINO, Lorena/ALVES CERQUEIRA, Kaetana, et al. «Avatar marketing: a study on the engagement and authenticity of virtual influencers on Instagram», *Social Network Analysis and Mining*, vol. 12, no. 130, 2022, pp. 1-19.

⁶ For instance, in accordance with the above-mentioned Global Principles on Digital Safety, governments should be expected to distinguish between illegal content and content that is lawful but may be harmful online.

oriented framework for regulating certain issues of avatars in a legally feasible manner are herein provided.

2. The Metaverse and online virtual worlds

As an opening remark, it is crucial to highlight that the leading academia rightly stresses that, even today, the Metaverse itself is a unique “ecosystem”; there is only one Metaverse in the same way that there is only one Internet⁷. The misnomer is often found in legal literature⁸, and mostly, this is due to the focus on the current state of the Metaverse, as emphasized here, rather than its true nature or intended purpose.

The common misconception arises from the existence of different *online* platforms, designed to work independently from each other and offer all kinds of experiences and services that can be enjoyed by users, such as those –remarkably– offered by Second Life⁹. Hence, *metaverses* (lowercase “m”, and plural) better describes *virtual online worlds* or *platforms*. Other examples, which are sometimes depicted as *metaverses*, include video games like Roblox, Fortnite or Minecraft, which display three-dimensional scenarios and different possibilities of interaction with whole communities¹⁰. All the above can be more accurately characterized as *centralized digital worlds* that take place in the Metaverse. *Virtual worlds* can therefore be defined as persistent online computer-generated environments where multiple users in remote physical locations can interact in real time for several purposes, *e.g.*, to work or play¹¹. But, as stated, they do not enclose, nor do they represent the entire concept of the Metaverse.

⁷ RIJMENAM, Mark Van. *Step into the Metaverse: How the Immersive Internet Will Unlock a Trillion-Dollar Social Economy*, Wiley, New Jersey, 2022, p. 12; LEE, Lik-Hang, et al. «All one needs to know about metaverse: A complete survey on technological singularity, virtual ecosystem, and research agenda», *Journal Of Latex Class File*, vol. 14, no. 8, *arXiv preprint arXiv:2110.05352*, 2021.

⁸ Or in several non-strictly technology-oriented papers, for that matter.

⁹ To date, most scientific studies on the Metaverse revolve around Second Life which is probably the utmost successful *virtual world* example, due to its great possibilities to recreate real experiences and develop new methodologies for learning, interaction, collaboration, etc. KEMP, Jeremy William/LIVINGSTONE, Daniel. «Putting a Second Life “metaverse” skin on learning management systems». In KEMP, Jeremy William/LIVINGSTONE, Daniel (Eds). *Proceedings of the Second Life education workshop at the Second Life community convention*, University of Paisley, Paisley, 2006, p. 12; LASTIRI SANTIAGO, Mónica. «Los desafíos del Derecho de marcas en los mundos virtuales como el Second Life», *Revista de la contratación electrónica*, vol. 98, no. 11, 2008; KAPLAN, Andreas M./HAENLEIN, Michael. «The fairyland of Second Life: Virtual social worlds and how to use them». *Business horizons*, vol. 52, no. 6, 2009, pp. 563-572; DE BACK, Tycho/TINGA, Angelica M./LOUWERSE, Max. «Learning in immersed collaborative virtual environments: design and implementation», *Interactive Learning Environments*, vol. 31, no. 8, 2021, pp. 1-19; BROWN, Elaine/GORDON, Marie/HOBBS, Mike. «Second Life as a holistic learning environment for problem-based learning and transferable skills», *ReLIVE 08. Proceedings of Researching Learning in Virtual Environments International Conference*, vol. 8, 2008, pp. 39-48; Among others.

¹⁰ SPARKES, Matthew. «What is a Metaverse», *New Scientist*, vol. 251, no. 3348, 2021, p. 18; ROSPIGLIOSI, Pericles. «Metaverse or Simulacra? Roblox, Minecraft, Meta and the turn to virtual reality for education, socialisation and work», *Interactive Learning Environments*, vol. 30, no. 1, 2022, pp. 1-3; <<https://www.roblox.com/>> (Accessed: 18 March 2024); <<https://www.minecraft.net/es-es>> (Accessed: 18 March 2024); <<https://www.epicgames.com/fortnite/es-ES/home>> (Accessed: 18 March 2024).

¹¹ DIONISIO, John David/BURNS, William G./GILBERT, Richard. «3D virtual worlds and the metaverse: Current status and future possibilities», *Association for Computer Machinery (ACM) Computing Surveys (CSUR)*, vol. 45, no. 3, 2013, p. 1; Also: HACKL, Cathy/LUETH, Dirk/DI BARTOLO, Tommaso, et Al. *Navigating the Metaverse A Guide To Limitless Possibilities In A Web 3.0 World*, John Wiley & Sons, Inc., Newark, 2022, p. 50.

The comparison serves the purpose of clearly differentiating between the *Metaverse* and *online virtual platforms*, since the latter pose markedly different legal issues, in which this paper will mainly focus¹².

The Metaverse, as an immersive digital ecosystem, makes use of different technologies, some of which have already transformed the state-of-the-art technology available, as well as our experience online¹⁵. As of today, it is not a final version of what it can be, but it is being developed to achieve a harmonic conjugation of *physical* and *digital* realities in a persistent fashion, which could progressively happen in the coming decades¹⁴.

Some of those technologies can be noted for the purposes of clarification.

The list is, in fact, large and complex. Some of the technological aspects that receive most attention in the scientific literature include the Metaverse's telecommunication infrastructures, that apply the fifth and even the sixth generation of cellular technology (5G and 6G networks), as well as the so-called *cloud computing* which integrates a network of shared resources and servers for data processing and storage, in addition to other services¹⁵. The user experience in the Metaverse is immersive; this is partially¹⁶ achieved through other types of technologies and hardware. They transport users to an increasingly realistic experience with Extended Reality (XR), which combines Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR)¹⁷, and through different types of hardware that look like helmets, goggles or visors, known as *head-mounted displays* (HMDs); in addition, there might be auxiliary devices that could look like gloves or electrodes known as *hand-based input* devices that collect the movement of the hands and arms or, in general, *motion input* devices that can collect the movement of the entire body of the user and translate it into a form of navigation or interaction in the Metaverse¹⁸. Added to said technologies also coexists the use of Artificial Intelligence or AI, which enhances the user experience as it allows machines to learn, make decisions autonomously, create and predict content or surroundings that can adapt, be customized, change quickly, etc., based on its own experience or statistics (so-called *machine learning* and *deep learning*)¹⁹.

¹² This is to prevent the research subject from being too wide.

¹³ This particularly fascinating topic has been delved into elsewhere: ARISMENDY MENGUAL, Lorena María. «Desafíos Jurídicos del Metaverso: Protección de Datos, Propiedad Intelectual y Responsabilidad Civil», *Cuadernos de Derecho y Comercio*, no. 80, 2023, pp. 61-102.

¹⁴ Most technology scholars agree on the Metaverse currently being in a development stage and on its way to being a "final product": DUAN, Haihan, et al. «Metaverse for social good: A university campus prototype», *Proceedings of the 29th Association for Computer Machinery (ACM) International Conference on Multimedia*, 2021, pp. 153-161; WANG, Dianwei/YAN, Xiaoge/ZHOU, Yang. «Research on Metaverse: Concept, development and standard system», *IEEE 2021 2nd International Conference on Electronics, Communications and Information Technology (CECIT)*, 2021, pp. 983-991; DIONISIO, John David/BURNS, William G./GILBERT, Richard. «3D virtual worlds and the metaverse: Current status and future possibilities», *Op Cit*, pp. 2-3; NING, Huansheng, et al. «A Survey on Metaverse: the State-of-the-art, Technologies, Applications, and Challenges», *arXiv preprint arXiv:2111.09673*, 2021, pp. 11-12.

¹⁵ NING, Huansheng, et al. «A Survey on Metaverse: the State-of-the-art, Technologies, Applications, and Challenges», *Op Cit*, p. 12.

¹⁶ More on the technology aiding the immersive experience below.

¹⁷ GADEKALLU, Thippa Reddy, et al. «Blockchain for the Metaverse: A Review», *arXiv preprint arXiv:2203.09738*, 2022, p. 4.

¹⁸ PARK, Sang-Min/KIM, Young-Gab. «A Metaverse: Taxonomy, components, applications, and open challenges», *IEEE Access*, 2022, vol. 10, no. 4216, 2022.

¹⁹ JEON, Hyun-Joo, et Al. «Blockchain and AI meet in the metaverse». In FERNÁNDEZ-CARAMÉS, Tiago/FRAGA LAMAS, Paula. (Eds.), *Advances in the Convergence of Blockchain and Artificial Intelligence*, IntechOpen, London, 2022, p. 6; GADEKALLU, Thippa Reddy, et al. «Blockchain for the Metaverse: A Review», *Op Cit*, pp. 11-12; LEE, Lik-Hang, et Al. «All one needs to know about metaverse», *Op Cit*, pp. 14, 45.

Nonetheless, some of the Metaverse's technological requirements call for our close attention for the purposes of understanding and analysing a legal status for avatars.

The Metaverse makes use of the *Web3.0*, which is considered the next stage of evolution of the *World Wide Web*; it is a decentralized and immersive version of its predecessors (the *web1.0* and the *web2.0*) and, more importantly, it is based on *blockchain* technology²⁰. Some remarks on these two fundamental aspects should be noted:

- **The Web 3.0 (*read, write, own*):** The *Web1.0* is also known as the “*read-only web*”, meaning that users could only check information hosted in it²¹. It was the initial version of the Internet in the 90s, when the first webpage was launched to the public. Its evolution led us to *Web2.0*, which gave users the possibility of creating and sharing content revolving around them (*reading* and *writing*), especially with the massive popularization of social networks and *e-commerce*. Whether liked or not, the outcome of this second milestone was that certain private companies such as Microsoft, Apple, Facebook (currently Meta) or Google, as processors and/or controllers, became the main holders of the content and data as well as their proceeds as monetizable assets transmitted through their respective platforms²². The *Web3.0* represents the up-and-coming shift on online navigation, moving away from centralized services to decentralized systems, since it allows users to *read, write*, as well as to *own* their data and contents which were previously hoarded by platforms, just like the aforesaid.
- **The Blockchain:** It allows the implementation of a *Distributed Ledger Technology* (or *DLT*)²³ and can be defined as a public, decentralized, and unalterable database or *chain* of codes, thus guaranteeing the transparency, reliability, and immutability of the encrypted information that is transmitted in it, which can be traced and verified by anyone at any time²⁴. When new data is entered, such as the request for the transfer of an asset, it is added as one more *block* in the chain if —and only if— a number of *verifiers*²⁵ reach a consensus to validate their inclusion in it, in exchange for a reward payable in

²⁰ KSHETRI, Nir. «Policy, Ethical, Social, and Environmental Considerations of Web3 and the Metaverse», *IT Professional*, vol. 24, no. 3, 2022, pp. 4-8.

²¹ While it required an advanced set of skills and technical knowledge to participate in it.

²² HACKL, Cathy/LUETH, Dirk/DI BARTOLO, Tommaso, et AL., *Op Cit*, p. 48; RIJMENAM, Mark Van. *Step into the Metaverse*, *Op Cit*, p. 4; MERRICK, Robert/RYAN, Suzanne. *Data Privacy Governance in The Age of Gdpr, Risk and Insurance Management Society*, t. 66, no. 3, New York, 2019, pp. 40-43.

²³ A DLT is a database in which there are multiple identical copies distributed among various participants. It is updated synchronously by consensus among the participants. ROMERO UGARTE, José Luis. «Tecnología de registros distribuidos (DLT): una introducción», *Boletín económico/Banco de España [Artículos]*, no. 4, 2018, p. 1.

²⁴ GADEKALLU, Thippa Reddy, et al. «Blockchain for the Metaverse: A Review», *Op Cit*, 4.

²⁵ These verifiers are not actual people, but rather computers or servers located worldwide that contribute their technical capabilities to verify the inclusion of a block in the chain, e.g., by solving complex mathematical problems, which is also known as *proof of work*. There are other protocols for DLT consensus, such as the *proof of stake* (already consolidated in Ethereum) and the *proof of space* (in experimental phase). THOMSEN, Søren Eller/SPITTERS, Bas. «Formalizing Nakamoto-Style Proof of Stake», *2021 IEEE 34th Computer Security Foundations Symposium (CSF)*. IEEE, 2021, pp. 1-15; JIAN, Xin/LENG, Pengcheng/WANG, Yanfeng, et al. «Blockchain-empowered trusted networking for unmanned aerial vehicles in the B5G era», *IEEE Network*, vol. 35, no. 1, 2021, pp. 72–77.

intangible assets (*tokens*)²⁶. Even though this decentralized consensus protocol started with Bitcoin (one of the main cryptoassets nowadays²⁷), other functionalities for it — besides the decentralization of logs and validations regarding cryptoassets transactions—, did not take long; new applications were found for this technology, e.g., through the development of the so-called *smart contracts*²⁸ that emerged with Ethereum²⁹, whose codes are also stored in the *blockchain*³⁰. There is much to discuss about this fascinating technology. However, for the purposes of this paper, it's essential to highlight that *blockchain* technology in the Metaverse serves two main purposes: (i) it allows users to store their own data —that can be ported or transferred amongst different platforms, which is known as *interoperability*³¹—, and (ii) it allows the creation of an economic environment or market for the exchange of goods and digital services, in connection with all kinds of goods and services in the *real world*³².

As can be seen, the concept of decentralization is fundamental for it allows users to have greater control over their own data and contributions to the digital ecosystem. It would seem that users should therefore be directly accountable for what their *digital twins* (avatars) do around the Metaverse, but in fact, the archetype of complete decentralization also makes it far more challenging to ideate a functional legal regime for this particular aspect; since users gain more power over their navigation practices, interactions, exchanges, etc., traditional intermediaries and/or service providers' accountability for wrongful or illegal behaviour in *virtual worlds* become more debateable. This paradoxically conflicts with essential goals of current European regulation, and especially with the up-to-date Digital Services Act (DSA) that aims to improve

²⁶ HUO, Ru, et al. «A comprehensive survey on blockchain in industrial internet of things: Motivations, research progresses, and future challenges», *IEEE Communications Surveys & Tutorials*, 2022, p. 3.

²⁷ The term *cryptoasset* is preferred rather than *cryptocurrency*, as the latter seems less accurate. Bitcoin's whitepaper can be found in: NAKAMOTO, Satoshi. «Bitcoin: A peer-to-peer electronic cash system», *Decentralized Business Review*, 2008, p. 21260.

²⁸ It should be noted that *smart contracts* are not contracts in a juridical sense, but technological contractual execution mechanisms with automated functionalities incorporated in them. Their technical aspects are explained in: ZARIR, ABDULLAH/OLIVA, GUSTAVO/JIANG, ZHEN/HASSAN, AHMED. «Developing cost-effective blockchain-powered applications: A case study of the gas usage of smart contract transactions in the Ethereum blockchain platform», *Association for Computer Machinery (ACM) Transactions on Software Engineering and Methodology (TOSEM)*, vol. 30, no. 3, 2021, pp. 1–38.

²⁹ Ethereum was launched in 2015, even though its whitepaper dates back from 2013. BUTERIN, Vitalik. «A next-generation smart contract and decentralized application platform», vol. 3, no. 37, 2013, pp. 1–36.

³⁰ JEON, Hyun-Joo, et Al. «Blockchain and AI meet in the metaverse», *Ob Cit*, pp. 3-4.

³¹ It is the equivalent of logging into any website using an existing Google or Facebook account. In the Metaverse, the conceptual frame entails that individuals can use their personal digital assets across various virtual worlds. Interoperability is defined by Directive (EU) 2019/770 of the European Parliament and of the Council, of 20 May 2019, on certain aspects concerning contracts for the supply of digital content and digital services (DCD), as the ability of the digital content or digital service to function with hardware or software different from those with which digital content or digital services of the same type are normally used (art. 2.12). Whether interoperability will be a standard or not, largely depend on the stage of development of the Metaverse, as well as digital platforms' particular policies of choice.

³² GADEKALLU, Thippa Reddy, et al. «Blockchain for the Metaverse: A Review», *Op Cit*, pp. 4-6; In turn, highlighting that an economic system in the Metaverse without the blockchain would eventually be centralized, v. gr., controlled by a single agent or participant: JEON, Hyun-Joo, et Al. «Blockchain and AI meet in the metaverse», *Op Cit*, p. 6; LEE, Lik-Hang, et al. «All one needs to know about metaverse», *Op Cit*, pp. 16-17.

protection standards for users by broadening the scope of liability and obligations of very large online platforms and search engines³³.

3. A digital identity in the Metaverse: unique or multiple?

Since this analysis is focused on granting a legal status to avatars, the issue of different types of avatars linked to the current Metaverse architecture should be addressed.

From one perspective, the Metaverse might exist as a *parallel universe* alongside our physical reality, where individuals adopt a unique and completely interoperable avatar within this digital realm, with access facilitated through technologies like extended reality devices. While Metaverse users could theoretically have just one avatar (as a single *digital twin*, rather than many of them) and use it to navigate across platforms, and to identify themselves unitarily in the digital world (in line with what we have called Metaverse interoperability), this is unlikely to happen, as experts stress, since each centralised platform would most likely prefer to offer its own version of an avatar for its users³⁴. Hence, this all calls for a speculative exercise when confronted with the question of a legal status for avatars in the Metaverse being anything other than digital content online.

From another perspective, it should be noted that online virtual platforms currently dominate the Metaverse's landscape, most of them being completely centralized (which is commonly known as *walled gardens*)³⁵. This paper asserts that the legal issues of the Metaverse primarily (and currently) relate to the legal challenges of *centralized virtual worlds* or *metaverses*. Therefore, this study mainly focuses on the legal challenges related to centralized virtual worlds when discussing the legal issues of avatars in the Metaverse.

The aforementioned calls for further remarks: legal issues concerning avatars require two distinct analyses; first, considering the *current situation*, which entails that avatars used by an individual, directly or indirectly, may vary across different platforms of which one is a user. Second, in a *hypothetical* scenario, an individual would conceivably have a unique identity or avatar within the Metaverse³⁶.

It is also important to consider that an avatar can be controlled by either a real individual (whether natural or legal) or by artificial intelligence agents, meaning they may be autonomous, thereby adding further complexity to the technological and legal landscape³⁷.

³³ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act).

³⁴ KIONG, Liew. *Metaverse Made Easy: A Beginner's Guide to the Metaverse: Everything you need to know about Metaverse, NFT and GameFi*. Liew, Voon Kiong, 2022, p. 25.

³⁵ Further on metaverses governance: GADEKALLU, Thippa Reddy, et al., «Blockchain for the Metaverse: A Review», *Op. Cit.*, pp. 2, 8, 10, 13-14.

³⁶ Another alternative to ponder is whether *digital wallets* will serve as the method for users to hold a singular ID in the Metaverse in the near future, as opposed to avatars.

³⁷ On the use of autonomous (AI powered) avatars: BARFIELD, Woodrow/WILLIAMS, Alexander. «Chapter 1: The law of virtual reality and increasingly smart virtual avatars». In BARFIELD, Woodrow/BLITZ, Marc. J. (Eds.), *Research Handbook on the Law of Virtual and Augmented Reality*, Edward Elgar, Cheltenham, 2018, pp. 2-43.

Considering these factors, a distinction can be drawn into categories that are not necessarily mutually exclusive, namely:

- Avatars can function as means of participation in metaverses, –where they may be unlimitedly created–, allowing users to have one or several avatars in each virtual world. Alternatively, they can serve as a singular means of identification within the broader environment of the Metaverse as a unique and fully decentralized technological ecosystem.
- Depending on the controlling entity, avatars can be controlled by persons (natural or legal), or other types of entities such as AI systems.
- Avatars can serve different purposes in identifying users, functioning either as pseudonyms or as direct identifiers of their respective controllers in virtual worlds.

The difference will hereinafter be emphasized as necessary.

4. Avatars in online virtual platforms

Avatars are often known as digital *twins* as means of providing a comprehensive understanding of what they theoretically achieve in the Metaverse –wherein a single identification form is assigned to each participant³⁸. Originally, the word *avatar* had a mainly religious or spiritual background and content; it denoted the descent of a deity on earth, according to Hinduism³⁹. Nowadays, the most common widespread notion of the avatar is that of a graphic representation associated with a user’s profile, mainly used in online forums, video games, instant messaging applications, and so on. It is approximately since 1985 that the word Avatar acquired its modern connotation, when *Habitat* –a computer role-playing game from Lucasfilm– was created. According to the game review written by Morabito: “once a human being enters Habitat, he or she takes on the visual form of an Avatar, and for all intents and purposes becomes one of these new-world beings”⁴⁰. The quoted statement, dating from 1986, has remained valid ever since; the Avatar is now a central element of the user experience in the Metaverse⁴¹.

In the Metaverse, the avatar (whether unique or multiple) customizes and digitalizes the presence of the user, who ultimately controls it. It enables users to identify themselves, present themselves to others, navigate, and interact in a virtual space, among other functionalities. Essentially, avatars allow users to express themselves, undertake and perform tasks, and engage in numerous activities analogous to those in the physical world, such as taking part in

³⁸ *Digital twins* originally refer to virtual replicas or models of physical objects, processes, or systems. This technology is used to simulate and monitor real-world entities in a digital environment, which is widely applied at an industrial level. It allows architects and engineers to predict the behavior of the replicated objects and it is mainly in used computer-aided design (to create products, architectural pieces, buildings, or *smart cities*), in industrial systems assisted by Artificial Intelligence, or even in risky operations assisted by robots. BAUER, Thomas/OLIVEIRA, Pablo/KUHN, Thomas. «Towards architecting digital twin-pervaded systems», *Proceedings of the 7th International Workshop on Software Engineering for Systems-of-Systems and 13th Workshop on Distributed Software Development, Software Ecosystems and Systems-of-Systems, SESoS-WDES '19*, 2019, pp. 66–69; SJAROV, Martin, et Al. (2020). «The digital twin concept in industry—a review and systematization», *2020 25th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA)*, 2020, p. 1789.

³⁹ LOCHTEFELD, James G. «Avatar». In *The illustrated encyclopedia of Hinduism*, vol. 1, Rosen Publishing, 2001, pp. 72-73.

⁴⁰ MORABITO, Margaret. «Enter the On-line World of Lucasfilm», *Run*, 1986, p. 24.

⁴¹ LEE, Lik-Hang, et al. «All one needs to know about metaverse», *Op Cit*, pp. 28-29.

interactions that may have legal consequences. These include attending large-scale events, establishing, and maintaining interpersonal connections, engaging in commercial transactions with other entities (both tangible and intangible), offering services, and more. Rather than merely simulating a person's presence in the Metaverse, this can be perceived as an extension of one's existence in the digital realm, or even as a form of digital embodiment or personification.

A claim for a proper regulation for avatars has been made for over a decade now⁴². Many modern online communities and social networks make use of avatars as means through which users can participate in these communities and engage with other, which focalizes the scope of the current research. Despite their widespread use, avatars are a topic of controversy, as some members of the community have raised concerns about the potential menaces associated with them resulting in the infringement of another's rights whether committed *by* an avatar, or *through* an avatar, depending on the status attributed to them. A wide range of potential problems, such as mental distress –caused, *e.g.*, by cyberbullying or harassment– heightened by the sense of immersion of digital platforms⁴³, identity theft, or the misappropriation of another's intellectual property⁴⁴. These problems are difficult to address, particularly because there is no way to identify the individual *behind* a given avatar⁴⁵. As a result, many members of the legal community advocate for the introduction of regulations to govern the use of avatars in the Metaverse. In the virtual environments it encompasses, interactions often feel more *lifelike* than they would in other online forums or social networks pertaining to the Web 2.0 experience⁴⁶, heightening the urgency for effective measures to mitigate potential risks.

The question of the legal status of avatars is a relatively unexplored area which deserves more attention. Having a clear idea of what an avatar can be in the eyes of the Law, may help create safer environments and legal certainty for *real life* Metaverse users. As the Metaverse becomes more and more integrated into everyday life, we will begin to see more avatar-related disputes. It is important to understand what might be at stake in these disputes.

5. A legal status for Avatars

A realistic debate covering a legal framework for avatars in the Metaverse, and therefore, in online virtual platforms, should align with currently recognisable legal categories. This means they may be viewed as *things (res)* or as what is considered their opposite, *legal persons (personae)*, as posed by Roman scholars⁴⁷. This seemingly simple classification –which is mainly acquainted

⁴² FRANKS, Mary Anne. «Unwilling avatars: Idealism and discrimination in cyberspace», *Columbia Journal of Gender and Law*, vol. 20, 2011, p. 224.

⁴³ <<https://www.technologyreview.com/2021/12/16/1042516/the-metaverse-has-a-groping-problem/>> (Accessed: 21 March 2024).

⁴⁴ Consider, *e.g.*, the ongoing Nike, Inc v. Stockx (2022) trademark infringement case, in which StockX is being sued for minting and selling NFTs that represent ownership of sneakers (tangible items) showcasing Nike's trademark, kept in StockX's secure storage facility known as the "vault". *Nike, Inc. v. Stockx LLC* 22-CV-00983 (VEC)(SN) (District Court, S.D. New York, Jan. 9, 2023).

⁴⁵ This will indistinctly be an issue whether users have a single avatar, or many of them.

⁴⁶ GONZALEZ-FRANCO, Mar/PECK, Tabitha C. «Avatar embodiment. towards a standardized questionnaire», *Frontiers in Robotics and AI*, vol. 5, 2018, p. 74.

⁴⁷ TRAHAN, John R. «The Distinction between Persons and Things: An Historical Perspective», *Journal of Civil Law Studies*, vol. 1, no. 1, 2008, pp. 9, 11.

to civil lawyers–, may be a key to formulate an actually applicable regime for avatars, as it is herein further examined.

5.1. A quest for personhood in a parallel with Artificial Intelligence agent’s cause

The ongoing debate about the legal status of Artificial Intelligence (AI) agents provides helpful insights that can partly apply to the upcoming discussion on the legal status of avatars. For example, and although it was exceptional, the actual recognition of citizenship can be considered a relevant precedent for this topic, as starred by Sophia, –a female-looking AI robot, created in 2015 by Hanson Robotics–, who received the Saudi Arabian nationality in 2017. Extending the concept of legal personhood, as exemplified by Sophia, raises highly complex questions concerning human nature and has required a reassessment of fundamental notions of legal personhood.

According to *Black’s Law Dictionary*, “[s]o far as legal theory is concerned, a person is any being whom the law regards as capable of rights and duties”. Nowadays, it is unquestionable that every human being benefits from the recognition of legal personhood⁴⁸. It grants the ability to be valid holders of rights and obligations. As such, *natural persons* (*natürliche Personen, personnes physiques, personas físicas*) may, for example, own property, enter into all kinds of binding covenants, be liable for the damages they may cause, and also, not be subjected to ownership by another entity⁴⁹. However, said recognition does not fall exclusively on human beings; it has also been granted to other non-strictly human entities which do have a legal status nonetheless as legal persons or *juristic persons* (*juristische Personen, personnes morales, personas jurídicas*). This is the case, for instance, of corporations, foundations, associations, government agencies, and so on⁵⁰.

The latter has unlocked a path towards exploring the legal personhood of agents other than human beings and juristic persons, as has been discussed at length with respect to robots equipped with AI (*e.g.*, smart vehicles, killer robots, automated clinical diagnostic systems, among others). While they differ significantly in many respects, the debates carried out on these disruptive entities provide some valuable elements for the discussion on the legal status of avatars in the Metaverse.

Most legal scholars have quite rightly rejected the recognition of independent legal personhood to AI agents in analogy to a natural persons’ legal personhood model (by nature). The reasoning behind this conclusion is that natural persons’ characteristics (such as freedom of will, intentionality, self-consciousness, moral agency or a sense of personal identity⁵¹) are not rationally transferable to AI agents, thus the acknowledgement of fundamental rights and guarantees (rights to physical integrity, suffrage, freedom, education, etc.)⁵² or even subjective

⁴⁸ Notwithstanding the historical fact that certain groups of human beings, such as slaves and women, were not legally recognized as persons.

⁴⁹ WAGNER, Gerhard. «Robot, Inc.: Personhood for Autonomous Systems?», *Fordham Law Review*, vol. 88, no. 2, 2019, p. 592.

⁵⁰ KURKI, Visa. *A Theory of Legal Personhood* (Oxford, 2019; online ed, Oxford Academic), 2019.

⁵¹ Should corporeity –or the lack thereof–, be considered as pertaining to this category in regard to digital entities.

⁵² All of which is clearly against the Charter of Fundamental Rights of the European Union and the Convention for the Protection of Human Rights and Fundamental Freedoms.

rights (ownership, obligations, actionable legal positions, personality rights, etc.) would be highly questionable by their own nature⁵³.

Given the impracticality of considering AI agents as natural persons, it has been argued that AI agents' legal status should follow (i) the same model of legal personhood granted to juristic persons (by attribution), or else, (ii) that a special or intermediate category should be created and acknowledged, especially for civil liability purposes⁵⁴.

Generally, the most compelling argument for granting legal personhood to AI agents often revolves around their capacity to make genuinely autonomous decisions and to learn without human intervention⁵⁵.

As Novelli and others argue, AI agents can be considered autonomous as far as they are capable of making autonomous decisions, whereas an *ordinary artifact* would merely execute predetermined prompts or guidelines set by its human users or designers. Therefore, AI may expand their initial knowledge and practical understanding when it's found to be incomplete or inadequate for the given context. They can then act based on this enhanced knowledge, which may not be accessible to their users and/or developers. Autonomy, as a spectrum, entails that the greater the ability of the entity to adapt and overcome situations facing of limited information, the more independent the AI agent becomes from the programmer's instructions, resulting in increased autonomous agency. Autonomy for AI agents necessarily entail a diminished level of control from human beings (either users, programmers, designers, etc.), which becomes a critical matter when AI systems engage in legally relevant interactions, such as negotiating and entering contracts or transactions, interfering with another's legally protected rights, or causing harms to others⁵⁶.

The argument considering the alleged autonomy of AI agents, is backed by the Committee on Legal affairs of the European Parliament⁵⁷. Their final recommendations for civil law on robotics aimed to create a specific legal status for autonomous robots in the long run, under the tag of *electronic personality* or *e-personality*. The strategy aimed to make this status applicable to the most complex autonomous robots, which logically does not cover all types of smart robots or AI

⁵³ Report of COMEST on robotics ethics, (SHS/YES/COMEST-10/17/2 REV), no. 201, 2017, p. 46.

⁵⁴ In favour of the attribution of a legal personhood to AI agents akin to the recognition awarded to legal persons: KARNOW, Cea. «Liability for distributed artificial intelligences», *Berkeley Technology Law Journal*, vol. 11, no. 1, 1996, p. 172; BAYERN, Shawn, et al. «Company law and autonomous systems: a blueprint for lawyers, entrepreneurs, and regulators», *Hastings Science & Technology Law Journal*, vol. 9, no. 2, 2017, p. 135; A different and more interesting approach is presented by Laukyte, who argues that the aforementioned model should not be fully replicated, but rather should the logic of its recognition: LAUKYTE, Migle. «AI as a Legal Person», *Proceedings of the Seventeenth International Conference on Artificial Intelligence and Law*, 2019, pp. 209-213.

⁵⁵ ARCHER, Margaret. «Considering AI personhood». In AL-MOUNDI, Ismael/LAZEGA, Emmanuel (Eds.). *Post-human Institutions and Organizations*, Routledge, London, 2019, pp. 28-47; DARLING, Kate. «Extending Legal Protection to Social Robots: The Effects of Anthropomorphism, Empathy, and Violent Behavior Towards Robotic Objects», (April 23, 2012), *Robot Law*, 2012, pp. 3-24; HILDEBRANDT, Mireille. «Legal personhood for AI», *Law for Computer Scientists and Other Folk*, 2019, p. 248; TRUBY, Jon/BROWN, Rafael/DAHDAL, Andrew. «Banking on AI: Mandating a Proactive Approach to AI Regulation in the Financial Sector», *Law and Financial Markets Review*, vol. 14, no. 2, 2020, pp. 110-120.

⁵⁶ Although, scholars rightly emphasized that “the mere fact that AI systems possess advanced cognitive capacities may not be a conclusive factor”. NOVELLI, Claudio/BONGIOVANNI, Giorgio/SARTOR, Giovanni. «A conceptual framework for legal personality and its application to AI», *Jurisprudence*, vol. 13, no. 2, 2022, pp. 199-200.

⁵⁷ European Parliament (EP) ‘Motion for a European Parliament Resolution’ CLA 2015/2103(INL), 27 January 2017 <https://www.europarl.europa.eu/doceo/document/A-8-2017-0005_EN.html> (Accessed: 19 March 24).

agents⁵⁸. The purpose was that those higher-level autonomous devices could be considered *electronic persons*, thus responsible for damages they may cause as a result of self-determined decisions or independent interaction with third parties (section 59.f)⁵⁹. This controversial proposal did not align with the standards posed by the European Economic and Social Committee which has expressly rejected the idea of any form of legal status for robots or AI systems, due to the alleged unacceptable risk of “moral hazard” that it may entail⁶⁰. Moreover, a prestigious group of experts (including Artificial Intelligence and Robotics Experts, industry leaders, law, medical and ethics experts) spoke in the same vein in an *Open Letter* addressed to the European Commission, in which they soundly indicate that it is wrong, biased and fanciful to think that liability for damages caused by AI agents is ultimately impossible to prove due to their extraordinarily high autonomy, which seems to overestimate their current capabilities⁶¹. This matter, which evidences not only legal, but also ethical, philosophical and technological aspects, has not been fully settled as of today⁶².

As noted, the central aspect around which the discussion of AI agents’ personhood usually revolves –the autonomy of robots and AI agents– is not quite applicable to avatars⁶³, since the latter are not inherently endowed with “autonomy”, nor “self-learning” capabilities. They are

⁵⁸ This also presents us with a significant issue to address: what should be the legal regime of all other –not as sophisticated– AI agents? Nevertheless, the current risk-based Regulation of the European Parliament and of the Council laying down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, already emphasizes the importance of considering the autonomy level of AI agents regarding their legal implications.

⁵⁹ Also, according to the European Parliament, the following would be the characteristics of smart autonomous robots: “the capacity to acquire autonomy through sensors and/or by exchanging data with its environment (inter-connectivity) and the analysis of those data; the capacity to learn through experience and interaction; the form of the robot’s physical support; the capacity to adapt its behaviour and actions to the environment”. European Parliament Resolution of 16 February 2017 with recommendations to the Commission on Civil Law Rules on Robotics, *Op Cit*.

⁶⁰ The report continues by stating: “Liability law is based on a preventive, behaviour-correcting function, which may disappear as soon as the maker no longer bears the liability risk since this is transferred to the robot (or the AI system). There is also a risk of inappropriate use and abuse of this kind of legal status. The comparison with the limited liability of companies is misplaced, because in that case a natural person is always ultimately responsible. In this regard, it should be examined to what extent the current national and EU laws, rules and jurisprudence in the area of (product and risk) liability and own risk provide an adequate answer to this question and, failing that, what kind of legal solutions can be put forward”. Opinion of the European Economic and Social Committee on ‘Artificial intelligence – The consequences of artificial intelligence on the (digital) single market, production, consumption, employment and society’ (own-initiative opinion) (2017/C 288/01), 31.8.2017.

⁶¹ Open Letter to The European Commission Artificial Intelligence And Robotics, <<http://www.robotics-openletter.eu>> (Accessed: 21 March 2024).

⁶² According to the Vice-president of the European Commission: “when it comes to technology with a purpose, one of the most promising tools we have is AI. Artificial intelligence can help us use resources better. It can improve our health, even save our lives, by helping doctors to prevent complications for seriously ill people. For instance, the Big Medilytics project –which is funded by the EU– has used AI to improve the treatment of some of the 15 million Europeans who live with heart failure. But without a proper ethical framework, AI can also undermine values like fairness and equality. Those values are important to us, and to our sense of who we are, even though we know that our society doesn’t always meet those standards. Because as human beings, we can aspire to be better than we are. But unless we’re very careful, AI systems won’t see that - they’ll just learn about the world as it is, with all its unfairness and inequality, not the world as we want it to be. And they’ll dedicate their intelligence to reproducing the past, not to creating a brighter future”. <https://ec.europa.eu/commission/commissioners/2019-2024/vestager/announcements/shaping-digital-future-europe_en> (Accessed: 21 March 2024).

⁶³ Whether discussing a singular avatar or multiple avatars in the Metaverse or specific online platforms.

essentially electronic data within a specific online virtual platform, even though they are capable to represent users in the Metaverse⁶⁴.

At this point it is important to consider the fact that an avatar can indeed be controlled by an AI agent, which is why a comprehensive regulation on the subject should consider the adequate governing rules for AI agents first, before covering this issue. In this respect, it is noteworthy that the proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act or AI Act) and Amending Certain Union Legislative Acts⁶⁵ disregarded the present discussion, and is limited to the minimum necessary requirements to address the risks and problems linked to AI, as so does the Proposal for a Directive of the European Parliament and of the Council on adapting non-contractual civil liability rules to artificial intelligence (AI Liability Directive)⁶⁶, not providing rules on an alleged personhood for AI agents.

Furthermore, it appears that whenever an avatar is controlled by an AI system would not be legally distinguishable from an AI agent. This would result in any existing or forthcoming regulation concerning AI systems being directly applicable to avatars as well.

Upon closer examination, –besides the regulatory impetus–, the question for avatars in the Metaverse draws significant insights from legal analyses and studies conducted on AI agents. The rationale behind one of the most prevalent arguments raised to deny AI agents of a legal personhood lies in the widely agreed-upon notion among scholars that AI agents are becoming increasingly sophisticated and autonomous⁶⁷, and even though they are not 100% self-governed or sentient (yet), their autonomous agency in decision making processes result in a continuous separation from any human influence (e.g., designers and programmers)⁶⁸.

In light of this consideration, it is not tenable to derive a legal status for AI agents from the juristic person model as the concept of a legal person requires the presence of natural persons driving its decision-making processes; these natural persons structure, represent, direct, and make decisions for it at any given time; it is through an individual (or a group of individuals), that a legal person engages in contracts or obligations, executes contracts, owns assets, and so on, while maintaining legal independence from them⁶⁹. The concept of high autonomy in AI robots inherently implies an increasing disconnection from a controller. In contrast, avatars are fundamentally controlled by another agent, human or otherwise. This reasonably indicates that

⁶⁴ It would be useful to consider that avatars (as a controllable electronic record –*vid. infra* note 104) can be stored in a digital wallet.

⁶⁵ 2021/0106(COD). 2024 version available at: <<https://data.consilium.europa.eu/doc/document/ST-5662-2024-INIT/en/pdf>> (Accessed: 25 March 2024).

⁶⁶ COM/2022/496 final.

⁶⁷ To prove this point: there is no definitive way for readers to determine if this paper has been written by popular AI-powered tools like such as *ChatGPT* or *Jenni.AI*, is there? While it is not the case—and I want to emphasize this fact: it is not—, we are currently experiencing an era where such distinctions may not be discernible.

⁶⁸ KURKI, Visa. *A Theory of Legal Personhood, Op Cit*, pp. 176-189; *Open Letter To The European Commission Artificial Intelligence And Robotics*, available in: <<http://www.robotics-openletter.eu>> (Accessed: 21 March 2024); Against this argument: GORDON, John-Stewart. «Artificial moral and legal personhood», *AI & Society*, vol. 36, no. 2, 2021, pp. 459-460.

⁶⁹ It is uncontested that legal personhood of a juristic person remains apart and separated from the natural persons behind it.

an avatar bears a closer resemblance to a corporation, foundation, or an association (a juristic person) than an AI agent does.

Avatars need someone –or something– to create and direct them in their activities within online virtual platforms, hence, some of the concepts currently utilized to justify the existence of legal persons (such as the organic theory, the fiction theory, or the real entity theory) could potentially be expanded to give rise to a regulation. Considering that avatars could theoretically serve as a singular form of identification in the Metaverse, said regulation may involve, *e.g.*, (i) the creation of a registry of avatars in the Metaverse, so that each of them can be legally recognized as far as linked to natural or legal persons⁷⁰; (ii) the possibility of –exceptionally– *piercing* or *lifting* the *corporate veil* (which could rather be referred to as the *avatar veil*), when avatars are being used by individuals in an abusive or detrimental manner, that is⁷¹; or even (iii) acquiring a (perhaps mandatory) civil liability insurance to facilitate compensation for damages that avatars may cause⁷²; these ideas have also been mooted in legal studies regarding AI agents, as previously mentioned.

Nevertheless, it is crucial to acknowledge that legal personhood does not inherently follow a dichotomous or absolute (*all or nothing*) framework⁷³. Depending on the Legal System, ultimately, the law or legal precedents can determine and modulate its content and scope, just as with respect to legal persons in each country, whenever it is useful and necessary for society⁷⁴.

The refusal to grant a special legal personhood to AI agents seems to be the leading opinion at a European level, as emphasized by the recently published report by the European Commission's Group of Experts on Responsibility and New Technologies in 2019⁷⁵. It is worth noting that said report does not only discard a legal status of autonomous robots or AI agents (for liability

⁷⁰ KARNOW, Cea. «Liability for distributed artificial intelligences», *Op Cit*, p. 147; NOVELLI, Claudio. «Legal personhood for the integration of AI systems in the social context: a study hypothesis», *AI & Society*, vol. 38, 2023, p. 1351; The technological means by which avatars can be registered and traced under biometric data is proposed in: YANG, Kedi, et al, «A Secure Authentication Framework to Guarantee the Traceability of Avatars in Metaverse», *arXiv:2209.08893*, 2022, pp. 1-13.

⁷¹ A similar proposal can be found in: CHEONG, Ben Chester. «Avatars in the metaverse: potential legal issues and remedies», *International Cybersecurity Law Review*, vol. 3, 2022, p. 5.

⁷² PAGALLO, Ugo. «Killers, fridges, and slaves: a legal journey in robotics», *AI & Society*, vol. 26, no. 4, 2011, p. 347.

⁷³ For instance, corporations and certain collective entities have limited personality statuses, primarily focused on their legal rights within patrimonial relations. As Novelli and others further explain: “limited personality statuses may be granted to other creatures, such as unborn children and nonhuman animals, and possibly also to natural entities, such as mountains, rivers, and ecosystems. On the interest-based conception of subjective rights, such creatures and entities may be granted legal rights to the extent that the legal system assumes that such creatures and entities have interests of their own that need legal protection (even though the exercise of such rights requires the activity of human agents)”. NOVELLI, Claudio/BONGIOVANNI, Giorgio/SARTOR, Giovanni. «A conceptual framework for legal personality and its application to AI», *Op Cit*, p. 203.

⁷⁴ BRYSON, Joanna/DIAMANTIS, Mihailis/GRANT, Thomas. «Of, for, and by the people: the legal lacuna of synthetic persons», *Artificial Intelligence and Law*, vol. 25, no. 3, 2017, pp. 280-281.

⁷⁵ EUROPEAN COMMISSION, DIRECTORATE-GENERAL FOR JUSTICE AND CONSUMERS, *Liability for artificial intelligence and other emerging digital technologies*, Publications Office, 2019, p. 37; Also: PAGALLO, Ugo. «Apples, oranges, robots: four misunderstandings in today's debate on the legal status of AI systems», *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, vol. 376, no. 2133, 2018; Offering some nuanced remarks from a meta-institutional and institutional approach: NOVELLI, Claudio/BONGIOVANNI, Giorgio/SARTOR, Giovanni. «A conceptual framework for legal personality and its application to AI», *Op Cit*, pp. 216-219.

purposes) but also extends this negative stance to *all emerging digital technologies*⁷⁶. Among the main conclusions of the report: the person (natural or legal) operating a permissible technology that nevertheless carries an increased risk of harm to others, for example AI-driven robots in public spaces, should be subject to strict liability for damage resulting from its operation; A person using a technology that does not pose an increased risk of harm to others should still be required to abide by duties to properly select, operate, monitor and maintain the technology in use and –failing that– should be liable for breach of such duties if at fault; A person using a technology which has a certain degree of autonomy should not be less accountable for ensuing harm than if said harm had been caused by a human auxiliary; It is not necessary to give devices or autonomous systems a legal personality, as the harm these may cause can and should be attributable to existing persons or bodies⁷⁷.

Considering all of these arguments, in the following sub-section the avatar is pondered as a “thing” in online virtual platforms, but not without making a further remark: as mentioned above, avatars work as immersive elements in online digital platforms, so that the presence of users and their interactions are *digitalized* through it. Thus, in the Metaverse (and any of the digital platforms it hosts), an avatar is simply perceived as a user, meaning it replicates an individual⁷⁸ and not an element, nor an asset of the digital scenery. This underscores the importance that, despite how dystopian it may appear today, the legal status of an avatar must be evaluated not only in relation to the existing *real-world* framework (which highlights the idea of multiple *digital twins* in virtual metaverse platforms), but eventually it might be necessary to also consider the legal status of avatars *within* the Metaverse itself, regardless of its recognition –or lack thereof–, by *real-world* States, as well as how to create a functional regulatory framework *in situ*⁷⁹.

5.2. Avatars as “things”

Further following our initial reasoning, avatars can also be considered and regulated as “things”, which can be possessed, used, and disposed of for its own qualities, that are also useful and valuable, existing separately from humans, and thus subject to juridical control⁸⁰.

It appears feasible and, in general, more accurate to regard avatars as things, rather than as persons. But such a generic approach does not add value to current dialogues on the most pressing legal aspects of the Metaverse, other than emphasizing that avatars can be the object of dispositions and acquisitions, and that interests in avatars could be asserted against third parties as actionable legal positions⁸¹. Therefore, some applied topics related to this perspective will now be addressed, in order to shed some light and insight on the legal consequences of this category; should Property Law, Contract Law, Intellectual Property Law, or any other areas of

⁷⁶ Among *emerging digital technologies*, the *Internet Of Things*, and the *Distributed Ledger Technologies* are mentioned, which is why The scope of the report is considered to be relevant to the subject matter discussed in this paper. EUROPEAN COMMISSION, DIRECTORATE-GENERAL FOR JUSTICE AND CONSUMERS, *Liability for artificial intelligence and other emerging digital technologies*, Op Cit, p. 3.

⁷⁷ *Ibidem*, pp. 3-4.

⁷⁸ Even when the avatar’s appearance is not anthropomorphic.

⁷⁹ This concern is clearly articulated in: NASEH, Morteza. «Person and Personality in Cyber Space: A Legal Analysis of Virtual Identity», *Masaryk University Journal of Law and Technology*, vol. 10, no. 1, 2016, p. 14.

⁸⁰ RUDDEN, Bernard. «Things as thing and things as wealth», *Oxford Journal of Legal Studies*, vol. 14, no. 1, 1994, p. 81.

⁸¹ LASTOWKA, Gregory/HUNTER, Dan. «The laws of the virtual worlds», *California Law Review*, vol. 92, no. 1, 2004.

the Law govern avatar issues within the walled gardens that currently define the Metaverse experience.

As a preliminary observation, it should be mentioned that the following categories solely epitomize diverse perspectives, without implying that they are mutually exclusive.

a. Avatars as digital content: goods or services

Recent EU regulations elucidate the legal understanding of *digital content*. Two primary Directives are involved: art. 2(11) of Directive 2011/83/EU –on consumer rights⁸²– state that digital content is defined in art. 2(1) of Directive 2019/770 –on certain aspects concerning contracts for the supply of digital content and digital services (DCD)–, which in turn affirms that digital content means data which are produced and supplied in digital form. The latter Directive also provides a definition of a *digital service*, which means a service that allows the consumer to create, process, store, or access data in digital form; or a service that allows the sharing of or any other interaction with data in digital form uploaded or created by the consumer or other users of that service.

Therefore, in accordance with EU Law, contracts for the supply of digital content (either as a good or a service) may currently fall within the scope of Consumer Protection Law when agreed upon by traders and consumers (B2C)⁸³. It is not problematic to catalogue an avatar as data produced and contractually supplied digitally either *in-game* or *in-digital world*, as outlined above. Enter Consumer Protection Law into the equation; should the supply of an avatar by a centralized digital world be subject to rules in consumer sales or services, pre-contractual information duties, the right of withdrawal, or certain remedies, such as the liability for any lack of conformity?⁸⁴

How should we determine if the supply of digital content, such as an avatar in digital virtual worlds, meets the criteria to be classified as a sale of goods (being categorized as a good itself) or the performance of a service? As García Rubio explains, if the digital content must remain in the

⁸² Directive 2011/83/EU of The European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council. Amended by Directive (EU) 2019/2161 of 27 November 2019, part of the ‘Review of EU consumer law - New Deal for Consumers’ package, as a result of identifying a number of areas where the existing Union consumer protection rules needed to be modernized, in view of the continuous development of digital tools (recital 17).

⁸³ It is important to indicate that, according to DCD, platform providers could be considered traders if they act for the purposes relating to their own business and as the direct contractual partner of the consumer for the supply of digital content or a digital service (recital 18). If that’s the case, what are the implications when one of the parties involved is not a trader? According to Directive (EU) 2019/2161, specific information requirements for online marketplaces should be provided in Directives 2005/29/EC and 2011/83/EU to inform consumers using online marketplaces whether they enter into a contract with a trader or a non-trader, such as another consumer (recital 26); Also, providers of online marketplaces should inform consumers whether a third party offering goods, services or digital content is a trader or non-trader, based on the declaration made to them by the third party. When the third party offering the goods, services or digital content declares its status to be that of a non-trader, providers of online marketplaces should provide a short statement to the effect that the consumer rights stemming from Union consumer protection law do not apply to the contract concluded, (recital 27).

⁸⁴ HELBERGER, Natali/LOOS, Marco/GUIBAULT, Lucie, et Al. «Digital content contracts for consumers», *Journal of Consumer Policy*, vol. 36, no. 1, 2013, pp. 37–57; On an updated note: personal data provided by the user serves the same purpose as *currency*, in exchange for the supply of a digital content or a digital service. DCD, (recital 24). Although the trader must comply with the obligations stipulated in General Data Protection Regulation.

seller's cloud, or where it can be downloaded but is usable only while the customer's device is connected to the seller's cloud, the contract resembles a service contract rather than a sales contract⁸⁵. This seems fairly applicable nowadays (in the current walled garden context), but it clashes with the core concept of the Metaverse, which might evolve towards genuine decentralization, where users hold and administrate the ownership of their own data and may theoretically interoperate with digital contents throughout digital worlds in a decentralised environment provided by blockchain technology –characterized by the lack of intermediaries. Should the development of the Metaverse reach this scenario, we would have to consider the A avatar to be a good, instead of a service supplied by a platform as it can be currently categorized.

Furthermore, one should not overlook that digital content may currently be protected by copyright, be protected by a related right, or not be protected by IP Law. The first group is herein prioritized⁸⁶: as examples, computer programs, musical, cinematographic, audiovisual, literary, or pictorial works, or photos, can be highlighted, most of which are expressly covered by DCD, even though that said Directive explicitly excludes copyright law from its scope of application and does not address the arrangements between the traders of digital content and the IP rights holders⁸⁷.

Cámara Lapuente has appropriately stressed the dimension of conflicting interests between IP Law and Consumer Law regarding digital contents. The author considers that, on one hand, Consumer Law seeks to guarantee consumer rights even when acquiring ownership or use of IP Law protected works, thus limiting the rights of said works' owner, avoiding their abuse (both in the negotiation of a contract and in its execution), while on the other hand, Intellectual Property regulations tend to consider the end user as benefiting from a series of limits or exceptions to the rights of the intellectual property owner (for example, making a private copy), rather than as the owner of a full right⁸⁸. As the author notes, the disparity of interests and approaches to which

⁸⁵ GARCÍA RUBIO, María Paz. «Non Conformity of Goods and Digital Content and its Remedies». In PLAZA PENADÉS, Javier/MARTÍNEZ VELENCOSO, Luz M. (Eds.). *European Perspectives on the Common European Sales Law Studies in European Economic Law and Regulation*, Springer, New York, 2015, pp. 163-181.

⁸⁶ To complete the mentioned overview: the second group of works –protected by a related right– covers rights of performers, producers of phonograms, broadcasting organizations, etc. On the latter group –not within the scope of IP Law–, we may find, e.g., non-original databases without original structure, nor qualitative and/or quantitative substantial investment in terms of resources, time and efforts engaged and other investments in the generation, obtaining or verification of its contents. CÁMARA LAPUENTE, Sergio. «La nueva protección del consumidor de contenidos digitales tras la Ley 3/2014, de 27 de marzo», *Revista CESCO de Derecho de Consumo*, vol. 11, 2014, pp. 79-167.

⁸⁷ “In order to cater for fast technological developments and to maintain the future-proof nature of the notion of digital content or digital service, this Directive should cover, inter alia, computer programmes, applications, video files, audio files, music files, digital games, e-books or other e-publications, and also digital services which allow the creation of, processing of, accessing or storage of data in digital form, including software-as-a-service, such as video and audio sharing and other file hosting, word processing or games offered in the cloud computing environment and social media. As there are numerous ways for digital content or digital services to be supplied, such as transmission on a tangible medium, downloading by consumers on their devices, web-streaming, allowing access to storage capabilities of digital content or access to the use of social media, this Directive should apply independently of the medium used for the transmission of, or for giving access to, the digital content or digital service”. Recital 19, DCD. *Cfr.* Art. 3.9, Recitals 20 and 36 of the DCD, which explicitly exclude copyright law from its scope of application. See also: OPRYSK, Liliia. «Digital Consumer Contract Law without Prejudice to Copyright: EU Digital Content Directive, Reasonable Consumer Expectations and Competition», *GRUR International*, vol. 70, no. 10, 2021, p. 944.

⁸⁸ However controversial this topic may be, in-depth discussion can be found in: SCHOVSBO, Jens. «Integrating consumer rights into copyright law: From a European perspective», *Journal of Consumer Policy*, vol. 31, 2008, pp. 401-407.

Consumer Law and IP Law discourse in the digital field peaks in the very concept of *property* for which each legal branch exhibits a characteristic stance: while the Consumer Law and, the regulations on consumer buying and selling of goods in particular, is based on a full transfer of ownership with which the consumer will make use of the goods as they see fit; the dogma supporting IP Law is that the ownership of a physical copy of a work (e.g., a book) does not bestow any type of ownership on the contents included in that physical medium (the actual literary work that still belongs to the author)⁸⁹. It is important to specify that, in the realm of protected works or their copies when they are marketed, they are mostly beyond the control of the rights holder due to the principle of copyright exhaustion. However, according to the Court of Justice of the European Union (CJEU), this may not always apply in the digital environment⁹⁰.

As Spindler elucidates, contracts on digital content are strongly related to the transfer of rights, under the so-called *end user licenses agreements* (EULAs), which are, in principle, directly concluded between the user of the digital content and the rights holder. Said agreements frequently cover all kinds of different contractual obligations in addition to the main service (or sale) contract between the supplier and the user or consumer⁹¹. The extent to which EU regulation affects EULAs, copyright and Consumer protection Law is still overwhelmingly unidentified due to its undeniable complexity⁹².

If avatars are considered services under the DCD, the consequences bear the necessary application of remedies for the failure to supply, as well as remedies for the lack of conformity⁹³. In principle, the consumer (metaverse user) could seek remedies from the trader (metaverse controller). However, (i) in cases involving a chain of transactions, there may be an act or omission by a person in a previous link of that chain that results in a failure to supply the digital service, or a lack of conformity. In such a scenario, the metaverse controller would have the right to seek redress and would be entitled to pursue remedies against the person responsible in the chain of commercial transactions, which is to be determined by national law, *ex Art. 20* of DCD; (ii) in cases where a restriction from a violation of third-party rights prevents or limits the use of the avatar (as a digital service), e.g., when the supply of the avatar infringes a copyrighted work,

⁸⁹ CÁMARA LAPUENTE, Sergio. «La nueva protección del consumidor de contenidos digitales tras la Ley 3/2014, de 27 de marzo», *Op Cit*, pp. 79-167; Based on: HELBERGER, Natali/LOOS, Marco/GUIBAULT, Lucie, et Al. «Digital content contracts for consumers», *Op Cit*, pp. 45-47.

⁹⁰ As summarized in: BODÓ, Balázs/GIANNOPOULOU, Alexandra/QUINTAIS, João Pedro, et Al, «The Rise of NFTs: These Aren't the Droids You're Looking For», *European Intellectual Property Review*, vol. 44, no. 5, 2022, pp. 265-282; See also: OPRYSK, Lillia. «Digital Consumer Contract Law without Prejudice to Copyright: EU Digital Content Directive, Reasonable Consumer Expectations and Competition», *Op Cit*, pp. 948-949.

⁹¹ “The transfer of rights is operated by license agreements; they are the only tool to entitle the user (consumer) to use copyrighted material as long as no limitation or exception applies. Even though the focus of licenses relies upon the transfer of rights, such reproduction etc. licenses are usually a twosided contract containing all kinds of (contractual) obligations. Thus, it should be expected that licenses are regulated either by copyright law or by contract law. (...) Given the absence of specific provisions, licenses and their general terms and conditions are to a large extent still left to court practice in each member state of the EU. As mentioned, we have to distinguish two core elements of licenses, the transfer of rights and the (contractual) obligations between the rightsholder and user. Both are in a complex manner intertwined, as compliance with contractual obligations is often combined with the transfer of rights”. SPINDLER, Gerald. «Digital content directive and copyright-related aspects», *Journal of Intellectual Property, Information Technology and Electronic Commerce Law*, vol. 12, no. 2, 2021, pp. 111-130.

⁹² Some more insights on ToS and EULA's impact are addressed in: ARISMENDY MENGUAL, Lorena María. «Desafíos Jurídicos del Metaverso: Protección de Datos, Propiedad Intelectual y Responsabilidad Civil», *Op Cit*, pp. 77-82.

⁹³ Arts. 13-14 of DCD. The latter must, in turn, comply with the subjective and objective tests of conformity set in Arts. 7-8 DCD.

Member States are obliged to ensure that the metaverse user is entitled to the remedies for lack of conformity provided for in Art. 14 DCD, unless National Law provides for the nullity or rescission of the contract for the supply of the digital service in such cases, *ex Art. 10 DCD*⁹⁴.

It should be highlighted that, from this perspective, avatars cannot be transmitted to others unless permitted by the trader (*e.g.*, the metaverse controller) as per their own EULAs or Terms of Service (ToS). While this aspect might be part of the dynamics of a specific digital world –or a cluster of them–, and the parties involved are generally free to negotiate these terms, this is rarely the case in practice⁹⁵. On the future ahead, the stage of development of the Metaverse and its decentralization will be a key aspect, as explained herein.

b. Avatars as products

Another potential approach for establishing a legal regime for avatars (particularly concerning civil liability), is to categorize them as *products*. This perspective has been the predominant view supported by legal scholars regarding the issue of damages caused by AI-equipped robots, according to the European Commission⁹⁶. The European Commission proposes to extend this type of liability (of *defective products* and their components, even when they are in *digital form*) to emerging digital technologies⁹⁷. Moreover, the 2022 Proposal for a Directive of the European Parliament and of the Council on liability for defective products identifies the legal uncertainty as to how to apply the current decades-old definitions and concepts to products in the modern digital economy and circular economy, such as software and products reliant on software or digital services for functionality⁹⁸.

Replicating the model in force to the question of the avatar in online virtual worlds, as of today, poses some significant difficulties. Indeed, it is quite challenging to align the concept of the avatar (either as a unique digital twin or as means of participating in a given online virtual world) with that of a “product”, since the latter is currently defined as *movable property*, which mostly relates to tangible goods (art. 2 of Directive 85/374/CEE – Product Liability Directive or PLD)⁹⁹.

⁹⁴ “However, the task of defining the objective requirements for conformity to concretise the use has not been embarked on. Furthermore, the option of delivering content deviating from reasonable expectations has also been reserved, on the condition that consumers are explicitly informed beforehand. Whereas providing clear information to consumers assumes they are going to decide on a provider, the impact is limited in practice if the supply is not diverse or a consumer is locked into using a particular platform anyway. It raises the question of whether such a provision has implications for the market and entrance to it, given that the reasonable expectations of consumers are not defined”. OPRYSK, Liliia. «Digital Consumer Contract Law without Prejudice to Copyright: EU Digital Content Directive, Reasonable Consumer Expectations and Competition», *Op Cit*, p. 951.

⁹⁵ LANGENDERFER, Jeff. «End-User License Agreements: A New Era of Intellectual Property Control», *Journal of Public Policy & Marketing*, vol. 28, no. 2, 2009, p. 202.

⁹⁶ EUROPEAN COMMISSION, DIRECTORATE-GENERAL FOR JUSTICE AND CONSUMERS, *Liability for artificial intelligence and other emerging digital technologies*, *Op Cit*, p. 27.

⁹⁷ “Strict liability of the producer should play a key role in indemnifying damage caused by defective products and their components, irrespective of whether they take a tangible or a digital form”. *Ibidem*, 6. Although the European Commission recognizes that, due to the variety of existing emerging technologies, it is not possible to offer unitary solutions to all risks brought by them. *Ibidem*, p. 5.

⁹⁸ COM (2022) 495 final. If implemented, the concept of a product will likely be better suited to encompass emerging digital technologies, as it will be defined to include all movable items, even if integrated into another movable or immovable object. It shall also include electricity, digital manufacturing files and software (Art. 4 of the proposal).

⁹⁹ Council Directive 85/374/EEC of 25 July 1985 on the approximation of the laws, regulations and administrative provisions of the Member States concerning liability for defective products.

While the regulation acknowledges that certain intangible assets like electricity can be considered products, it remains unclear if a digital element corresponds accurately to this concept¹⁰⁰. The foregoing highlights that the European Commission's concept of emerging digital technology is more ambitious than what may be practically applicable. This serves as a clear example of the complexity inherent in this subject matter.

If we were to significantly broaden the scope of the concept of a product to include avatars in online virtual worlds (for the purpose of discussing its legal implications), it would also be mandatory to question what aspects of the *safety which a person is entitled to expect* (art. 6, PLD) may be legally relevant when using an avatar; Indeed, the legal definition of a “defect” in a product, which is essential to this regulation, comprises a lack of safety that can hardly be applied to an avatar¹⁰¹. Nevertheless, as explained above, avatars can be controlled by natural persons, juridical persons and AI agents in a way that could reasonably fit into the concept of an *act or omission of a third party* as referenced in art. 8.1 PLD. In such cases, the *producer* of the avatar, (likely the digital platform on which it was created) may have a legal right against the user (controller) to seek compensation for damages caused using an avatar in a specific centralized digital world¹⁰². At last, the Metaverse's evolution towards decentralization, as described in this paper, significantly diminishes the likelihood of effectively making a claim against anyone we can pinpoint as the *producer*, (that being the *manufacturer* or *importer* of the avatar). The solution proposed by the PLD for cases where the producer cannot be identified, entails considering any supplier of the product as its producer (this refers to the digital platform in question, but it may also include the user), unless they inform the injured party of the identity of the producer, or the person who supplied the product (according to art. 3.3, PLD). The idea of avatars being classified as products, besides being a stretch, raises significant concerns regarding the anonymity and protection of personal data that online platforms must currently guarantee for their users¹⁰³.

c. Avatars as digital assets

According to UNIDROIT's Draft on *Principles on Digital Assets and Private Law*, a *digital asset* is simply an electronic record¹⁰⁴ which is capable of being subject to control¹⁰⁵. As explained on the

¹⁰⁰ SANTOS MORÓN, María José. «Régimen de responsabilidad por daños causados por productos defectuosos», OLMO GARCÍA, Pedro Del/SOLER PRESAS, Ana. *Prácticum de Daños 2019*, Thomson Reuters Aranzadi, Cizur Menor (Navarra), 2019, “2.1. Concepto de producto”. Digital Version.

¹⁰¹ Regarding this aspect: “the interconnectivity of products and systems makes it hard to identify defectiveness. (...). Additionally, the complexity and the opacity of emerging digital technologies complicate chances for the victim to discover and prove the defect and prove causation”. EUROPEAN COMMISSION, DIRECTORATE-GENERAL FOR JUSTICE AND CONSUMERS, *Liability for artificial intelligence and other emerging digital technologies*, *Op Cit*, p. 28.

¹⁰² According to that provision, the liability of the producer is not be reduced when the damage is caused both by a defect in product and by the *act or omission of a third party*.

¹⁰³ Concerning the *data controller* provided for in Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).

¹⁰⁴ Whereas an *electronic record* consists of information stored in an electronic or digital medium, which is capable of being retrieved. *Electronic medium* must be understood in a broad sense. UNIDROIT 2023 – Study LXXXII (on public consultation).

¹⁰⁵ Principle 2(2), *Ibidem*. UNIDROIT Draft principles seem to be inspired by definitions found on a statutory level in North America. For example, the United State of America's Revised Uniform Fiduciary Access to Digital Assets Act (FUFADAA, 2015) developed by the Uniform Law Commission (ULC) as means of directing how to manage someone's digital assets after their death, defines a digital asset as “an electronic record in which an individual has a right or interest. The term does not include an underlying asset or liability unless the asset or liability is itself an electronic record”. It should be noted that each State's laws on this subject may vary. Similarly, Canada's

Draft, this useful definition of a *digital asset* encompasses an electronic record only if it is *capable of being subject to control* (principle 2.2) – meaning, the exclusive ability to prevent others from obtaining substantially all of the benefit from the digital asset, the ability to obtain substantially all the benefit from the digital asset; and the exclusive ability to transfer said abilities to another person (principle 6). For example, some electronic records might be described colloquially as *digital assets*, but normally could not be subjected to exclusive *control*, and consequently would not be digital assets as preliminarily defined by UNIDROIT¹⁰⁶.

The fact that an avatar can be a *digital asset* in the Metaverse, thereby, constituting a unique and interoperable form of identification for users, has already been established by technology scholars. Their conclusion posits that an avatar can indeed function as a Non-Fungible Token (NFT), consequently attaining certifiable uniqueness and becoming subject to exclusive control granted to users, who would therefore be their owners¹⁰⁷. Cryptopunks, introduced in 2017, are a good example of this¹⁰⁸. An NFT can be used as an avatar to represent our digital selves in the Metaverse (whether a single avatar or several are used to represent users in a particular online virtual world)¹⁰⁹. As such, it is also technically possible to trace their ownership to a correspondingly unique *digital wallet address* from which avatars can be stored and transferred at the user's convenience¹¹⁰. For instance, Twitter (a *Web2.0* social network) allows using an NFT as a profile picture, but not without warning that, by doing this, the user agrees their Twitter account to be associated with his or her digital wallet address¹¹¹. At this point, it is useful to remember that an NFT is a *one-of-a-kind* cryptoasset (legally, non-fungible and susceptible of being the subject of proprietary rights). These examples also demonstrate that unless users take actions that disclose their *real-world* identity while acquiring or operating with a digital asset, e.g., an avatar, their anonymity is maintained¹¹²; only their public digital wallet address is publicly known. This standard of anonymity is encouraged in the development of the Metaverse, as it responds to privacy protection concerns when navigating through it¹¹³.

Uniform Access to Digital Assets by Fiduciaries Act (2016) provides that a digital asset is “a record that is created, recorded, transmitted or stored in digital or other intangible form by electronic, magnetic or optical means or by any other similar means”.

¹⁰⁶ UNIDROIT 2023 – Study LXXXII (on public consultation).

¹⁰⁷ BELK, Russell/HUMAYUN, Mariam/BROUARD, Myriam. «Money, possessions, and ownership in the Metaverse: NFTs, cryptocurrencies, Web3 and Wild Markets», *Journal of Business Research*, vol. 153, no. 4, 2022, pp. 199-200; SJAROV, Martin, et al. «The digital twin concept in industry—a review and systematization», *Op Cit*, pp. 1789-1796; GHELANI, Diptiben. «What is Non-fungible token (NFT)? A short discussion about NFT Terms used in NFT», *Authorea Preprints*, 2022.

¹⁰⁸ Cryptopunks are unique collectible characters with proof of ownership stored on the Ethereum blockchain. The Cryptopunks are one of the earliest examples of a “Non-Fungible Token” on Ethereum and were the inspiration for the ERC-721 standard (an interface for non-fungible tokens, also known as *deeds*) that powers most digital art and collectibles. They are uniquely generated characters, and each one of them can be officially owned by a single person on the Ethereum blockchain. Originally, they could be claimed for free by anybody with an Ethereum wallet, but all 10,000 were quickly claimed. Now they must be purchased from someone via the marketplace that's also embedded in the blockchain. <<https://www.larvalabs.com/cryptopunks>> (Accessed: 21 March 2024).

¹⁰⁹ TAPSCOTT, Alex. *Digital Asset Revolution: The Rise of DeFi and the Reinvention of Financial Services*, Blockchain Research Institute, 2021, p. 28.

¹¹⁰ WANG, Dianwei/YAN, Xiaoge/ZHOU, Yang. «Research on Metaverse», *Op Cit.*, pp. 983-991.

¹¹¹ <<https://help.twitter.com/en/using-twitter/twitter-blue>> (Accessed: 21 March 2024).

¹¹² This is better categorized as pseudo-anonymity as of today. Further explained in: ARISMENDY MENGUAL, Lorena María. «Desafíos Jurídicos del Metaverso: Protección de Datos, Propiedad Intelectual y Responsabilidad Civil», *Op Cit*, pp. 89-91.

¹¹³ LEE, Lik-Hang, et al. «All one needs to know about metaverse», *Op Cit*, p. 37; NAIR, Vivek/MUNILLA GARRIDO, Gonzalo/SONG, Dawn. «Going Incognito in the Metaverse», *arXiv preprint arXiv:2208.05604*, 2022; BLACK, Damien.

As explained above, while Metaverse users could theoretically own just one avatar and use it across platforms to uniquely identify themselves in different *digital worlds* in accordance with the touted Metaverse's interoperability, this outcome improbable since each centralized platform will most likely prefer to offer their own version of an avatar to its users, and might not allow them to migrate through, either due to not being *currently* interoperable or due to competitive issues¹¹⁴. But as Belk and others have pointed out, that's what they said when railroads began with different gauge tracks and power sources¹¹⁵.

The aforementioned poses a further difficulty: the discussion regarding digital property is far from settled, despite the widespread acknowledgment that virtual property holds tangible value in the real world, with many assets having clear exchange rates with *real-world* currencies in *real-world* markets. While property rights may indeed exist in virtual assets, the allocation of those rights will often depend on EULAs that delineate the terms of access and use of each virtual world hosted in the Metaverse¹¹⁶. This may lead to a shift away from Property Law and into the realm of Contract Law, which could be rather complicated in a *digital-reality* as large as the Metaverse¹¹⁷.

6. Approaching further key inquiries

While not the primary focus of this study, a thorough Private Law-oriented analysis should also address topics such as damages incurred while using an avatar in the Metaverse as well as the potential grant of personality rights to avatars. These questions will be explored considering the findings from the initial issue of their legal classification.

6.1. Avatars and Personality Rights

As previously mentioned, the Metaverse offers an immersive experience primarily enabled by avatars, which serves as the visual representation in the digital realm. Avatars can manifest in

«Identity 3.0? How to guard privacy in the metaverse» <<https://cybernews.com/privacy/identity-3-0-how-to-guard-privacy-in-the-metaverse/>> (Accessed: 21 March 2024).

¹¹⁴ KIONG, Liew. *Metaverse Made Easy: A Beginner's Guide to the Metaverse: Everything you need to know about Metaverse, NFT and GameFi*, Op. Cit., p. 25; BELK, Russell/HUMAYUN, Mariam/BROUARD, Myriam. «Money, possessions, and ownership in the Metaverse», *Op Cit*, p. 199; MARR, Bernard. «Metaverse versus Multiverse: What's the Difference», Bernard Marr & Co., November 26, 2021, <<https://bernardmarr.com/metaverse-vs-multiverse-whats-the-difference/>> (Accessed: 21 March 2024).

¹¹⁵ BELK, Russell/HUMAYUN, Mariam/BROUARD, Myriam. «Money, possessions, and ownership in the Metaverse: NFTs, cryptocurrencies, Web3 and Wild Markets», *Op Cit*, p. 199; Also: SIMCOE, Timothy/WATSON, Jeremy. «Forking, fragmentation, and splintering», *Boston University Questrom School of Business*, no. 2862234, 2019, pp. 283-297.

¹¹⁶ It should be noted that EULAs are usually one-sided, raising significant doubts about relying solely on Contract Law for all regulatory matters.

¹¹⁷ LASTOWKA, Gregory/HUNTER, Dan. «The laws of the virtual worlds», *Op Cit*, p. 50; Dong quite rightly highlights the overall insufficiency of Contract Law as follows: “The argument for contract law fails for two main reasons. First, it takes an overly narrow view by focusing on video games and how property law may ruin those systems. (...), more and more of our traditional services and property can now be found through cyberspace. We may be reluctant to have property law govern an in-game sword or castle, but we may not have the same reluctance in regards to our Kindle books, Google Play movies, or iTunes songs. Second, Cifrino and other contract law proponents place too much trust in market pressures providing more favorable EULAs”. DONG, Kevin. «Developing digital property law regime», *Cornell Law Review*, vol. 105, no. 6, 2020, pp. 1753-1754; Offering a nonetheless compelling case for Contract Law: CIFRINO, Christopher. «Virtual property, virtual rights: Why contract law, not property law, must be the governing paradigm in the law of virtual worlds», *BCL Rev.*, vol. 55, no. 1, 2014, p. 235.

various forms, such as three-dimensional, two-dimensional, anthropomorphic, or non-anthropomorphic, and they may or may not resemble their *controllers*. The range of customization options is usually extensive. In online virtual worlds, users utilize the visible aspect of their avatar to express their individuality and as a reflection of the free development of their personality, allowing them to navigate as a single avatar or multiple avatars, according to their preferences as well as each platform's restrictions.

Can avatars' rights be subject to legal protection from unlawful interferences with their personality, *e.g.*, from the infringement of an alleged *right of publicity*?¹¹⁸. To further assess this academic inquiry, the legal personhood of avatars must be acknowledged, as a logical prerequisite.

However, in light of the discussion above, it is herein considered that academic efforts are currently better oriented towards exploring and addressing the legal implications arising from situations where an avatar is used to misappropriate another individual's image, *e.g.*, the unauthorized use of the image of a celebrity as one's avatar for commercial exploitation, whereas liability is based not on misrepresentation leading to consumer confusion or deception, but on the misappropriation of the commercial value of a person's identity¹¹⁹. These scenarios often raise critical questions regarding the right of publicity and IP rights of existing persons, making them a focal point for very scarce scholarly investigation and analysis. Can these be asserted upon the use of avatars in metaverse digital platforms? It should be useful to consider *Hart v. Electronic Arts, Inc.* (2013) in the United States, in which the avatar of a football player, that accurately matched his physical and biographical attributes was used in a sports videogame; Hart filed a lawsuit against Electronic Arts, arguing the violation of his right of publicity by using his likeness in the videogame's series. The district court dismissed the case, citing freedom of expression (First Amendment) protection. However, the Third Circuit Court of Appeals overturned this decision; they argued that the video games did not alter Hart's identity enough to avoid the right of publicity claim, thereby protecting the plaintiff's right¹²⁰. This means that while metaverse controllers or users may have the right to create and express themselves in the Metaverse, any person's right to control the commercial use of their own image, likeness, or identity in online virtual platforms should be deemed more deserving of protection.

On the other hand, most legal scholars certainly agree that currently existing copyright law sufficiently protects IP rights holders under EU Directive 2001/29/EC¹²¹, as well as under the United States Digital Millennium Copyright Act¹²². Thus, IP rights holders mostly have the right to enforce their rights in the *real world* as well as in the Metaverse and seek damages for any harm caused by an infringement¹²³. Moreover, should an avatar be considered a protected *creation* on

¹¹⁸ As set out in Spanish Organic Law 1/1982, of 5 May 1982, on the civil protection of the right to honour, to personal and family privacy and to one's own image. Under Spanish Law, the common law originated term *right of publicity* (which stands for Personality Rights in the U.S.) is accepted, *cf.* STS 30-11-2011, RJ 2012/1638.

¹¹⁹ BEVERLEY-SMITH, Huw/OHLY, Ansgar/LUCAS-SCHLOETTER, Agnes. *Privacy, Property and Personality Civil Law Perspectives on Commercial Appropriation*, Cambridge University Press, Cambridge, 2005, p. 7.

¹²⁰ *Hart v. Electronic Arts, Inc.*, No. 11-3750 (3d Cir. 2013).

¹²¹ Directive of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society.

¹²² As well as the Copyright Act of, 1976, and § 17 of the United States Code.

¹²³ EUROPEAN INNOVATION COUNCIL AND SMES EXECUTIVE AGENCY. *Intellectual Property in the Metaverse. Episode IV: Copyright* <<https://intellectual-property-helpdesk.ec.europa.eu/news-events/news/intellectual-property->

its own? If an avatar created by a metaverse user displays creativity, such as a unique and distinctive appearance, that meets the criteria for originality, (as long as the metaverse platform has not reserved rights over the creation through their EULAs), it would likely meet the threshold for copyright protection. Similarly, if an avatar is used to represent a specific source of goods or services, it may qualify for Trademark protection¹²⁴. These considerations are consistent with established legal principles governing IP rights in digital creations and are illustratively exemplified by the recent Chinese *Ada* case referenced below¹²⁵.

6.2. An avatar oriented Metaverse Tort Law

A future Metaverse Tort Law is likely to revolve around avatars as a pivotal component of the online immersive experience. The legal status of avatars will play a crucial role in addressing pressing questions: if avatars are granted legal personhood due to their distinct representation of users, they could be directly liable. Alternatively, users might also face vicarious liability for actions carried out by their avatars. In the absence of legal personhood for avatars, various legal regimes can be considered, including liability for damages caused by objects or product liability laws. This underscores the complex legal landscape that will need to be navigated in the evolving digital world of the Metaverse¹²⁶.

In this regard, Carrasco Perera and Álvarez López appropriately emphasize that the legal relevance of torts in the Metaverse must occur in what we perceive as the physical world in order to warrant a compensation claim¹²⁷. Under this perspective, civil liability for damages in the Metaverse, as well as in metaverses, according to the Law as it stands, will only apply if a natural or legal person experiences harms in the physical world. In the present state of affairs this idea can hardly be disputed and is our necessary starting point.

For instance, as the digital reality operates within a sphere where only reproductions of our physical reality are made in the digital environment (digital twins), it is worthwhile to inquire about the direct translation of legal rules from the real world to online virtual worlds¹²⁸. One paradigmatic illustration of a direct translation of damages that can arise in the Metaverse, yet are reflected in the physical world, involves the issue of moral damages (*e.g.*, mental distress) caused to a user by harmful acts perpetrated by another user through their own avatar. These actions may result in compensable harm according to our existing laws. As mentioned above, the avatar is not just means by which users may express their individuality, but they may also develop emotional attachment for their avatars which is heightened in online virtual worlds by the

metaverse-episode-iv-copyright-2022-06-30_en> (Accessed: 25 March 2024); Also: ARISMENDY MENGUAL, Lorena María. «Desafíos Jurídicos del Metaverso: Protección de Datos, Propiedad Intelectual y Responsabilidad Civil», *Op Cit*, pp. 82-87.

¹²⁴ *Cfr.* the fundamentally similar *MetaBirkins* case (mainly on Trademark protection) which highlights current laws applicability in the Metaverse in regards of IP rights protection. *Hermès International, et al. v. Mason Rothschild* (2023), 1:22-cv-00384 (SDNY).

¹²⁵ *Vid. infra* note 136.

¹²⁶ The author will address the aforementioned issues along with other pressing matters in an upcoming publication, notwithstanding a necessary assessment herein.

¹²⁷ CARRASCO PERERA, Ángel/ÁLVAREZ LÓPEZ, Carlos. «Operadores y responsabilidad civil en el metaverso», *Publicaciones GA_P*, 2022, p. 4.

¹²⁸ The other end of the continuum being the co-existence of physical-virtual reality or namely the *surreality*. The idea originated from the Milgram and Kishino's Reality-Virtuality Continuum. Further explained and revised in: LEE, Lik-Hang, et al. «All one needs to know about metaverse», *Op Cit*, pp. 2-40.

immersive technologies used while navigating the Metaverse¹²⁹. Wolfendale argues that this attachment to avatars sets the basis of potential moral prejudice against users, thus, the author proposes the acknowledgment of a parallel standard with other socially accepted attachments, such as those to physical objects, people, or ideas¹³⁰. In the absence of studies offering more definitive conclusions, the need to take into account an imminent change in the way reality is perceived, which should also be relevant for the law, especially insofar as damage may be caused to others that needs to be redressed, is emphasized.

These arguments are yet to be considered by Courts of Law¹³¹, although the recent *Ada* case ongoing in China could potentially set a considerable milestone in this regard as yet another illustrative example of actionable damages taking place in online virtual worlds via avatar use. Recently, the Chinese Hangzhou Internet first-instance Court ruled an avatar related affair; *Mofa* (魔法公司诉称) – a Chinese company –, created, developed, and launched *Ada*, an AI powered, hyper-realistic, human-resembling digital avatar in 2019, and publicly released a couple of videos featuring their avatar in Bilibili (a popular video hosting platform)¹³². The defendant, another tech company by the name of *Sihai Optical Fiber Network Co., Ltd* (杭州四海光纤网络有限公司) based in Hangzhou, distributed the videos in their Douyin account¹³³, and by doing so, allegedly infringed the copyright of *Mofa*'s earlier released videos¹³⁴. The defendant, in turn, argued that *Mofa* was not, in fact, the IP right holder for the *Ada* related content. Many interesting aspects aside, it is certainly noteworthy that, for the first time, a Court of Law judged the issue of whether digital avatars are directly entitled to copyright and/or related rights protection. According to China's legal framework, the Court specially pondered that a digital avatar like *Ada* operates under human control, is guided by preset algorithms, and supported by various aiding technologies such as AI animation, intelligent modeling and binding technology, motion capture –based on a performer's movements–, speech synthesis technology, among others. Due to its characteristics, which are close to a *weak AI* (弱人工智能)¹³⁵, the Court concluded that *Ada* cannot legally be considered the author or IP right holder. Instead, *Mofa* was recognized as the intellectual property rights holder of the videos that wrongfully appropriate *Ada*'s image¹³⁶.

¹²⁹ This perspective is supported by numerous sociological and non-legally focused studies that date back to the early 2000, when *Second Life* and other virtual worlds became popular, e.g., *vid.* TAYLOR, T. L. «Living digitally: Embodiment in virtual worlds». In SCHROEDER, Ralph. (Ed.) *The Social Life of Avatars: Presence and Interaction in Shared Virtual Environments*, Springer, London, 2002, pp. 40-62. According to Taylor, users experience a sense of reality and immersion in virtual worlds by embodying an avatar, akin to the role of the body in social interactions that aid in establishing identity. She also discovered that some individuals identify more with their digital avatar than with their physical body.

¹³⁰ WOLFENDALE, Jessica. «My avatar, my self: Virtual harm and attachment», *Ethics and Information Technology*, vol. 9, 2007, pp. 111–119.

¹³¹ Criminal offences are hereby excluded.

¹³² <<https://www.bilibili.com/>> (Accessed: 25 March 2024).

¹³³ <<https://www.douyin.com/>> (Accessed: 25 March 2024).

¹³⁴ Other charges, not evaluated herein, include an unfair competition as well as a false advertising claim.

¹³⁵ The chosen term entails that AI equipped entities cannot recognize and/or control computer programs by themselves, as opposed to *strong AI* that may have such capabilities.

¹³⁶ *Mofa* was awarded compensation of 120,000 yuan for the infringement, which is approximately 15,000 euros; Hangzhou Internet Court (2022) Zhejiang 0192 Minchu No. 9983, Civil Judgement (浙0192民初9983号民事判决书), and Hangzhou Intermediate People's Court (2023) Zhejiang 01 Minzhong No. 4722, Civil judgement (浙01民终4722号民事判决书).

Assessing the Ada case under EU law suggests that the rationale used to reach a suitable response could align with the upcoming AI Act, once again, drawing a parallel with the advancement of AI. Said EU Regulation adopts a *risk-based* approach, classifying AI systems grounded on the risk they pose to fundamental rights. This categorization includes *unacceptable* risk systems (prohibited), *high-risk* systems (authorized but subject to stringent requirements and certifications to access the EU market under a premarket conformity regime), *limited risk* systems (subject to minimal transparency obligations like codes of conduct), and *low or minimal* risk systems. An appropriate regulatory regime for avatars could also be assessed by identifying the level of risk associated with their use; this could entail evaluating whether avatars fall under limited risk systems, such as those AI equipped avatars interacting with humans like chatbots, or if they pose a lower level of risk, with the responsibility for any risk assumed entirely by their controller¹³⁷. This analysis could facilitate the customization and introduction of legal provisions to address specific concerns or anticipated risks associated with avatar usage in the near future (whether as a unique form of identification or as means of participating in a given online virtual world), thereby enhancing regulatory effectiveness and responsiveness in the evolving digital landscape.

As of today, instances of avatar misuse are currently being addressed through the terms and conditions contained in EULAs. Online virtual platforms are unilaterally amending and modifying them, *e.g.*, to forbid avatars from interacting or getting too close from one another, thus avoiding alleged harms arising from some forms of unwanted interactions between avatars¹³⁸. It is critical to ponder whether Contract Law alone should govern this –or other– issues and, if not, how should a legal regime be adequately articulated around them. This will likely become a task for the courts, initially leading to legal uncertainty for all parties involved.

Ultimately, the fact that an avatar may be directly liable for the damages (if acknowledged as a separate legal entity) raises an additional concern; whether it has the necessary funds to compensate the damaged party. This issue has been dealt with by legal experts in AI and, the most orthodox proposal considers an adaptation of the *peculium* of slaves in Roman Law; according to this legal figure, those without a legal personhood could have economic resources to respond to obligations owed to others without involving the patrimony of their master (the *Pater*)¹³⁹. Analogously, Pagallo proposed a *digital peculium* for AI agents that seems applicable to avatars (AI equipped or otherwise) as well. As an added benefit, the adaptation of this approach only requires the recognition of a separate patrimony, without the necessity of granting legal personhood (either to AI agents or avatars) whatsoever, circumventing this particularly challenging task¹⁴⁰.

¹³⁷ ALFIERI, Costanza/CAROCCIA, Francesca/INVERARDI, Paola. «AI Act and Individual Rights: A Juridical and Technical Perspective», *IAIL@ HHAI*, 2022, pp. 1-13.

¹³⁸ Meta has advocated for the use of an *in-platform* tool called “Safe Zone”. It is a safety feature introduced into Meta’s Horizon Worlds, which imposes a virtual boundary that prevents avatars from coming within a set *digital* distance of each other. <<https://lens.monash.edu/@politics-society/2022/07/22/1384871/sexual-assault-in-the-metaverse-theres-nothing-virtual-about-it>> (Accessed: 21 March 2024).

¹³⁹ According to D. 15.1,5,4: “Peculium autem Tubero quidem sic definit, ut Celsus libro sexto Digestorum refert: quod servus domini permissu separatim a rationibus dominicis habet deducto indi, si quid domino debetur”.

¹⁴⁰ GARCÍA TERUEL, Rosa María. «El Derecho de daños ante la inteligencia artificial y el machine learning: una aproximación desde las recomendaciones del Parlamento Europeo y del Grupo de Expertos de la Comisión

7. Final remarks

There are several ways in which Avatars can be used to support and enhance the experience of members of online communities, especially in the Metaverse. At the same time, there is a growing concern about the use of avatars and their potential to cause damages online. The use – and misuse– of avatars in the Metaverse and its online virtual platforms is not specifically covered by current regulations, which is why one can only recur to a feasible legal regime using existing legal standards. Roman Law provides a simple, yet useful approach: avatars can be considered as persons, or not; both views make some interesting and somewhat valid points. Various applicable rules and complex issues stemming from each point of view can be assessed through the perspective defended in this paper.

It would appear an avatar is currently better characterized as a “thing” rather than as a “person”, but even though his conclusion may seem straightforward, it is not easy to disregard the fact that the immersive experience that avatars provide to their users adds a layer of complexity to their legal characterization in the *digital world* that extends beyond mere aesthetics and serves the purpose of granting individuals of a *real-like* digital presence which can sometimes be closely linked to emotions and the sense of identity or reputation of a real person in the physical world.

While agreeing with avatars being with a “thing”, or “thing-like” assets, it is imperative to thoroughly mind the complexity of interests at stake, and how guidelines provided mostly by EULAs (which basically states autonomy of the will) must consider regulatory standards introduced by existing legislation that are arguably and indirectly relevant to the subject matter, namely: IP Law, Consumer Protection Law, Property Law and Contract Law.

Further research is necessary –and will be undertaken–, to appropriately address the issue of damages caused by avatars and their alleged personality rights, providing a thorough examination from a private law perspective.

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