Navigating Democratic Challenges in the Age of Metaverses

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The Metaverse is an opportunity to bring together "all the questions surrounding the development of digital technology in the years ahead" (LINC, 2023, pp. 25), in particular "all of the digital world's usual ethical issues: network neutrality, protection of personal data, digital identity, online harassment, addiction, isolation, and also exclusion" (Basdevant et al., pp. 81).

This ecosystem of interconnected, immersive digital worlds, while promising unparalleled opportunities for innovation and engagement, also embodies critical democratic concerns. As digital spaces become more immersive and ubiquitous, the traditional boundaries between what's virtual and what's real are getting blurred, raising complex questions about governance, participation, and individual rights. The concept of the "Metaverse" suggests an ideal of fully interoperable and synchronized digital spaces; however, the reality often presents a constellation of "metaverses" managed by private corporations, public authorities, or other stakeholders. This fragmentation brings with it the risk of reproducing, or even intensifying, the governance limitations seen in contemporary digital platforms, such as the monopolistic control exerted by a few dominant players. For example, centralised governance models, typical of many current digital platforms, can impose restrictions on user autonomy, transparency, and democratic engagement. These concerns are compounded by the rapid regionalisation of digital spaces, as seen in the diverging regulatory frameworks of the European Union, the United States, and China, suggesting that democratic principles in the Metaverse will be inherently context-dependent and highly variable.

This chapter aims to examine some democratic challenges posed by the emergent Metaverse. It is structured into three sections. The first section explores the concept of the Metaverse, distinguishing between its idealised form as a single, interconnected space and the reality of multiple, fragmented "metaverses" governed by varied and often conflicting interests. The second section delves into the governance implications of these metaverses, drawing parallels with the existing digital platforms ecosystem and highlighting risks associated with centralised control. Finally, the chapter

outlines some stages of a roadmap for the promotion of democratic governance in metaverses, including recommendations for multi-stakeholder processes, user representation, and agile regulatory frameworks that can adapt to evolving technological contexts. Through this analysis, the chapter contributes to ongoing debates on ensuring that the Metaverse can develop as an inclusive, democratic digital space, responsive to the needs and rights of its diverse user base.

1 The "Metaverse" as a Concept, Metaverses as Embodiments

The “Metaverse” has a multitude of definitions, both in scientific literature and in the media. While "the concept of the ‘virtual world’ underlying the Metaverse has been assimilated by the public [in particular] thanks to the imaginary universe deployed in the entertainment industries, [...] its definition is still unclear to consumers, who do not grasp its significance or the scope of its use" (Galienni & Truphème, 2023, pp. 116).

The Metaverse embodies the idea of a universe of interoperable digital worlds and environments, enabling an unlimited number of people to enjoy immersive, collective, and synchronised experiences. It's a concept, an ideal, that seems hardly feasible today. In this respect, it is interesting to draw a distinction between "the abstract concept of the Metaverse 'with a capital M' (as we refer to the Internet 'with a capital letter'), which describes a concept of immersion, [and] metaverses in lower case. The term metaverse in lower case is used to describe instantiations or implementations of the Metaverse principles. In other words, the Metaverse concept holds within it a multitude of possibilities, services, and spaces, which are open, to a greater or lesser extent, and which will hereafter be referred to as 'metaverses' with a lower-case 'm'" (Basdevant et al., 2022, pp. 9). The use of the term “metaverse” reflects the reality of today's digital worlds and simulated universes: they are diverse, heterogeneous and plural.

We can therefore assume that there will not be just one large Metaverse, but rather several metaverses, each constituting a sort of galaxy of worlds governed by large companies, public authorities, and various communities, or even users. As a result, “some leaders, like Tim Sweeney, are convinced that, in the end, each company will have to run its own virtual world, both as individual planets and as stakeholders in the main virtual world platforms, such as Fortnite and Minecraft. As Sweeney put it, in the same

way that, a few decades ago, every company created its website, and then, after a while, every company created a Facebook page'" (Ball, 2023, pp. 56).

Moreover, adds the author, "over the past 15 years, what we call 'the internet' has become increasingly regionalised. All countries use the internet Protocol suite, but each market's platforms, services, technologies, and agreements have diverged, in part due to the emergence of non-American tech giants. [...] If the metaverse is to play a greater role in human society and the workplace, then it is likely that its emergence will also lead to more and stronger regional players" (Ball, 2023, pp. 322). This perspective needs to be taken seriously, at a time when the European Commission, as well as countries such as the United Kingdom and China, among many others, are communicating about projects and strategies linked to the development of their own Metaverse; even if these are often "digital" strategies that are closer to industrial digital twins (industrial metaverses) than to the concept of Metaverse that we have just described. The lack of a consensual and shared definition is a primary obstacle to the existence of a democratic debate on this object.

2 The Platforms Legacy

The debate about the democratic nature of metaverses is part of an ongoing debate about digital platforms. These often intense and polemical debates have highlighted the weak democratic nature of digital platforms. Social networks and other types of platforms, such as user-generated content platforms or electronic marketplaces, are characterised by a very undemocratic governance. As the Metaverse seeks to articulate these different logics in a single immersive space, it is to be feared that it will simply reproduce the current governance mechanisms without really amending them. Most of the existing platforms operate on a centralised model.

Centralised platforms rely on a single authority for decision-making. Decision rights lie with a single person or an entity representing the platform owner (Baldwin & Woodard, 2009). Centralised platforms typically exhibit no or very little transparency. Since transparency and user participation are related to platform control and commercialisation, centralised platforms do not provide the platform user with information on what governance processes take place and why (Staykova & Damsgaard, 2015). Although certain units within the company may be involved and, therefore, be given

access to information, this does not account for all units and participants of a platform.

Furthermore, platforms with centralised governance mechanisms rely on strict participation regulations and poor accessibility. Centralised platform governance is typically accompanied by strict participation boundaries, resulting in a low level of accessibility. Working on or improving the platform is, therefore, only possible based on a working order being given by the governing entity, or by another organisational unit. For instance, developers who want to cooperate or improve the platform have neither the possibility to get information about the areas to be developed nor the code available (Trang et al., 2014).

The main source of trust in centralised platforms are established Terms and Conditions, enforced by the platform management. These Terms and Conditions are the basis for dispute resolution. They specify in which cases and in which way the company has to settle disputes between its users (Parker & Van Alstyne, 2017). In short, trust is based on top-down processes and mechanisms (Söllner et al., 2016).

Finally, incentives for engagement in platform improvement focus on order-based improvements of the platform with no or low (pecuniary) incentives. Related to the accessibility dimension, central authorities might give monetary incentives to users who contribute to developing the platform.

As it stands, there is a strong fear that metaverses will only replicate the centralised platform model. Meta's Horizon Worlds, for instance, illustrates a continuity from digital platforms' centralised model. It is therefore fundamental that the regulation of metaverses provides a framework that constrains their governance, particularly on the issue of users' rights over these spaces and the transparency of the rules governing them.

3 Some Governance Principles to Promote Democratic Spaces in Metaverses

Towards More Harmonised Criminal Law Frameworks

In today's democracies, legal frameworks exist to protect individuals from criminal offences and harmful behaviour, both in the physical world and online. The EU Charter of Fundamental Rights and the French Penal Code, for example, apply to the Metaverse (as they apply to the internet

in general). In France, cyberbullying is considered an offence, in the same way as moral or sexual harassment, and is punishable under article 222–33–2–2 of the Penal Code. Furthermore, there are some standards that apply to everyone, both online and offline, and which form the basis of democracies: fundamental rights. In fact, they constitute the highest standards that apply to metaverses. At supranational level, several texts are dedicated to the fundamental rights that are likely to be impacted by the mass adoption of virtual worlds[1].

Despite the existence of such a framework, it can be difficult, in the age of the Metaverse and social networking platforms, to clearly define criminal offences and therefore to counter them. How can harassment be defined in an immersive virtual space? Can rape take place in the Metaverse? Should a distinction be made between private and public spaces? How can the perpetrators of criminal offences and harmful behaviour be held accountable? How can such behaviour be proven, and victims compensated? It is all quite unclear.

Moreover, there are major gaps in this regard in our legal systems, starting with the lack of definitions. For example, it is still difficult to establish a common legal definition of what is illegal. At European level, there is no harmonised definition of "hate speech", for instance. Prior to 15 March 2017, and the coming into force of the Counter-Terrorism Directive, even "terrorism" did not have a common definition across EU Member States. Nor is there a harmonised Penal Code in Europe – each Member State has its own. What constitutes illegal content or behaviour therefore varies from country to country. In Denmark and Germany, for example, Holocaust denial is not punishable by law, whereas it is in France. Therefore, how can we identify and fight against illegal behaviour in the Metaverse? Illegal according to whom? Illegal where? This remains an open question.

One key example of how this lack of common definition can be an obstacle to the prevention and punishment of illegal behaviour in the Metaverse is the criminalisation of virtual rape, which has been under discussion for over thirty years and is well documented[2]. In France, under Article 222–23 of the Penal Code, "[a]ny act of sexual penetration, whatever its nature,

1 These include: the 1948 Universal Declaration of Human Rights; the European Convention for the Protection of Human Rights and Fundamental Freedoms, enforced by the European Court of Human Rights, which is based in Strasbourg; the Charter of Fundamental Rights of the European Union, which has been enforceable by the Member States since 2009: any citizen can refer to it if their rights are not respected.

2 On this subject, see for example: Horne, 2023.

committed against another person by violence, coercion, threat, or surprise is rape". For rape to be considered a criminal offence, there must be physical contact. In other words, in France, rape is not currently recognised as such in the cyberspace, as it is not a physical space in which there can be a physical penetration. However, at a time when the boundaries between physical online experiences and physical offline experiences are becoming increasingly blurred, we should keep a close eye on developments in immersive technologies and how people feel about them. Some legal adjustments may indeed be needed.

Despite the lack of common definitions for key concepts such as "hate" or "rape", efforts are being undertaken by European legislators to come up with a shared framework of what is "illegal" or "harmful" online. For instance, the EU's Digital Services Act (DSA)[3] is based on the principle that what is illegal offline is also illegal online. It lays down a series of rules to make digital platforms more accountable and to combat the spread of illegal or harmful content or products: racist attacks, child pornography, disinformation, the sale of drugs or counterfeit goods, etc. The aim is to better protect European internet users and their fundamental rights (freedom of expression, consumer protection, etc.) and to strengthen the democratic control and supervision of the very large platforms and reduce their systemic risks (manipulation of information, etc.). It's a first (and big) step, but it doesn't solve the problem of harmonising laws from the point of view of freedom of expression at international level, for example (which is probably a utopia). Thus, we urge the new European Parliament and Commission to make legal consistency and enforceability a priority in the coming years. The possible advent of the Metaverse appears to be a perfect laboratory in this respect.

A Collective Approach

Multi-Stakeholder Processes

At the start of 2022, the European Commission took up the subject of metaverses and virtual worlds, to analyse if there was a need to regulate their development and, if so, the potential role of regulators in doing so. In

3 European Commission, "The Digital Services Act": https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-services-act_en

line with this, the President of the European Commission, Ursula von der Leyen, announced the launch of an initiative on virtual worlds in 2023, as part of the "A Europe fit for the digital age"[4] programme.

Questions are being raised as to whether the existing legal framework is sufficient to protect users from certain practices that could be detrimental to them in metaverses, to protect their rights in these spaces, and to guarantee an "open, secure, trustworthy, fair, and inclusive digital environment"[5] as called for by the European executive. But we must also question how this framework is being decided. Who formalises these frameworks? In what way? According to what criteria? What role do users play in decision-making processes?

In this regard, we recommend a multi-stakeholder approach, bringing together metaverse operators, terminal suppliers, users, the relevant regulatory authorities, legislators, researchers and civil society, in order to have a holistic and structured approach to Metaverse governance.

Thierry Breton, former European Commissioner for the Internal Market, was calling for the launch, "similarly to the European Bauhaus", of "a creative and interdisciplinary movement, aiming to develop standards, increase interoperability, maximising impact with the help of IT experts, regulatory experts citizens' organisations and youth" (European Commission, 2022). With this in mind, between February and April 2023 the European Commission convened a "European citizens' panel on virtual worlds". Bringing together 140 citizens from the 27 Member States, the panel published 23 recommendations on the values and actions needed to create attractive and equitable European virtual worlds. These recommendations are now feeding into the Commission's work on virtual worlds and tomorrow's internet.

In our report "Governing the Metaverse and tomorrow's internet", we propose the development of experimental multi-stakeholder processes (e.g. via regulatory sandboxes and policy prototyping), in order to analyse the relevance of the existing legal framework in relation to the Metaverse, and

4 This work culminated in the presentation, on 11 July 2023, of a strategy to "place the EU at the forefront of Web 4.0 and virtual worlds". See: European Commission. (2023). Towards the next technological transition: Commission presents EU strategy to lead on Web 4.0 and virtual worlds. https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3718

5 European Commission. (2023). Towards the next technological transition: Commission presents EU strategy to lead on Web 4.0 and virtual worlds. https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3718

put forward recommendations relating to the technical operationalisation of concepts such as privacy, the protection of personal data, or the prevention of cyber-bullying.

Involving Users in Content Moderation

Users of digital platforms contribute significantly to the creation of value on these platforms (Renaissance Numérique, 2020a). Therefore, they should be integrated in their regulation. One way to do this would be to impose user representation in their governance and decision-making bodies. The role of a user-representative body should focus on several elements: the definition of moderation rules and their evolution, the definition of a collaborative platform-specific approach to moderation, and the development of a moderation culture specific to each platform (Renaissance Numérique, 2020b).

For metaverses, like for platforms, content moderation requires defining the right balance and processes, hand in hand with public authorities, civil society and the end users. The notion of value co-creation is inherent to platforms that host content generated by their users. The same will apply to metaverses. This substantial input from end-users should be reflected in the moderation efforts of metaverses, for example by encouraging online service providers to involve users in the moderation of content and behaviour, and more generally in the regulation of metaverses. However, this requires the establishment of real discursive processes between platforms and their users, and cannot be limited to the outsourcing of moderation tasks (Renaissance Numérique, 2020c).

An Agile Approach

Without wiping the slate clean of existing restrictive legal frameworks, which are necessary, the challenge is to simultaneously establish multi-stakeholder mechanisms that are as agile as possible, with feedback loops to adapt to technologies as they evolve. This aspect is all the more important with regard to the Metaverse, as the underlying technologies are not yet fully mature, and the uses to which they will be put, and therefore the business models that will be linked to them, remain largely undefined. In this sense, we propose to put in place agile, multi-stakeholder governance mechanisms to structure every person's right and duty in tomorrow's internet. The new

European Commission should encourage and develop the implementation of this kind of approach at European level.

A Holistic Approach

It is also highly likely that the responsibilities of the various players involved in the governance of the Metaverse will evolve. Nowadays, in the Web 2.0 era, we are faced with highly centralised systems. It is technically the online services providers, also known as "intermediaries", via their moderation and Trust & Safety policies, and via their Terms & Conditions, who decide, within the limits set by the law, what is acceptable or not on their platforms. However, the Metaverse is not destined to become a space controlled solely by a few dominant players. On the contrary, a multitude of metaverses and hence owners of immersive spaces should be able to emerge.

In Meta's Horizon Worlds, for example, a third-party company could create its own space, in which it sets its own rules. As is the case in immersive worlds that have been in use for several decades now, such as Second Life, there would be several layers of responsibilities and rules: a technical layer, covering what the source code allows or does not allow in terms of actions; a layer managed by the operator of the metaverse; a layer managed by the owner of the specific world in that metaverse; and above all that, the law (Lucas, 2013).

The ambition of a collective, agile, holistic approach should be to move towards a more effective allocation of responsibilities across various layers, so that they can be implemented more effectively. Renaissance Numérique encourages the new European Commission to embrace this approach and to facilitate the establishment of agile, multi-stakeholder governance mechanisms to organise the rights and duties of all stakeholders in tomorrow's internet.

3 Conclusion

The rise of the Metaverse encapsulates a unique convergence of social, economic, environmental, cognitive, ethical, and legal considerations that define today's digital era. As it takes root in our existing digital landscape, the Metaverse compels us to reimagine how we want to communicate,

connect, learn, entertain, and trade in a more immersive and interactive internet. Rather than merely replicating past models, it offers us an unprecedented chance to craft an internet that is more egalitarian, inclusive, ethical, and sustainable—one that aligns with the aspirations of a responsible, democratic society.

The governance of the Metaverse calls for a multi-stakeholder approach that prioritises agility, transparency, and inclusivity. This would empower not only institutions and corporations but also individual users and citizens, facilitating a collective re-evaluation of our shared values. Legal frameworks currently provide baseline protections against harmful conduct in digital environments, yet inconsistencies remain, especially at the international level. Harmonising these definitions and aligning policies with the realities of immersive experiences is essential to ensure users' safety and rights across borders.

However, the rapid evolution of metaverse technologies, driven by intense competition and undefined business models, poses the risk of recreating the centralised, platform-dominated structures of the past. To avoid this, alternative governance mechanisms must be considered, such as decentralised models enabled by blockchain or emerging cooperative frameworks, that could uphold users' rights and trust without relying solely on a central authority.

As we face these challenges, the Metaverse should be viewed not only as a technological innovation but as an opportunity to redefine digital governance and rethink the ways we interact socially online. By treating the Metaverse as a living, evolving project, we can build a digital future that reflects the democratic values we strive for, setting the stage for a truly inclusive, participatory, and resilient internet. The journey is complex, but the potential to shape a Metaverse that serves society as a whole is a compelling invitation to reimagine the foundations of our digital lives.

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