

The Neverending Story: Illusions of Limitlessness and Abundance in the Metaverse

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Abstract

This paper critically unpacks one central narrative feature of the Metaverse, namely its purported limitlessness, endlessness, and abundance, particularly on the level of spaces, objects, bodies, and identities. The primary means through which to present the Metaverse as limitless is by blurring the boundaries between the physical and virtual or the material and immaterial. Once these distinctions have been obscured, the apparent limitlessness of virtual phenomena can be positioned as surpassing the limits of material existence. The Metaverse can subsequently be presented as a world of near infinite possibilities, a future that is only limited by our imaginations. Narratives that represent the metaverse as endless and limitless are far from pointless; their apparent vagueness is precisely the point. Such narratives obscure the harmful actions of 'Big Tech' companies in the present, and mask the totalizing and all-encompassing character of the Metaverse as an attempt to reshape reality.

Keywords

Metaverse, virtuality, technology, narratives, limitlessness

Starting point

The Metaverse¹ is – together with the Singularity and Artificial Intelligence – a techno-optimist narrative central to contemporary media and technology discourse. Initially coined by the novelist Neal Stephenson in 1992 to describe a distinctly dystopian world ruled by large corporations that is characterised by economic collapse as well as widespread violence and poverty, the term 'metaverse' has subsequently been taken up by 'Big Tech' corporations to describe their specific Silicon-Valley centric visions of the future. These imaginaries are predominantly optimistic about the future, promising to employ emergent 'metaversal' technologies to achieve widespread psychological, social, economic, and even political benefits while frequently mobilizing fantasies of dematerialization, disembodiment, and decentralization (Carter and Eglinton, 2024; Messeri, 2024). For example, Jensen Huang, CEO of Nvidia – one of the largest companies in the world by market capitalisation that dominates the microprocessor industry at the heart of the current AI boom – has stated that the metaverse "is where we will create the future" (Shapiro 2021). Unsurprisingly, forceful academic critiques have been articulated of such utopian (or instead rather

¹ There is considerable variability in whether to pluralise or capitalise the term 'metaverse'. Meta has closely associated itself with the term 'Metaverse' (capitalised and in conjunction with the definite article *the*), most notably through the company's name change from Facebook in 2021, and most major companies involved in metaverse discourse tend to capitalise the term as well. When using the capitalised form here, I am explicitly referring to how the metaverse is conceptualised by such corporate actors. Otherwise, I employ the lowercase form to indicate its broader and more generic connotation.

dystopian) visions of the future and the attempts at constructing the ‘metaverse’ because of its potential for datafication, commodification, surveillance, and exploitation by ‘Big Tech’ companies (Hesselbein et al., 2024b; Hesselbein and Bory, 2025; McStay, 2023; Mosco, 2023; Smith, 2024). These critiques thus closely mirror previous issues with datafication and exploitation noted during the rise of digital platforms (Couldry and Meijas, 2019; Nieborg and Poell, 2018; Van Dijck, 2014).

There are three central components found in nearly all Metaverse narratives presented by companies and ‘tech’ commentators. First, the emergence of the Metaverse is inevitable and inexorable. It is simply the logical consequence of the progression of technology towards higher sophistication and efficiency, an evolutionary outcome that naturally flows from previous inventions such as the computer, internet, digital platforms, and smartphones. Second, the creation of the Metaverse involves the confluence of a wide range of different technologies that, once come together, will produce an entirely new, radically different, and ultimately better society. For example, Virtual and Augmented Reality headsets, digital environments or ‘worlds’, blockchains and cryptocurrencies, as well as AI, will – it is claimed – revolutionize how we communicate, work, and spend our leisure time. We will be ‘more present’ and ‘connected’ with others in and through ‘immersive worlds’. In other words, the Metaverse is a world in which the boundaries between technologies have been dissolved and their frictions overcome, thus allowing a plethora of devices, systems, and protocols to smoothly and seamlessly interoperate. Following a linear and deterministic logic, these developments will have a straightforward and positive impact on society. Third, metaversal spaces or worlds are presented as seemingly endless or limitless (Beer, 2024) as well as infinite and abundant. Geographical distance, bodily incapacity, material scarcity, and to some extent even temporality, are obviated or overcome. The virtual world of the Metaverse thus surpasses and transcends many, if not all, of the limitations and drawbacks of the ‘real’ world with its many material constraints. Or, in the words of Mark Zuckerberg during his now (in)famous announcement of Facebook’s name change to Meta, “you’re going to be able to do almost anything you can imagine” (Meta, 2021c). Only the limits of our imagination, in short, delimit the metaverse. Such metaversal fantasies of infinity and limitlessness are a hallmark of the contemporary technology and media landscape, and are closely connected to the ideology of infinite growth under capitalism (Echauri, 2023).

The appearance of hyped-up narratives alongside the emergence of new technologies is a phenomenon that has long been noted in research on technology and innovation (Bory, 2020; Mosco, 2005; Nye, 1996), as is the sense of disappointment and disillusionment that inevitably follows when such technologies fail to live up to their promises (Borup et al., 2006; Bory, 2019; Galanos and Stewart, 2024). Nevertheless, despite their ups and downs, these narratives matter greatly, not least because this is how inventors and investors garner further financial support for the development of technologies but also because such narratives shape how technologies are culturally framed and eventually used and valued. Narratives of hype are all the more important in the case of highly complex and still-emergent systems such as the metaverse, which – depending on who you ask – may already exist, is about to arrive, will be developed in the near future, or will never exist. In addition to material resources and cultural framing, narratives are also important in that they have an effect on the design and development of technologies, shaping at an early stage what is defined as a design priority or engineering challenge while simultaneously foregrounding

certain concerns while downplaying others. Similarly, such narratives, even if referring to ostensibly unlikely outcomes, can nevertheless be used to shape policy-making endeavours (Martini, 2025). It is for this reason that it is important to analyse the various visions, imaginaries, and narratives surrounding technological developments, particularly ones that have the potential for reshaping society in a profound manner. Even if the most radical or utopian versions of the metaverse do not come to fruition, the resources and efforts spent towards achieving this end are enormous. Such resources could, however, have been put to better use. Before the imaginaries and ideologies of a select group of people get 'baked into' this all-encompassing infrastructure, we have to understand what their implications are and find ways to steer the creation of the metaverse into a direction that is beneficial to more than a select elite of technologists and investors.

This paper seeks to identify and critically unpack one central narrative feature of the Metaverse as it is presented to us by such actors, namely its purported endlessness, limitlessness, and abundance. Drawing on a variety of sources, such as public statements, reports, studies, and presentations by heads of 'tech' companies, consultants, and researchers who are involved in the push towards developing the Metaverse, while also pointing towards several metaverse platforms and technologies as illustrative examples, I examine how the 'metaversification' of spaces, objects, and bodies through techno-optimist narratives² is employed to undergird claims about the ostensible limitlessness and abundance of the metaverse. In conclusion, I briefly reflect on the point, or perhaps intentional pointlessness, of such narratives.

Narrating the Metaverse

Before examining the three central components of metaverse narratives that suggest limitlessness, endlessness, and abundance, it is necessary to briefly outline what I believe is currently the most helpful way to conceptualise the metaverse, particularly at this nascent stage. This admittedly rather broad definition is nonetheless concrete enough to contrast the relatively abstract and forward-looking narratives of limitlessness with their technological and infrastructural underpinnings as well as their potential contradictions and political implications.

A primary category of metaverse technologies encompasses the efforts being made to create persistent and immersive virtual environments, platforms, or 'worlds' in which a range of professional, social, and leisure activities will purportedly take place. This is probably the most common popular interpretation of the term 'metaverse', in part because of comparisons that have been drawn with older virtual worlds, such as Second Life, or contemporary gaming environments, such as the widely popular games Fortnite and Roblox. Another reason for the predominant interpretation of 'metaverses' as virtual 'worlds' lies in the widely reported name change by Facebook to Meta and its subsequent presentation of the Horizon Worlds platform. A secondary set of metaversal technologies encompasses the emerging range of wearable (generally head-mounted) and sensory (i.e. spatially-aware as well as body-tracking) computing devices, prominent examples of which are the Quest headset sold by Meta, the Vive headset produced by HTC, and Apple's recently released Vision Pro. Such technologies are referred to under a range of different

² The process of 'metaversification' is certainly not only a narrational one but also a concrete material endeavour (see Hesselbein and Bory, 2025).

names, such as virtual reality (VR), augmented reality (AR), mixed reality (MR), and extended reality (XR), which all denote to the mutual incorporation of physical and digital dimensions of the environment as well as the ‘user’ or ‘wearer’ of these devices. These devices all have in common the extension of virtual layers onto the perceptual field for the purpose of enhancing various activities, which can range from gaming and other forms of audio-visual entertainment to attending work meetings and carrying out various professional activities (Hesselbein et al., 2024a). A tertiary and ostensibly more marginal category is that of various ‘decentralised’ technologies, which includes blockchains, cryptocurrencies, and non-fungible tokens (NFTs), as well as phenomena such as digital twins and virtual influencers. These diverse technologies are sometimes also referred to as ‘web3’, and are currently characterised by extreme cycles of hype and disillusionment. Moreover, although some deem these technologies central to the development of metaverses (Ball, 2022), others consider their role much less clear (Boellstorff, 2024), and indeed their relevance to all major current metaverse platforms, with the exception of digital twins and virtual influencers, appears quite marginal so far.

All three of these technologies are underpinned by a logic of virtualization, namely the creation of virtual versions of physical systems, objects, people, or processes, and the subsequent blurring of the boundaries between these physical and virtual versions (Hesselbein and Bory, 2025). This blurring of the distinctions between physical and digital or virtual phenomena is central to all metaverse visions. For instance, Pony Ma, head of the large Chinese technology corporation Tencent, has introduced the term “immersive convergence” to describe “a new connection that integrates digital and physical forms, transcending time and space” (Tencent, 2022). Similarly, prominent metaverse investor and commentator, Matthew Ball, states in his widely read and cited book *The Metaverse and How It Will Revolutionize Everything* (2022, 97) that the metaverse “spans both the physical and virtual planes of existence”. This suggestion, moreover, is not only made in the context of metaverse platforms or worlds. For instance, Apple describes its Vision Pro headset as “a revolutionary spatial computer that seamlessly blends digital content with the physical world” (Apple, 2023). The narrative of virtualization is a particularly powerful means for blurring the boundaries between the material and immaterial characteristics of spaces, objects, and bodies and representing these as having an endless or limitless character in the Metaverse.

Spatiality

Overcoming the limits of geographical distance is one of the if not the primary component at the heart of many metaverse narratives. Meta, for example, presents the metaverse as “an embodied internet where you’re *in* the experience” (emphasis added), which strongly suggests the confluence or collapse of boundaries between physical embodiment and virtual space (Meta 2021a). In another, more specific instance, Zuckerberg describes this as “instead of looking at a screen, you’re going to be in these experiences” (Meta 2021c), thus suggesting that the distance between screen and viewer has entirely disappeared. Once the boundaries between the physical and the virtual as well as between the screen and the body have been overcome, a space of limitless options is opened up. Being inside the metaverse can now be presented as a means to traverse distances in a manner that is qualitatively different to, say, the way one’s voice or image may travel via a telephone or video call. It is no surprise then that Zuckerberg often employs geographical metaphors such as ‘frontier’

or ‘world’, and frequently refers to ‘teleporting’ as a means of getting around the Metaverse. The latter term is commonly understood as the actual, physical transportation of objects or beings from one place to another in science-fiction stories, but in Zuckerberg’s narratives is presented as “like clicking a link on the internet”, taking you to “whole worlds that you can teleport in and out of whenever you want” (Meta, 2021c). In short, an unrestricted means to travel across space.

Another purported consequence of the dissolution of geographical distance is that “the metaverse will help you connect with people when you aren’t physically in the same place and get us even closer to that feeling of being together in person” (Meta, n.d.). This statement is a reference to the idea that VR technologies have the ability to connect people in a more profound and empathetic manner than conventional media can achieve, and therefore of having a specific potential for doing ‘good’. This conceptualization of VR as the ‘ultimate empathy machine’ (Bollmer, 2017) relies on a specific notion of presence and space. Through VR, it is claimed, one can enter a new, immersive space to experience the feeling of ‘being elsewhere’, and more specifically, a deeper and more profound sense of ‘presence’ with other people. An underlying assumption that virtual presence in the same space with others will also signify a sense of social connection, engagement or care. That is to say, in addition to overcoming the challenge of geographical distance, now also the problem of emotional distance can be transcended. But the limits of space and emotional connection are not the only boundaries that can be surpassed or overcome, even those of time can be vanquished:

In the metaverse you’ll be able to teleport not just to any place, but any time as well. Ancient Rome. Imagine standing on the streets, hearing the sounds, visiting the markets, to get a sense of the rhythm of life over 2000 years ago. (Meta, 2021c)

The limits of geographical distance are not the only form of spatiality that the Metaverse promises to overcome. Another spatial dimension that is ostensibly altered is that of lived or experiential space. For example, one of the supposed promises of life in the metaverse is its near-infinite customizability, particularly in terms of the spaces in which we spent most of our lives, namely the home and workplace. One’s Metaverse home, according to Zuckerberg, will allow you to explore opportunities beyond one’s imagination, such as having an “incredibly inspiring view” and “things that are only possible virtually” (Meta 2021c). Similarly, virtual work environments will offer “room customization” and provide “your perfect work setup and you can actually do more than you could in your regular work setup”.

More specifically:

You’re going to be able to design it to look *the way you want*, maybe put up your own pictures and videos and store your digital goods. You’re going to be able to invite people over, play games and hang out. You’ll also even have a home office where you can work. Your home is your personal space from which you can *teleport to anywhere you want*. (Meta 2021c) (emphasis added)

In a similar vein, gaming platforms that are frequently considered as either proto-metaverses or ‘microverses’ (Evans et al., 2022), such as Roblox and Minecraft, and to some extent Fortnite, allow one to construct virtual worlds with seemingly endless options. Such

platforms, which facilitate the creation of user-generated games or places are often referred to as ‘sandboxes’ because they focus on creative play rather than overt competition, are often open-ended, tend to lack a strong, centralized structure, and have close to limitless possibilities for creating a wide variety of things, ranging from enormous worlds and structures to avatars and objects (Grimes 2021). An important dimension of virtual worlds, moreover, is that virtual economies are seemingly less constrained by the finiteness of material resources. Similar to ‘cyberspace’, one of the dominant logics of virtualization is, after all, that this allows one to move beyond the apparent restrictions and limitations of physical reality and to enjoy personalized, tailored experiences in virtual worlds. And the ostensibly freer characteristics of virtual spaces are posited as a powerful alternative for carrying out one’s daily activities compared to the limitations set by ‘real-world’ places or ‘meatspace’. Virtual space thus transcends the limitations of the material, embodied world. In other words, the metaverse is framed, particularly in narratives presented by Meta and without even the slightest sense of humility, as being able to fulfil “the ultimate promise of technology, to be together with anyone, to be able to teleport anywhere and to create and experience anything” (Meta, 2021c).

Materiality

A central component of metaverse discourse, which is closely related to both spatiality and corporeality, is the assertion that the breakdown of the boundaries between physical and virtual phenomena is akin to the transition from material to less material or even immaterial practices. In short, the metaverse allows for largely if not entirely overcoming the limits of material production and consumption. Such narratives are espoused, both explicitly and implicitly, not only by ‘tech’ companies but also by some academic researchers and consultancies. This has potentially two important implications in terms of interrelated questions surrounding sustainability as well as consumption and their role in framing the metaverse as enabling a limitless and abundant future.

In terms of sustainability, the metaverse can be presented as an important aid in the transition towards more carbon-neutral societies because metaverse technologies might mitigate issues of environmental sustainability (De Giovanni, 2023; Piccarozzi, 2024). For example, such technologies can have the potential to reduce carbon emissions by providing enhanced possibilities for remote work, thus obviating, at least partially, the need for personal travel. Moreover, metaverse development ostensibly enables the substitution of physical goods with virtual ones, particularly in terms of a variety of consumer products such as clothing. Furthermore, metaverse technologies can enhance a wide range of operational processes by, for example, running simulations in digital twins rather than actual physical environments. The creation and implementation of metaverse technologies, it is argued, promises to impose fewer material limits on ongoing technological development, thus enabling the continuation of ‘business as usual’ and therefore economic growth (Hesselbein and Migliore, forthcoming).

The apparent shift from material to immaterial practices of production and consumption – of virtual ‘land’, objects, and services, which are all seemingly infinitely expandable, replicable, and usable – has led to intense speculation about the emergence of new categories of assets and therefore property rights and investment opportunities. Sandbox platforms such as Roblox and Minecraft, after all, allow for endless virtual worldbuilding in

a manner that appears entirely unconstrained by the physical world, and have developed thriving internal markets for the sale of digital objects, such as ‘skins’, accessories, and cosmetics. Moreover, blockchain-based platforms, such as Decentraland and The Sandbox, have sought to introduce artificial scarcity in order to position virtual ‘land’ and Non-Fungible Tokens (NFTs) as lucrative opportunities for real estate investment and financial speculation. The Metaverse, in other words, promises a world with unprecedented levels of abundance and growth. One of the most notable exponents of this narrative is Marc Andreessen, a hugely successful ‘tech’ entrepreneur who has played an important role in the digital media landscape of the World Wide Web since the 1990s. Notably, Andreessen is also an early investor in Facebook and OpenAI as well as a slew of cryptocurrency companies. Indeed, he is a particularly important actor in forwarding techno-utopian discourse as well as in shaping technological development as the co-founder of Andreessen Horowitz, an influential Silicon Valley venture capital firm that has invested in a range of metaverse initiatives. Asked in an interview in early 2021 about whether digital technologies might make us “too connected”, Andreessen responds, rather tellingly and therefore worth quoting at length, as follows:

A small percent of people live in a real-world environment that is rich, even overflowing, with glorious substance, beautiful settings, plentiful stimulation, and many fascinating people to talk to, and to work with, and to date. These are also **all** of the people who get to ask probing questions like yours. Everyone else, the vast majority of humanity, lacks Reality Privilege -- *their online world is, or will be, immeasurably richer and more fulfilling than most of the physical and social environment around them* in the quote-unquote real world. The Reality Privileged, of course, call this conclusion dystopian, and demand that we prioritize improvements in reality over improvements in virtuality. To which I say: reality has had 5,000 years to get good, and is clearly still woefully lacking for most people; I don’t think we should wait another 5,000 years to see if it eventually closes the gap. We should build -- and we are building -- online worlds that make life and work and love wonderful for everyone, no matter what level of reality deprivation they find themselves in. (Soldo 2021) (emphasis added)

Here, the ‘real’ or ‘material’ world is portrayed by Andreessen as essentially limited and fundamentally unequal as well as unfulfilling, whereas virtual worlds are positioned as solutions to such social issues because they will apparently make life and work ‘immeasurably richer and more fulfilling’. Metaverse technologies and spaces allow us, in other words, to escape from the natural or ‘real’ state of inequality towards a virtual world of limitless abundance.³ Rather than physical assets, virtual ‘experiences’ are the hallmark of this new economic paradigm. That is, the metaverse is posited as a virtual ‘fix’ for solving the widespread problems of ‘reality’, whether these may be the limits of material resources, embodiment, or the failing of social institutions more broadly.

³ As one might expect, Artificial Intelligence has also been represented as a potential source of infinite abundance. For a specific techno-optimistic perspective on this, coming out of Silicon Valley venture capitalism, see Acharya (2024).

Corporeality

Whereas as the boundaries between the physical or virtual aspects of spatiality and materiality might appear somewhat easier to blur or collapse, making their differences less distinct and enabling virtual phenomena to be reframed as limitless or endless, this is more difficult to achieve for corporeality. Most of us are under no illusion (yet) that entering the metaverse allows us to forget our bodies or live forever. Indeed, there is a stark contradiction between narratives that describe the metaverse as either an embodied reality or an escape from this (Saker and Frith 2022). The metaverse thus appears in a paradoxical relationship with embodiment because it is as much a place to virtually depart from one's body as it is a place to engage in bodily activities. Many metaverse companies, consequently, seek to blur the boundaries between virtual embodiment and physical bodies and their material limits by employing the term 'experience', which is used to describe both metaversal spaces as well as the activities that take place there. To be more precise, the term 'experience' is employed to cover a wide range of different perceptual moments, emotional states, embodied practices that are enabled by virtual technologies, infrastructures, and environments. What is more, these similar yet importantly distinct meanings of the term are used in a manner that suggests corporeality while nonetheless retaining a crucial and somewhat ambiguous emphasis on intangible aspects or immateriality. The language of 'experience' as employed by Meta as well as other metaverse companies, such as Apple and Roblox, thus subtly elides the boundaries between being embodied or disembodied, between feeling and being, as well as between engaging in material or immaterial practices. In other words, rather than explicitly referring to bodies, which connote material limits, these companies instead refer to 'experiences', which are far more difficult to define, locate, or delineate. In short, virtual experiences, despite being always necessarily embodied, are thus represented as less bounded or materially constrained.

As is the case for spatiality and materiality, the logics of near-endless personalization and customization as well as the purported escape from the limitations physical reality are, in the Metaverse, extended to the body and one's social identity. Although the body has to be "left at the door" in virtual spaces (Penny 1993), one's identity does not. The latter can therefore be represented by its virtual counterpart the avatar. Company discourse about avatars presents this virtual representation of the self as an opportunity for playful experimentation and creative self-expression, above all through digital fashion and accessories (e.g. Meta 2021a; 2021b). At the centre of this new narrative of identity is the avatar, the "living 3D representations of you, your expressions, your gestures that are going to make interactions much richer than anything that's possible online today" (Meta, 2022). Heavily emphasized, unsurprisingly, is that 'users' of the metaverse will have multiple avatars for work, leisure, and whatever, which can be endlessly adapted and customized according to one's wishes. On the Meta Avatar Store, for example, it is claimed that avatars allow one to "be uniquely you" as well as "your authentic self" by "decking out your avatars with clothing from some of the world's leading brands" (Meta 2022). And as Roblox CEO David Baszucki states, "we really believe everyone on our platform will ultimately be who they want to be and who you want to be" (McDowell 2021). In short, the Metaverse is a realm of near infinite possibilities, providing a future "beyond anything we can imagine" (Meta, 2021c).

This utopian vision of the metaverse and its ostensibly transformative significance for embodiment and identity has been circulating within Meta for some time. For instance, just after the famous 2021 Connect conference, reporting emerged about a 2018 pitch sent by Jason Rubin – then still an Oculus VR executive, now the Vice-President of Metaverse Experience at Meta – to Facebook executive board member as well as Marc Andreessen, laying out a similar vision of the metaverse. In his pitch, Rubin describes future occupants of the metaverse as follows: “the only thing she spends as much time doing as she spends in the Metaverse is working, eating, socializing, and sleeping in the IRL [in real life] ‘MEATverse’”. Note not only how the metaverse is situated as a place where people will spend almost all of their daily time, but also how this disembodied virtual space is juxtaposed with the fleshiness of real life. What is more, Rubin suggests that “I might check in to Facebook multiple times a day, but I will LIVE in the Metaverse, work in the Metaverse, and potentially prefer my time in the Metaverse to my day-to-day grind” (Rodriguez 2021). In other words, the metaverse is as much an escape from one’s regular daily life as it is a new, apparently disembodied, and ostensibly better place to inhabit and live.

Rubin’s representation of the metaverse as an escape from mundane, embodied reality or ‘meatspace’ towards some state of limitless possibility harkens back to previous ideas articulated in the 1990s about ‘cyberspace’ as a disembodied realm in which one can behave and live more freely (Hayles 1999). Indeed, John Perry Barlow’s declaration of independence famously claims that “[cyberspace] is a world that is both everywhere and nowhere, but it is not where bodies live”, and that here our identities “have no bodies” (1996). It is not difficult to see such cyberspace narratives mirrored in current metaverse narratives. Moreover, fantasies of escaping embodiment and indeed mortality appear widespread among the communities of engineers and entrepreneurs in Silicon Valley (Gebru and Torres 2024; Messeri 2024), and researchers have observed that metaverse narratives frequently contain deep-seated assumptions about virtuality as separated from corporeality (Kalpokas and Kalpokienė 2024). In other words, the metaverse can be understood as the latest iteration in a long series of attempts by ‘tech’ companies to situate their specific technologies as fundamental to accomplishing a future in which we no longer constrained by materiality, yet this accomplishment paradoxically depends on the very concrete material inputs and outputs of such virtual technologies.

Endpoint

This paper has sought to critically unpack one central narrative feature of the Metaverse, namely its purported limitlessness, endlessness, and abundance, particularly on the level of spaces, objects, bodies, and identities. The primary means through which to present the Metaverse as limitless is by blurring the boundaries between the physical and virtual or the material and immaterial. Once these distinctions have been collapsed and obscured, the apparent limitlessness of virtual spaces, objects, and practices can be positioned as surpassing the limits of material existence. The Metaverse can subsequently be presented as a world of near infinite possibilities, offering a future “beyond anything we can imagine” (Meta, 2021c). Needless to say, this future world is one which is fundamentally reliant on the various virtual technologies, platforms, and infrastructures that are produced, maintained, and managed by ‘Big Tech’ companies, and thus exposes anyone who spends

time in these virtual worlds to datafication, commodification, and exploitation by such companies.

Narratives that represent the metaverse as endless and limitless are, however, far from pointless. Indeed, their apparent amorphousness and vagueness is precisely the point. By placing the endpoint of the metaverse in some near or not-so-near future, the totalizing and all-encompassing character of the Metaverse as an attempt to reshape reality appears less concrete and threatening. Perhaps equally importantly, the hyped-up and hyperbolic nature of metaverse discourse serves as an important deflection and distraction from the real and ongoing practices of 'Big Tech' companies, many of them quite harmful already in the present (Beer, 2024). Moreover, the purported limitless of the Metaverse appears to mirror the contemporary 'infinite paradigm' that characterises the broader media landscape (Echauri, 2023). The Metaverse thus bears a strong family resemblance to other contemporary techno-optimist fantasies, such as the Singularity and AI. Whereas the former relies on the confluence of various emerging technologies that will eventually enable us to escape the limits of our mortality, the latter assumes that technology will be able to emulate and surpass human intelligence, and by consequence usher in an era of limitless technoscientific development and economic growth. Although Metaverse narratives do not yet feature fantasies of immortality, they certainly do contain fantasies of material overabundance. Ultimately, all three narratives can be understood as embodying the technocratic ideal of progress (Marx, 1987), which sees techno-scientific development as progress in itself without answering the crucial question from what or whom these technologies are liberating us. Insisting on making this answer explicit, and tying this to concrete issues in the here and now that concern more than a select group of technocapitalists, is a crucial starting point for both imagining and creating a better virtual future.

References

Acharya, A. (2024, February 7). *How AI Will Usher in an Era of Abundance*. Retrieved September 15, 2025, from <https://a16z.com/how-ai-will-usher-in-an-era-of-abundance/>

Apple (2023, June 5). *Press release. Introducing Apple Vision Pro: Apple's first spatial computer*. Retrieved March 15, 2025, from <https://www.apple.com/newsroom/2023/06/introducing-apple-vision-pro/>

Ball, M. (2022). *The Metaverse: And How It Will Revolutionize Everything*. Liveright Publishing Corp.

Barlow, J. P. (1996, February 8). *A Declaration of the Independence of Cyberspace*. Retrieved March 15, 2025, from <https://www.eff.org/cyberspace-independence>

Beer, D. (2024). Extensive culture: expressions of endlessness in the metaverse and the limits of data accumulation. *Information, Communication & Society*, 28(5), 926–941. <https://doi.org/10.1080/1369118X.2024.2413114>

Boellstorff, T. (2024). Toward anthropologies of the metaverse. *American Ethnologist*, 51(1), 47-56. <https://doi.org/10.1111/amet.13228>

Bollmer, G. (2017). Empathy machines. *Media International Australia*, 165(1), 63-76. <https://doi.org/10.1177/1329878X17726794>

Borup, M., Brown, N., Konrad, K., & Van Lente, H. (2006). The sociology of expectations in science and technology. *Technology Analysis & Strategic Management*, 18(3-4), 285-298. <https://doi.org/10.1080/09537320600777002>

Bory, P. (2019). The Italian network hopes: Rise and fall of the Socrate and Iperbole project in the Mid-1990s. *Internet Histories*, 3(2), 105-22. <https://doi.org/10.1080/24701475.2019.1596407>

Bory, P. (2020). *The Internet Myth: From the Internet Imaginary to Network Ideologies*. University of Westminster Press. <https://doi.org/10.16997/book48>

Carter, M., Eglinton, B. (2024). *Fantasies of Virtual Reality: Untangling Fiction, Fact, and Threat*. MIT Press.

Couldry, N., Meijas, U.A. (2019). *The Costs of Connection: How Data is Colonizing Human Life and Appropriating it for Capitalism*. Stanford University Press.

De Giovanni, Pietro. (2023) 'Sustainability of the Metaverse: A Transition to Industry 5.0', *Sustainability*, 15(7), 6079.

Echauri, G. (2023). Infinite media: The contemporary infinite paradigm in media. *Convergence*, 31(2), 447-461. <https://doi.org/10.1177/13548565231208135>

Evans, L., Frith, J., & Saker, M. (2022). *From microverse to metaverse: Modelling the future through today's virtual worlds*. Emerald Group Publishing.

Galanos, V., & Stewart, J. (2024). Navigating AI beyond hypes, horrors and hopes: Historical and contemporary perspectives. In A. Ponce del Castillo (Ed.), *Artificial Intelligence, Labour and Society* (pp. 27-46). ETUI.

Gebru, T., & Torres, É. P. (2024). The TESCREAL bundle: Eugenics and the Promise of Utopia through Artificial General Intelligence. *First Monday*, 29(4). <https://doi.org/10.5210/fm.v29i4.13636>

Grimes, S. M. (2021). *Digital Playgrounds. The Hidden Politics of Children's Online Play Spaces, Virtual Worlds, and Connected Games*. University of Toronto Press.

Hayles, N. K. (1999). *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics*. University of Chicago Press.

Hesselbein, C., Bory, P., & Canali, S. (2024a). Metaverse datafication: technologies, definitions, and futures. *Information, Communication & Society*, 28(5), 763-777. <https://doi.org/10.1080/1369118X.2024.2443082>

Hesselbein, C., Bory, P., & Canali, S. (2024b). Six provocations for metaverse datafication: an emergent cultural, technological, and scholarly phenomenon. *Information, Communication & Society*, 28(5), 778-796. <https://doi.org/10.1080/1369118X.2024.2433548>

Hesselbein, C. Bory, P. (2025). *Infrastructures of Reality: Metaverse Stories, Spaces, Bodies*. PoliMI SpringerBriefs. <https://link.springer.com/book/10.1007/978-3-031-97167-9>

Hesselbein, C. Migliore, A (forthcoming). Doing sustainability in the metaverse? Metaphors and paradoxes of (im)materiality in sustainability reporting by Italian fashion companies.

Kalpokas, I., & Kalpokienė, J. (2024). I VR therefore I am: toxic binary thinking in visions of the metaverse. *Information, Communication & Society*, 28(5), 910–925. <https://doi.org/10.1080/1369118X.2024.2427119>

Martini, M. (2024). Materializing corporate futures: how the EU navigated the Metaverse hype. *Information, Communication & Society*, 28(5), 852–869. <https://doi.org/10.1080/1369118X.2024.2428331>

Marx, L. (1987) Does Improved Technology Mean Progress? *Technology Review*, 32-41.

McDowell, M. (2021, May 17). Inside Gucci and Roblox's new virtual world. *Vogue Business*. <https://www.voguebusiness.com/technology/inside-gucci-and-robloxs-new-virtual-world>

McStay, A. (2023). The metaverse: Surveillant physics, virtual realist governance, and the missing commons. *Philosophy & Technology*, 36(13), 1–26. <https://doi.org/10.1007/s13347-023-00613-y>

Messeri, L. (2024). *In the Land of the Unreal: Virtual and other realities in Los Angeles*. Duke University Press.

Meta (n.d.). *What is the metaverse?* Retrieved September 15, 2025, from <https://www.meta.com/en-gb/metaverse/what-is-the-metaverse/?srltid=AfmBOop58vC9flznr5CoTDXPj0h9XhUy0k0PrVYZGrVmIuXNu6LpZ78>

Meta (2021a) *Founder's Letter, 2021*. Retrieved March 15, 2025, from <https://about.fb.com/news/2021/10/founders-letter/>

Meta (2021b, October 28). *Connect 2021: Our vision for the metaverse*. Tech at Meta. Retrieved March 15, 2025, from <https://tech.facebook.com/reality-labs/2021/10/connect-2021-our-vision-for-the-metaverse/>

Meta (2021c, October 28). The Metaverse and How We'll Build It Together – Connect 2021. *YouTube* (video). https://www.youtube.com/watch?v=Uvufun6xer8&ab_channel=Meta

Meta (2022, June 20). *Introducing the Meta Avatars Store*. Meta. Retrieved March 15, 2025, from <https://about.fb.com/news/2022/06/introducing-the-meta-avatars-store/>

Mosco, V. (2005). *The Digital Sublime: Myth, Power, and Cyberspace*. MIT Press.

Mosco, V. (2023). Into the Metaverse: Technical challenges, social problems, utopian visions, and policy principles. *Javnost - The Public*, 30(2), 161–173. <https://doi.org/10.1080/13183222.2023.2200688>

Nieborg, D. B., & Poell, T. (2018). The platformization of cultural production: Theorizing the contingent cultural commodity. *New Media & Society*, 20(11), 4275-4292. <https://doi.org/10.1177/1461444818769694>

Nye, D. E. (1996). *American Technological Sublime*. MIT Press.

Penny, S. (1993). Virtual bodybuilding. *Media Information Australia*, 69(1), 17-22. <https://doi.org/10.1177/1329878X9306900105>

Piccarozzi, M., Silvestri, C., Fici, L., Silvestri, L. (2024). Metaverse: A Possible Sustainability Enabler in the Transition from Industry 4.0 to 5.0. *Procedia Computer Science*, 232, 1839–1848.

Rodriguez, S. (2021, October 30). *Facebook's Meta mission was laid out in a 2018 paper declaring "The Metaverse is ours to lose."* CNBC. Retrieved September 15, 2025, from <https://www.cnbc.com/2021/10/30/facebook-s-meta-mission-was-laid-out-in-a-2018-paper-on-the-metaverse.html>

Saker, M., & Frith, J. (2022). Contiguous identities: The virtual self in the supposed Metaverse. *First Monday*, 27(3). <https://doi.org/10.5210/fm.v27i3.12471>

Shapiro, E. (2021, April 18). Nvidia CEO Jensen Huang talks the powers of automation. *Time*. <https://time.com/5955412/artificial-intelligence-nvidia-jensen-huang/>

Smith, H. (2024). The metaverse-industrial complex. *Information, Communication & Society*, 28(5), 797–814. <https://doi.org/10.1080/1369118X.2024.2423346>

Soldo, N. (2021, May 31). *The Dubrovnik Interviews: Marc Andreessen - Interviewed by a Retard*. Fisted by Foucault. Retrieved September 15, 2025, from <https://niccolo.substack.com/p/the-dubrovnik-interviews-marc-andreessen>

Tencent (2022, September 29). *Tencent Introduces 'Immersive Convergence' to Drive Connections Between Digital and Real Worlds*. Retrieved September 15, 2025, from <https://www.tencent.com/en-us/articles/2201445.html>

Van Dijck, J. (2014). Datafication, Dataism and Dataveillance: Big Data between scientific paradigm and ideology. *Surveillance & Society*, 12(2), 197–208. <https://doi.org/10.24908/ss.v12i2.4776>

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