Spaces and Imaginaries of the Metaverse
The Myth of the Virtuality of the Internet at Horizon

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Abstract

This article examines how contemporary imaginaries of the metaverse inherit and reshape the twentieth-century myths of virtual reality and the early Internet. Bringing together philosophy, media theory, and sociotechnical history, the paper traces and reframes virtuality and "immersion" as a threshold experience linked to deterritorialization. Adopting a critical and political perspective, the analysis highlights how the metaverse functions as a "third space": an arena of playful interaction and creative experimentation, but also one shaped by technopolitical asymmetries and the remediation of social media logics in immersive 3D environments. Historical parallels with the commercialization of the Web and world expositions reveal how colonial and capitalist tropes persist in promises of frictionless transcendence. The article mobilizes concepts of code/space, smooth/striated space, and user practice to show how platform architectures reterritorialize the "virtuality" they advertise. Ultimately, the paper contends that the myth of the metaverse's virtuality conceals a process of reterritorialization, where the utopian promises of cyberspace give way to the controlled architectures of platform capitalism, turning the dream of virtual worlds into an infrastructural and ideological extension of the Internet's history.

Keywords:
metaverse; virtual reality; immersion; third space; Internet.

Introduction

With the exception of a few contributions — such as those by Lanier (2017) and Rheingold (1992), which focused on the material and technological aspects of VR, or that of Hillis (1999), who emphasized its nature as a cultural construct — discussions on VR, both within academia and beyond, have consistently prioritized the representational performance of technological devices and their ability to create "worlds" that are indistinguishable from the "real" one. This tendency can be traced back to the Platonic tradition of the deceptive image. One of the most emblematic examples of this approach is Chalmers' argument, which defines the experience of being immersed in VR as a real experience — one that should not be considered "second-rate" Chalmers (2022). Drawing on the legacy of thinkers like Gibson (1986), with his theory of ecological perception, and on enactive cognitive science — such as Noë's theory of sensorimotor perception — many scholars, including Chalmers, have explored the idea that immersion in VR can be understood as an environmental experience, indistinguishable from ordinary, "real" experience, insofar as the image perceptually responds to the user's bodily movements.

This contribution seeks to explore how we conceive and make sense of the digital and "virtual" spaces of the metaverse, thus evaluating whether its contemporary "technological imaginary" (Flichy 2001) inherits the topos of virtual reality, formed during the second half

of the 20th century.[1] First, we will examine how the social discourses that have recently revitalized the notion of the metaverse have adhered to this ancient tendency to consider virtual reality as a "reality". In this sense, the metaverse constitutes a paradigmatic case study for discussing the complex issue of the real/virtual dualism — a theme that has always been central to media studies. At the same time, we will claim that, in order to understand how the "virtuality" of the metaverse is nowadays conceived, it is important to bring to the fore the notion of deterritorialization, another major theme in reflections on the virtual (Levy, 1998; Maldonado, 1993; Giuliana, 2024). In the case of the metaverse, the process of deterritorialization is both temporal and spatial, but not identitarian. On the one hand, when entering a metaverse, a "spatial deterritorialization" from the *here and now* toward an alternative and *virtual* reality occurs. At the same time, the metaverse represents a direction toward which the main technology industries tend, a temporal deterritorialization. This assumption is essential when discussing the "metaverse" today, which appears more as an aspirational phenomenon than as a present reality. As Hesselbein and Bory note, "The word 'metaverse' denotes an evolution or transcendence towards a higher order that is above or beyond the current state of the world" (Hesselbein and Bory, 2025, p. 4). On the other hand, however, the metaverse represent a technological evolution of contemporary social media platforms, where the ontological dualism between real and virtual identity is no more felt.

To support these ideas, we will adopt a historical, sociological, and critical perspective to observe how the narratives currently surrounding the metaverse closely mirror those that accompanied the emergence of the commercial internet in the 1990s and the rise of mobile computing in the 2000s, including colonialist metaphors. This deterritorialization, we will argue, cannot be equated with the one typical of contemporary digital culture, which is primarily defined by the virtuality of the Web and the Internet. By inheriting models and forms from social media platforms, the contemporary metaverse departs from the idea of an "alternative" space imagined by Barlow (1996) — one populated by imaginary objects like the "information superhighway" or the "digital library," where nobody knew you were a dog.[2] Theoretically speaking, the technological imaginary of the contemporary metaverse goes beyond (and resolves, in some way) that paradoxical nature of virtual reality that characterized the early imaginary of VR.

The metaverse as a "reality"

Today, the term metaverse refers to a persistent, three-dimensional digital space that is, supposedly, 'interoperable' and shared (Ball, 2022). In some cases, it is constituted through the remediation of real-world spaces. This perspective is well represented by the idea of the "mirror world": as both Kelly (2016) and Gelernter (1991) have argued, the 'metaverse' can be conceived as a vast, distributed computing system containing a complete replica of reality — a 'downloadable' world that allows individuals to explore reality without leaving their homes, simply by 'traveling' through its digital mirror. Google Earth is a clear example of this approach. According to this view, the metaverse could be said to have "been built"

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[2] This reflection is valid, of course, in the case of metaverses featuring avatars that reflect the real identity of users, as in the case of Meta's Horizon Worlds.

(or at least to be in the process of being built) through the integration of virtual and physical worlds. This is the view held by authors such as Sonvilla-Weiss (2008) and Arcagni (2023), who reject the idea of the metaverse as an alternative or detached space. Their definition aligns more closely with that of "spatial computing" — that is, a type of human-machine interaction embedded within the physical world. This conceptualization is also well represented by lifelogging projects, augmented reality, or ubiquitous computing — all three centered on a vision of human-computer interaction that is diffuse and environmental. Ultimately, these visions are also those traditionally represented by Stephenson's novel or Gibson cyberspace.

However, the definition of the metaverse remains contested: the term is used to describe vastly different things depending on which social group or corporate actor one considers. Each seems to put forward its own version — different yet equally under-defined — but almost all share a similar ambition of revolutionizing society through metaversal technologies and transforming the ways in which people work, interact, and consume. In short, the term can be made to cover almost anything. Meta's Horizon, Spotify Island on Roblox, as well as the virtual showrooms and storefronts created by companies such as Walmart or Nikeland, or even games like Minecraft (which has existed since 2011), are all virtual spaces that inherit forms typical of video games, where one can fly or perform actions impossible to carry out in the "real world." Unlike the first model of "virtual reality," therefore, this second one is unequivocally unreal.

If, on the one hand, the idea of "virtual reality" — indistinguishable from "real reality" — can be considered an effect of meaning stemming from the common tendency to separate the real from the virtual that has always characterized discourse around digital media, on the other hand, if the contents that populate these environments — however plausible and photorealistic — are semantically unreal, the problem does not arise. From this perspective, it does not matter whether the Panorama or IMAX are photographically realistic, or whether the planetarium reproduces the actual constellation: what matters is the content of these images, their extraordinariness in relation to ordinary experience. The passage is from perception (of the immersive and realistic image) to cognition (of its meaning). For this reason, "virtual reality" has often been defined as a liminal or threshold experience — a connotation that can be inferred as much from a conceptual, symbolic, and interpretative perspective as from a linguistic and semiotic one.

The theme of virtual reality as a threshold has often been associated with the notion of "deterritorialization." The illusion of displacement presupposes change, variation, difference — an extraordinary situation of aesthetic immersion and illusion — as confirmed by the constant association between the meaning and experience of the immersive image, the syntax of deterritorialization, and the shift into another, often aquatic, reality as suggested in Murray's original definition[3]), as well as by the consideration of spaces immediately identifiable as places somehow separated from the world. Referring to the figure of displacement into an aquatic space, for example, Pinotti has described the VR experience as a form of apnea, in which the "respiratory" rhythm governing our habitual interactions with the real world is suspended and replaced by a different rhythm, one that requires the learning of new gestures and new sensorimotor performances (Pinotti, 2021,

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[3] Immersion is a metaphorical term derived from the physical experience of being submerged in water. We seek the same feeling from a psychologically immersive experience that we do from a plunge in the ocean or swimming pool: the sensation of being surrounded by a completely other reality, as different as water is from air, that takes over all of our attention, our whole perceptual apparatus… in a participatory medium, immersion implies learning to swim, to do the things that the new environment makes possible… the enjoyment of immersion as a participatory activity. (Murray, 2001, p. 98-99).

Apnea, 1). This extraordinariness thus emphasizes the "attractional" dimension of mediation and the artifice underlying it: apnea is not ordinary, just as immersion in liquid is not the natural condition of the human animal (and especially for this reason water both fascinates and frightens, connoting order and chaos, embodying the ambivalence of natural elements, so that even apnea can become an exciting, playful, or competitive practice)[4]. There are several cases, for instance, where VR content is presented with the expression "Meet": for example, Meet Mortaza VR, where the threshold is between a geographical "here" and "there," or Meeting You, where the threshold is between the earthly and the otherworldly dimension.

The threshold experience is also that between the real dimension and "surreality." It is no coincidence that the rise of VR — especially in the vision of figures such as Lanier — took place in the cultural ferment of the 1970s and 1980s, characteristic of the cyberpunk community, from which it inherited multiple references to tropes of mind expansion, science fiction, hacking, alternative music, alternative health, drug culture, and sexuality.[5]
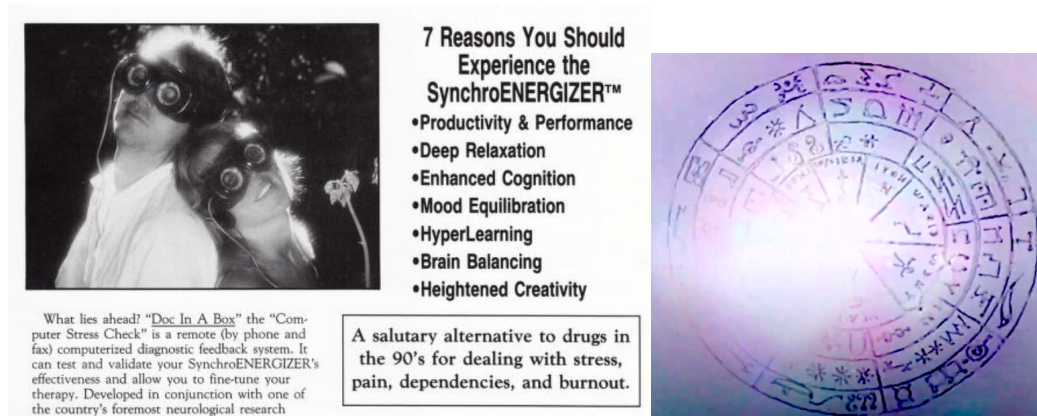

Image 1 - Left: SynchroEnergizer advertising, *Mondo 2000*, 1990; Right: a still from *The Lawnmower Man* (Leonard, 1992).

But the parallel between VR and esoteric culture can be traced in several contexts — from the success of meditation applications to those documented by Davis (Davis, 2015) in relation to techno-paganism, or to the references in cult films such as *The Lawnmower Man*, where the visuals displayed to the character through the VPL device recall the aesthetics of esotericism and alchemy.

Another topic is represented by the meaning of the notion of the virtual, no longer as a "threshold experience" but as a "becoming," linked to the idea of virtual technologies as future-oriented — no less destabilizing and extraordinary[6].. Chesher (2003), for instance, analyzing discourses around virtual reality (VR), highlighted the numerous metaphors —

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[4]The history of immersive media is filled with digital artworks that feature the aquatic trope (from Char Davies's Osmose to the works of Chatonsky). For a reflection on the experience of aquatic and liquid spaces, see the volume curated by Roelens e Erchadi (2023).

[5] "[…] the component of social criticism is dropping away, and the enthusiasm has been transformed into entrepreneurial fervour. Cyberpunk defines itself as marginal, esoteric, oppositional – a counterculture. As such it must keep moving, redefining itself, shifting its identity. There was a tension between the oppositional and peripheral nature of cyberpunk and the VR marketers' goals of breaking into mainstream. While cyberpunk had energy and imagination, mainstream industry had capital." Chesher (2003)

[6] Vitali-Rosati observes that it is precisely the notion of the virtual (even before that of immersivity) that identifies a process of deterritorialization: it evokes the sea and all the challenges this space poses to humans—who, after all, are living beings evolved on land. As an aquatic space, the virtual challenges, at least within the realm of digital technologies, our notion of space: there is no longer a territory. (Vitali-Rosati, 2012).

such as the myth of the American frontier — employed to legitimize VR as a significant and inevitable technological progression. Hillis (1999), in the same direction, noted that cyberspace and VR are both metaphors and configurations of the "promise of an escape from History with a capital H": "Cyberspace not only suggests that an ideal existence must necessarily be mediated by technology, but also continues and intensifies a long-standing project aimed at modifying, through the use of technology, subjectivity and the meaning of what it is to be human" (Hillis, p. XVII). This reading of the cyberspace becomes even more understandable if placed within the sociopolitical context of the 1970s and the typically postmodern rethinking of the role of institutions that characterized that period. Kroker, for instance, defined VR as having "always been about the mass emigration of genes from the old world of the human body to the new world of digital reality" (Kroker, 1993, p. 39). In more recent times, anthropologist Bell has proposed a similar analogy between the myth of the metaverse and the "new worlds" promised by the development of electrical technologies at the end of the nineteenth century, showcased in the context of world exhibitions such as the *Great Exhibition of the Works of Industry of All Nations* (London, 1851), the *Exposition Universelle* (Paris, 1889), and the *World's Columbian Exposition* (Chicago, 1893). She simultaneously highlights the parallel between immersion in VR and the immersive environments staged in the context of these exhibitions (Bell, 2022).

The same process can be understood with reference to identity. Gualeni and Vella (2020), drawing on the philosophical traditions of existentialism and hermeneutics, and in particular on authors such as Sartre and Plessner, argue that in the face of the impossibility of identifying a stable foundation for one's individual existence — namely, a reliable set of values or a defined sense of self — individuals develop an existential need to create something of themselves: to become, through free self-determination, a particular kind of being. Rather than considering virtual worlds as independent existential domains requiring total psychological and cognitive involvement, these can be understood as technically mediated tools for temporarily adopting new perspectives, experimenting, and reflecting on one's possibilities and their meanings. In virtual worlds thus conceived, aspects of real life and relations of power can be replicated, questioned, or even subverted.

These examples make it possible to argue that virtual reality is a typical case in which we can identify that interpretative mechanism through which a space acquires meaning on the basis of its opposition to its contrary, to the other, to what lies outside it. In this sense, what is important to stress is that VR constitutes a form of symbolic experience that inherits the ancestral human desire to transcend earthly reality — while the differences in perception between "real" and "transcendental" experience are not particularly relevant.

And yet, even if the contents are unreal, the imaginary of virtual reality has often associated the technological apparatus with the ability to create and open up spaces indistinguishable from real ones. The 360-degree headset, in particular, has been imagined as capable of configuring "another" body — an avatar — whose experiential form is normally associated with illusion (unlike the first model of HCI, in which it is the user's "real" body that experiences both real and digital contents).

These reflections help to highlight the paradoxical dimension of the "common sense" of virtual reality, insofar as they both emphasize the medium and the transition toward another experiential dimension, and at the same time identify this as "reality." As noted by Lévy and Maldonado, the problematic nature of the expression "virtual reality" stems from its oxymoronic character: it semantically combines the idea of "virtuality" — of transformation, heterogenies, deterritorialization, presupposing knowledge and, therefore, the extraordinariness of experience — with the idea of reality, which can be defined as an

ordinary condition, characterized by a biological-cultural determination underlying signification and, to some extent, "automated," at least more so than the process that prompts a subject to undergo an aesthetic experience.

The case of the metaverse is particularly emblematic for discussing this (ancestral) paradox, since it has, on the one hand, carried forward the myth of VR as a virtual experience (both synchronically and diachronically), partly recalling the origins of the Internet, the playful and utopian flavour of early online communities, and the renewed centrality of the avatar. As already mentioned, the metaverse is often associated with the form of a new video-game format — relatively recent, considering that the term MMORPG (massively multiplayer online role-playing game) was first used in 1996 by Electronic Arts — that seems to promote an experience situated in an "other" space. This idea is particularly evident if one considers Fortnite's island, which recalls management games such as Tropico. These experiences resemble those of theme parks, which in turn share many cultural forms with the carnival: the attraction component — referencing the "cinema of attractions," the fairground spaces where cinema was born, and virtual-reality technology — is especially strong here. This connection is explored in Lisa Messeri's studies on the uses of virtual reality in Los Angeles (Messeri, 2024). More specifically, Messeri proposes to move beyond the reality-virtuality dualism by adopting the notion of "un-reality," drawing on fantastical places such as theme parks, which are not virtual in a synthetic or digital sense at all.

To be in the world of the unreal is to experience the fracture of reality. The unreal holds both possibilities and threats, prompting people to ask what collective action and change might look like when the idea of "the collective" can no longer be taken for granted. In this fragmented reality, it has become frustrating to see that traditional civic-action strategies are ineffective, as they rely on norms and assumptions that no longer apply. (Messeri, 2024, p. 7)

On the other hand, however, the technological imaginary of the metaverse has also been enriched by a series of ideas — more problematic in certain respects — of an "ordinary metaverse," set against the notion of an "other" metaverse: such as the recurring associations with the idea of the "mirror world" (Gelernter, 1991; Kelly, 2016) or the "digital twin" evoked in Meta's promotional videos, where photorealistic images falsely anticipated the new stage of Facebook/Meta and of social media platforms — spaces that are anything but extraordinary.
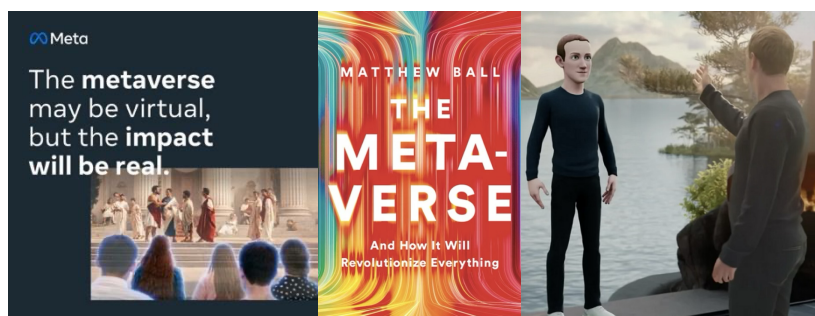

Image 2 - Figures of the imaginary of the metaverse: an image from Meta's advertising campaign (2023); the cover of Ball's book, a milestone for the business community; a still frame from Zuckerberg's presentation of the metaverse

Image 3 - Figures of the imaginary of the metaverse: a screenshot from Fortnite showing the countdown preceding an in-platform event.

However, Bory and Hesselbein argued, the real question is not merely whether the current metaverse corresponds more closely to the first or the second definition. Rather, it is a matter of understanding whether the values associated with the spaces of today's metaverses — such as *Fortnite*, *Roblox*, or *Minecraft* — are interpreted in connection with notions of virtual reality and cyberspace, as detached spaces, or whether other formulations are possible — for example, one that brings them closer to the digital platforms that currently dominate the online experience. In this direction, the authors propose a critical and political perspective.

The political dimension of virtual spaces

Several scholars in the second half of the twentieth century offered reflections, concepts, and theoretical frameworks to interrogate the political nature of space. De Certeau (1990), for instance, showed that space is not merely a geometric dimension generated and determined by strategies of power, but rather the outcome of everyday practices ("tactics") that traverse, reinterpret, and rewrite it. Along these lines, Messeri suggested adopting the notion of "third space" to capture both the entertaining and the political dimensions of virtual reality. Messeri suggested to adopt such notion to describe the entertainment and political nature of virtual reality. Originally introduced by Oldenburg, the notion of the "third place" refers to social spaces distinct from the home (the first place) and the workplace (the second place), and designed to offer an alternative to the serious, rational environment of work. Homi Bhabha (2004), from a postcolonial perspective, proposes instead that the third place be interpreted as a space where different communities bring their own readings of the same environment — a postmodern approach. This concept partly aligns with Arturo Escobar's *Design for the Pluriverse* (2018) and even resonates with certain theories in quantum physics (which often accompany narratives about virtual reality, such as the three-body problem).

From this perspective, the metaverse, as a third place, is primarily characterized as a space dedicated to leisure. Its playful and aesthetic dimension, its intersubjective character, and its pluralistic, heterogeneous nature are pivotal to this understanding. From a historical standpoint and taking into account the role of attractional components in the evolution of technologies and cultural habits, one could say — using Mosco's terminology — that since contemporary web culture has become *banal* and incapable of producing sublimation, the metaverse as a third place serves to renew collective passion for platforms. This idea is

further reinforced by the fact that Facebook chose to launch the metaverse at one of the company's worst-ever moments.

However, if the metropolis is already the result of space generation through strategic planning, this applies only from an organizational and infrastructural point of view. In contrast, the space of the metaverse is generative and technological determined in an ontological sense. Its source code generates a series of computational operations at various interface levels, ultimately resulting in a three-dimensional environment — the interface itself. In this case, however, space is not 'appropriable' in the same way as that of the third space: today's metaverses are nothing like the participatory spaces of the early internet's virtual communities. The metaverse spaces of today are primarily created and owned by corporations such as Epic Games, Meta, or Roblox. Two theories of digital space can help us highlight this issue, which is above all political. The first is technopolitical in nature. In *Code/Space*, Kitchin and Dodge (2011) describe how software code creates spaces: the code/space entity, they write, emerges through a process of transduction when software and the spatiality of everyday life become mutually constituted — that is, produced by and through one another. In this view, spatiality is the product of code, and code exists primarily to produce a particular spatiality. In other words, there is a dyadic relationship between code and space (Kitchin and Dodge, 2011, p. 17). The authors give the example of airport boarding zones, which would fall into chaos without the software managing them.

The second theory is philosophical. To describe internet spaces, Ugo Volli (2021) referred to the distinction between "smooth spaces" and "striated spaces" proposed by Deleuze and Guattari in *A Thousand Plateaus*. "Smooth" space is nomadic or rhizomatic — like the sea or the desert — where the path is not predetermined and aimless wandering is the fundamental mode. "Striated" space, on the other hand, is that of a journey guided directly toward a goal along fixed channels: railways, highways, commercial flight paths. Internet theorists, as Volli notes, have often interpreted users' online activity in "smooth" terms, for instance by speaking of "surfing" or "navigation," imagining a total freedom of curiosity, as if being connected to a computer were the contemporary equivalent of Baudelaire's *flâneur*. In reality, those who manage the medium (internet providers, legal regulators, software publishers, platform operators) constantly attempt to limit this freedom — by retaining the "navigator" within controlled spaces or making them passive to their suggestions, guiding them along "information highways." In short, they strive to *striated* cyberspace.

If we look to the case of the metaverse, we have to notice that spatial enunciation in the metaverse cannot be as invisible as the everyday spatial practices described by de Certeau. Institutional determinism affects not only the evolution of media but also the conditions of experience — for instance, during the Travis Scott concert in *Fortnite*, it was impossible to fight in certain parts of the island.

These issues strongly resonate within the scientific community of developers and designers, who are deeply concerned about the remediation of social media logics within 3D worlds accessed through VR technologies. Above all, the integration of Generative AI into the management of human-VR interaction heightens the risks of exploitation of creative labor, privacy violations through biometric data harvesting, and the erosion of trust through data contamination and misinformation.

Conclusions

In summary, although the social construction of the metaverse echoes the processes that shaped the emergence of the Internet and virtual communities, it is essential to highlight some key differences with this historical and technological model.

From a theoretical perspective, the metaverse appears to update — or rather, weaken — the meanings of the notion of the virtual as developed throughout the 20th century. The idea of the virtual as potential (a view that resonates with Pierre Lévy's thinking), commonly associated with the anonymity of the first virtual communities, is now countered by the concept of the digital twin. In this sense, the metaverse continues along the trajectory of social networks, in sharp contrast with the avatar–virtual community model of the early Internet. Indeed, they are precisely the narratives of business actors that accompany and financially propel the concrete development of the metaverse. They try to situate the metaverse within this historical evolution in order to frame and justify its technological development and cultural relevance, as well as to attract further investment (Hesselbein & Bory 2025, p. 12).

From a socio-cultural standpoint, the question also arises regarding the role of the fantastic. In the metaverse, the fantastic is not tied to the prophetic narratives that have historically accompanied media development, as Natale and Balbi explain (Natale and Balbi 2014). Rather, it functions as a driver toward unreality, following Messeri's framework, and is closely connected to the well-established industries of video games and theme parks.

From a sociotechnical perspective, it is also important to emphasise that the relationship between code and space is not inherently deterministic. Even in metaverse environments — particularly on Roblox — it is users who create environments. For at least a decade, it has been common to speak of "user-generated content", and it is reasonable to argue that many metaverses rely on actual games or experiences created by users. To support this line of thought, it is helpful to recall Michel de Certeau's provocative and anti-deterministic perspective, according to which a place is a static concept — defined by geographical coordinates and organized according to institutional logic — while space is a practised place, made dynamic through the actions, movements, and interactions of individuals. However, contemporary software for creating virtual worlds and metaverses, while facilitating and democratizing rapid 3D modelling through user-friendly development kits (SDKs), often leads to an abundance of homogeneous and low-quality content (sometimes referred to as "AI slop").

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