Democratic Culture, Virtual Spaces, and the Internet of Tomorrow

Matthias Quent

In the early 21st century, democracy finds itself confronted with profound changes and challenges. Worldwide, a backsliding of democratic cultures and structures can be observed: in many countries, democratic institutions and norms are coming under pressure while authoritarian tendencies gain traction. At the same time, the digital revolution is transforming the public sphere at a rapid pace and facilitating the rise of populist and illiberal forces. Societies have yet to find a satisfactory way to deal with the harmful side effects of the dynamic developments of social media in the Web 2.0 era. New platforms, artificial intelligence, and immersive technologies like the Metaverse are already becoming available. They offer unprecedented possibilities for communication and participation, but they also bring with them significant risks for user safety as well as for democratic culture.

Democratic culture generally refers to the totality of those beliefs, attitudes, and behaviors in a society that not only accept democratic principles like pluralism, human rights, equality, the rule of law, and participation, but actively support them. It manifests, for example, in a willingness to engage in open discourse, to tolerate divergent opinions and identities, and to actively participate in political processes. In the context of digital and immersive spaces in the Metaverse, the term Democratic culture takes on an expanded meaning: here, democratic culture encompasses not only the political values of individual users and how they interact with each other, but also the manner in which digital publics are designed, regulated, and experienced. A democratic culture in virtual environments requires that users are able to communicate as equals, that diversity is protected and made visible, and that discriminatory structures are recognized and curtailed. Ideally, platforms are not driven solely by commercial interests; instead, they enable user participation in decision-making and accept democratically legitimized regulations to balance freedom of expression and anti-discrimination. Democratic culture requires openness, transparency, and participation even beyond state institutions.

This book brings together transdisciplinary analyses and perspectives on the opportunities and risks of democratic culture in immersive digital environments, which are discussed under the term "Metaverse". These analyses were developed in the context of the "Immersive Democracy" project as part of the European Metaverse Research Network. The aim of the Immersive Democracy project is to empower social scientists, civil society actors, designers and creators of immersive environments, as well as political decision-makers, with theoretical foundations and empirical research to shape the internet of the future in an inclusive and democratic way.

In all regions of the world, democracy is under pressure – often from populist actors who reject political pluralism and seek unchecked power, while skillfully exploiting digital technologies. The background of this global trend is multifaceted – economic inequalities, nationalism as a reaction to the effects of globalization, the erosion of the middle class, cultural backlash against social change, and various crises all play a central role, as do changes in the media ecosystem. The latter directly links the crisis of democracy to the digital sphere, where a large part of political life, communication, and socialization takes place today.

Digital Public Spheres, Platform Structures, and the Concentration of Informational Power

Digitalization has fundamentally changed the foundations of public communication. While the internet in the 1990s was associated with hopeful visions of a free, decentralized information space, this image has shifted over the past two decades: the initial techno-utopian ideals have given way to the realization that legal frameworks, market forces, and social practices have transformed the web into a commercial platform economy. Today, a few digital platforms – above all global social networks, search engines, and messaging services – dominate the role of public forums. They function as new gatekeepers of opinion formation and use algorithmic curation to control which information becomes widely visible and which does not. This has been accompanied by an extreme concentration of informational power: only a handful of companies and their decision-makers have the ability to influence the online communication of billions of people worldwide to an unprecedented extent. These corporations collect and analyze vast quantities of user data and make decisions based on that – about, for

instance, newsfeed algorithms or content moderation – that have global societal and political impacts. Through their global economic and media power, they are able to thwart effective regulations by democratically legitimized governments.

These digital public spheres are privately organized and hierarchically controlled. Instead of transparent, accountable governance, control is concentrated in the hands of a few individuals – founders, CEOs, and major investors – who often act according to their own financial or ideological interests. As a result, private-sector actors with exclusive decision-making authority and sometimes a political agenda determine central aspects of freedom of expression and the order of discourse on the internet. This concentration of power raises grave questions in democratic theory: if public deliberation increasingly takes place in closed spaces rather than in open forums based on a consensual social framework of rules, principles of debate oriented toward the common good risk being pushed to the margins. Algorithms optimized for profit maximization and prolonged user engagement can, for example, reward sensationalism and outrage more than factual information – impairing the quality of public opinion formation. In this way, digital platforms become "private publics" with enormous power but without genuine accountability to society. The concentration of this power in a few hands – whether through algorithmic control over information flows or through surveillance practices for data analysis – jeopardizes the diversity and openness that a functioning democratic public sphere requires.

Democratic Risks of Monopolistic Platform Economies

Closely tied to the concentration of power in the digital realm are the quasi-monopolistic structures of today's platform economy. The global market for online communication, social media, and digital services is dominated by just a few large corporations – often referred to as "Big Tech" – such as Meta (Facebook, Instagram, WhatsApp), Alphabet (Google, YouTube), Apple, Amazon, Microsoft, or in Asia Tencent (WeChat, QQ) and ByteDance (TikTok). Each of these companies controls entire ecosystems of services and has attained a market position that presents traditional antitrust oversight with enormous challenges. This is democratically relevant primarily because extremely concentrated economic and informational power in private hands poses a potential danger to pluralistic societies and to the

principle of democracy itself. Monopolies tend to replace transparent rules with corporate interests and to convert public goods into private profits – while social costs are externalized to society. For example, the moderation of speech on Facebook or YouTube is ultimately subject to the guidelines and decisions of a single company – there is no democratic participation by the users or the general public in determining who may say what, or according to what criteria content is regulated.

The democratic risks of such monopolistic platform economies are manifold. First, a few companies can dominate the informational agenda of society – for instance, through selection of news or manipulation of reach – and thereby potentially influence political processes. Second, there is the danger of misuse of personal data and mass surveillance: Shoshana Zuboff (2019) coined the term "surveillance capitalism" for a regime in which corporations like Google or Meta analyze and influence citizens' behavior to generate profit – undermining individual autonomy and privacy. Third, public communication may become dependent on private infrastructure: if a dominant service fails or arbitrarily changes its terms of use, it can destabilize entire democracies and upend the relationship between truth and falsehood (think of the role of platform X under Elon Musk). Fourth, quasi-monopolistic digital corporations can convert their economic clout into political influence through lobbying, pressure on governments, or media agenda-setting.

A stark example outside of liberal democracies is Tencent in China: as the operator of WeChat, Tencent controls not only the social network but also payment transactions, everyday services, and news consumption for over a billion users – tightly interlinked with state surveillance. Here we see the dystopia of a corporate-provided every day and public space merging with authoritarian state power. Although liberal democracies differ significantly in political culture and legal context, the structural question remains: How can we prevent a few private platforms from becoming the quasi-infrastructure of democratic society without any democratic oversight mechanisms in place?

AI as a Challenge for the Political Public Sphere, Pluralism, and Participation

In parallel to platform concentration, another layer of the digital challenge is emerging: the rapid proliferation of Artificial Intelligence (AI) in the form of algorithmic decision-making systems, big data analytics, and more

recently generative AI (such as ChatGPT, DALL-E, or deepfake technologies). On one hand these developments promise efficiency gains and new tools – on the other hand, they bring significant dangers for the political public sphere, societal pluralism, and participation – a subject substantial enough for another important book in its own right. Above all, it should be noted here that developments in AI and the Metaverse are closely intertwined: the generation of environments and content in the Metaverse relies on vast amounts of data – AI is a prerequisite for the Metaverse, not its adversary.

Democratic Scope for Shaping Digital Spaces: Governance, Regulation, Innovation

In light of the risks outlined, the pressing question arises of how democratic principles and participation can be defended and shaped in the digital age. If digital platforms are becoming central arenas of political opinion-formation and AI systems increasingly intervene in societal processes, democracies need new strategies to enforce their values and rules in these spheres. In this context, several levels must be distinguished: first, state regulation and legal frameworks; second, governance innovations by the platforms themselves; and third, democratic innovations and alternative counter-models from civil society.

Regulation: In recent years, European democracies in particular have begun to develop comprehensive regulatory frameworks for the digital realm. A prominent example is the EU-wide Digital Services Act (DSA), which came into force at the end of 2023. With the DSA, the EU aims to rebalance the power relationship between users, platform companies, and public authorities. The legislation obliges online services to greater transparency (for example, through regular reports on content moderation and algorithmic systems), mandates the preservation of fundamental rights principles in their terms of service, and strengthens cooperation between platforms and supervisory authorities. Particularly large platforms (designated as Very Large Online Platforms, VLOPs) are subject to additional obligations. Among other things, they must conduct risk analyses regarding their societal impacts, submit to independent audits, offer users an option for non-personalized feeds, and provide data for research purposes. Overall, the DSA is designed to curb the information and economic power of tech corporations, give users more rights vis-à-vis platforms, and enable

authorities to act more effectively against disinformation, illegal content, and systemic risks. In addition, the Digital Markets Act (DMA) addresses monopolistic practices by imposing antitrust restrictions on gatekeeper platforms (for example, banning self-preferencing of their own services). These European initiatives are unprecedented globally and ultimately aim to structure digital spaces more in line with democratic ground rules. Likewise, in other democracies, such as Australia, Canada, or India, laws are being discussed to increase the accountability of large platforms (for example, regarding content moderation or the protection of personal data).

Governance and Self-Regulation: In parallel to state regulation, platforms and international policymakers are also searching for new governance models. One approach is the implementation of multi-stakeholder committees and oversight boards that incorporate a broader range of interests. For instance, Facebook – responding to public criticism – set up an "Oversight Board" that reviews content decisions in a limited capacity. Although its independence and influence remain disputed, this move indicates that platform rules need no longer be set in an entirely internal and opaque manner. Similarly, there are considerations to establish user councils or advisory boards to involve civil society in drafting moderation guidelines, algorithmic principles, or data practices. Digital platforms, as public spaces, should be a subject to democratic rules and oversight, while at the same time remain resilient against authoritarian and human-rights-violating co-optation. Politically, there is debate as to what extent competition policy (e.g. breaking up tech monopolies or stricter merger control) and transparency requirements (such as opening up recommendation algorithms) can improve the structural balance of power. All these measures aim at a technological order in which democratic value like transparency, accountability and participation, are anchored in digital systems.

Civil Society and Grassroots Innovations: At the level of civil society and grassroots initiatives, a variety of innovations are emerging to harness the opportunities of digitalization in a pro-democratic way. Under the banner of "civic tech," numerous digital participation platforms have been developed in recent years that open up new channels for citizens to have a voice. Examples include online petition platforms, participatory budgeting tools, e-voting pilot projects, and deliberative discussion platforms. These tools make it possible to involve broad segments of the population directly in political deliberation and decision-making processes – independent of time and place via the internet. For instance, citizen budgets can be voted on online, or legislative proposals can be collaboratively edited on the web.

From participatory budgeting to virtual citizen forums, digital participation platforms are already helping communities co-create policy, hold governments accountable, and amplify citizens' voices. Especially in times when traditional democratic institutions are losing public trust, such innovations offer a chance to make democracy more resilient and inclusive. Digital participation tools can build bridges between citizens and institutions and make political processes more transparent. Of course, these instruments also face challenges (e.g. the digital divide, abuse by trolls, data protection issues), but they reveal an important potential: Namely, to understand the internet not just as a threat, but as an expansion of the democratic realm.

Finally, the emergence of the Metaverse brings a new dimension of the digital sphere into focus, one that will increasingly need to be shaped in the future. In general, the Metaverse is understood as an immersive virtual environment in which a persistent, three-dimensional online world is created by means of virtual or augmented reality and interconnected platforms. Major technology corporations – especially Meta – are investing massively in this vision of a next-generation internet. For democracy, this means both opportunity and risk: on the one hand, novel spaces for social exchange, education, and even political participation could arise in Metaverse environments (for example, virtual town halls, simulations for citizen dialogues, and gatherings unconstrained by geography). On the other hand, everything discussed so far threatens to repeat itself in an even more acute form or even intensify. If the Metaverse infrastructure is provided by the same quasi-monopolistic firms, there is a danger that an immersive parallel public sphere under private control will emerge, in which the rules are dictated by a few platform operators. Governance and law enforcement are even harder to grasp in three-dimensional cyberspace – questions of accountability for virtual transgressions, hate speech, or manipulation in VR remain largely unresolved. The Metaverse could be misused to foment hatred, manipulate public opinion, and enable even more far-reaching surveillance, for example through the analysis of users' movement data. It is therefore crucial to embed democratic principles such as equality, transparency, data protection, and security into the architecture of the Metaverse and its AI systems from the outset. Moreover, open standards and alternative models should be promoted. Now is the time to set the course for an "immersive democracy," in which immersive virtual worlds do not become lawless zones or the monopolistic private realm of a few corporations, but are designed to be accessible, inclusive, and guided by fundamental rights.

The socio-political relevance of this topic could hardly be greater. While traditional democratic structures are coming under pressure worldwide, it is in the digital sphere – and soon in the Metaverse – that it will be decided whether democratic values and processes experience renewal and strengthening or are further hollowed out. The anthology *Immersive Democracy – Interdisciplinary Perspectives on the Potentials and Perils of Democratic Culture in the Metaverse* seeks to explore precisely this tension. The following contributions analyze, from a transdisciplinary perspective, how democratic culture can be preserved, fostered, and reimagined under the conditions of immersive technologies – to ensure that the next chapter of digital evolution does not become a step backward for democracy, but in the best case contributes to its deepening.

About this book

The contributions in this volume approach the relationship between democratic culture and immersive digital technologies from an interdisciplinary perspective and shed light on theoretical foundations as well as concrete fields of application.

In „Towards a Democratic Culture in the Metaverse?", Matthias Quent reflects on what it would take to cultivate democratic norms and structures in emerging virtual worlds. He discusses the risks of leaving metaverse development solely to corporate interests and highlights the importance of embedding principles like transparency, inclusivity, and human rights from the outset. Quent raises questions about governance models for the metaverse – for example, whether user communities can participate in rule-setting or if new institutions are needed to safeguard digital public spaces. He argues that without deliberate action, virtual environments could amplify existing social inequalities and undemocratic tendencies; however, with proactive engagement, the metaverse could become a sphere for enhanced civic participation and community empowerment. This chapter sets a forward-looking tone by challenging stakeholders in tech, government, and civil society to collaboratively steer the metaverse toward democratic ends.

Lenn Blaschke's article „A Theory of Immersive Democracy" proposes a conceptual framework for understanding how immersive technologies might transform democratic participation. Drawing from his background as a media artist, Blaschke explores the idea that immersion can deepen civic engagement by making democratic processes more experiential and

accessible. He discusses how virtual and augmented reality could enable citizens to "step into" political issues or community debates, potentially increasing empathy and understanding in polarized societies. At the same time, Blaschke critically examines challenges to this vision – such as ensuring broad access to immersive tech and guarding against the manipulation of virtual experiences for propaganda. Ultimately, A Theory of Immersive Democracy *serves* as an invitation to rethink traditional democratic practices in light of immersive media's potential to bring people closer to the issues and to each other.

Octavia Madeira and Georg Plattner („A Safe Space for Everyone – A Plea for a Democratic and Participative Metaverse) warn that as the metaverse evolves, extremists and other *malevolent actors* will creatively exploit it for propaganda and recruitment. In this chapter, they argue that these risks demand proactive measures to ensure the metaverse remains a democratic and participative space. The authors emphasize involving users, platforms, and democratic institutions in the governance of virtual worlds, urging that marginalized communities be empowered to counter hate and discrimination in immersive environments. They highlight that the metaverse is still in an early development phase – a critical window for building tools and norms that can make future virtual worlds safe and inclusive for all. This plea calls for collaboration across tech and civil society to develop a metaverse that prioritizes safety**,** participation**,** and equality as core features.

In "Navigating Democratic Challenges in the Age of Metaverses" Jean-François Lucas, Jessica Galissaire and Henri Isaac tackle the broad democratic dilemmas posed by the rise of multiple metaverse platforms. They observe that as we enter the "age of metaverses," questions of governance, accountability, and citizen rights become increasingly complex in these new virtual domains. The chapter discusses how the fragmentation of digital spaces among various private providers could lead to inconsistent norms and oversight, making it challenging to uphold public values across the metaverse. Key issues addressed include ensuring transparency in how immersive platforms are run, giving users a voice in platform policies, and preventing virtual worlds from becoming siloed echo chambers or zones of unchecked power. At the same time, Lucas, Galissaire, and Isaac highlight opportunities: metaverses might be used to *enhance* democratic engagement (for instance, through virtual town halls or collaborative world-building that involves citizens) if designed with inclusive principles. This chapter essentially navigates the tension between the exciting possibilities of immer-

sive technologies and the need for robust democratic safeguards as these technologies mature.

Esen K. Tütüncü and Danielle Shanley *(*"Hate Speech in the Metaverse"*)* explore how hateful content and harassment might manifest in immersive virtual environments, and what can be done about it. They note that defining "hate speech" is inherently challenging, but it remains crucial to address because virtual worlds can both reflect and *reinforce* real-world biases. The chapter shows that many forms of hate observed on traditional social media – racism, sexism, homophobia, and others – are already appearing in social VR platforms, often intensified by the immersive nature of these spaces. For example, users in VR can engage in nonverbal harassment (e.g. offensive gestures with avatars) and invade personal space, which can amplify the emotional impact of hate incidents. Tütüncü and Shanley emphasize that mitigation will require proactive measures: strong community standards, real-time content moderation tools, user education, and collaboration between platform developers, policymakers, and civil society. They also invoke concepts of "responsible innovation," arguing that the principles of deep democratic engagement should guide the design of the metaverse to prevent hate and bias from being "built in" to these emerging systems. In sum, this chapter highlights the imperative of early and concerted efforts to keep the metaverse's social spaces inclusive and respectful**.**

Julia Ebner examines in her article "Decentralized Autonomous Organisations (DAOs) in the Metaverse: The Future of Extremist Organisation?" *whether* decentralized, blockchain-based communities – known as DAOs – could become the next frontier for extremist groups operating in the metaverse. DAOs are online organizations without central leadership, governed by smart contracts, which allow members to coordinate and make decisions collectively across borders. Ebner warns that while DAOs hold promise for reimagining how we collaborate online, they might also be exploited by extremists to fundraise, spread propaganda, or even coordinate illegal activities in a leaderless, anonymous fashion. The chapter suggests that such decentralized structures could enable extremist networks to bypass traditional oversight, posing risks to minority rights and the rule of law if used for hate campaigns or plotting violence. Ebner discusses real and hypothetical scenarios where extremist or anti-democratic actors leverage DAOs to challenge democratic institutions for instance, using pooled funds for election interference or creating private governance systems that reject external authority. In response, she calls for foresight in monitoring these developments and adapting our counter-extremism and legal frameworks,

so that the metaverse economy (including DAOs) does not become a safe haven for anti-democratic organization.

Sandra Kero and Josephine B. Schmitt ("Narrative, Creative – Immersive? The Immersive Potential of Right-Wing Extremist Communication on Social Media") investigate how far-right actors leverage the immersive qualities of modern social media to spread their messages. They argue that "immersiveness" in this context isn't limited to VR headsets – it also refers to the deep emotional engagement and narrative techniques that draw users in on platforms like Instagram, TikTok, or YouTube. The chapter outlines mechanisms by which right-wing extremists make their content feel immersive and compelling. For example, blending political propaganda with lifestyle content, music, or interactive memes to create a sense of community and excitement around their ideology. This strategy normalizes extremist ideas by packaging them as part of everyday online culture, lowering the threshold for young or apolitical users to absorb these views. Kero and Schmitt also discuss how features like endless scrolling, Livestreaming, and algorithmic personalization can "pull" users deeper into a narrative bubble, effectively immersing them in an alternative reality curated by extremist influencers. A key contribution of this chapter is its interdisciplinary analysis (drawing on media and psychology theories) to explain why such content can be so emotionally resonant and persuasive. Finally, the authors offer recommendations on how to counter this immersive extremism, from media literacy efforts to platform design changes, aiming to disrupt the seductive storytelling that far-right communicators employ.

Arne Vogelgesang explores in this work „Platform Design, User Creativity, and Aesthetic Governance in Social VR" *how the design of* social VR platforms, combined with the creative agency of users, gives rise to what he calls "aesthetic governance." He examines two leading social VR environments – *Rec Room* and *VRChat* – as case studies to understand how different design philosophies can shape community culture and norms. For instance, *Rec Room* has a unified, game-like aesthetic with more controlled creation tools, whereas *VRChat* offers vast freedom for users to create avatars and worlds. Vogelgesang argues that these design differences lead to distinct forms of self-governance: platform rules and user behaviors evolve together as an *interaction between top-down design choices and bottom-up creative expression*. The chapter discusses how features like world-building tools, avatar customization, and moderation systems influence the development of social norms – what is considered acceptable or taboo – within these virtual communities. Vogelgesang's concept of aesthetic gover-

nance highlights that governance in the metaverse isn't only about formal rules; it's also about the implicit cultural standards that emerge from a platform's look, feel, and possibilities for user creativity. By comparing how *Rec Room* and *VRChat* communities differ, the chapter sheds light on the political implications of seemingly technical design decisions, suggesting that the way we build virtual spaces can encourage either more positive social interaction or, conversely, enable problematic subcultures. This analysis is crucial for understanding how we might foster *"immersive democracy"* – the idea that the design of virtual worlds should actively support democratic values and inclusive community-building.

Mick Prinz („Unpixelated Hate? Lessons from VR Gaming for a Digital Civil Society") draws on the world of video games to extract lessons for combating hate and extremism in the metaverse. He notes that video game environments have long been immersive social spaces where cultural values are both expressed and contested – virtual worlds are not just escapist playgrounds, but arenas where political debates occur and norms are formed. In toxic corners of gaming culture, anti-democratic actors have applied meta-political strategies, using games and gamer communities to normalize racist, sexist, or anti-Semitic narratives. Prinz points out that the games industry since the 1980s has been a testing ground for these dynamics, with some gaming platforms suffering from poor moderation that allows harassment and hate to flourish. At the same time, he acknowledges that gaming has also spawned positive movements – groups of players and developers working to promote diversity and inclusion in their communities. The chapter then asks what the burgeoning metaverse (which in many ways resembles a massively multiplayer game world) can learn from these experiences. Prinz discusses concrete examples, such as how lack of moderation in voice chats or VR lobbies leads to intimidation of marginalized users, and conversely how community-driven initiatives have successfully pushed back against toxic behavior in some games. He concludes that building a healthy *digital civil society* in the metaverse will require adapting effective strategies from gaming: robust moderation policies, user empowerment tools, and coalitions between industry and civil society to promote pluralistic values. In essence, *Unpixelated Hate?* calls for preemptive action so that the metaverse can be a space of playful democracy rather than a new wild west of unchallenged hate.

In the chapter „Identity and Safety in Social VR: Findings from an Experimental Avatar-Based Interview Study", Matthias Quent and Sara Lisa Vogl present results from an innovative study where they interviewed users

inside a social VR platform (using avatars) to understand issues of identity and safety. Their findings highlight several positive aspects of social VR. Many participants described how platforms like VRChat allow them to overcome real-life social anxieties and form meaningful friendships in a controlled virtual environment. For example, introverted users appreciated having tools to limit their exposure to overwhelming situations and to connect with others from the comfort of home. One interviewee noted that in VRChat people "get to know each other mainly based on their personality instead of physical appearance," which gave them a confidence boost and a safe space to practice social interaction. Quent and Vogl also delve into how users experiment with gender identity in VR. Some participants chose avatars of a different gender or presented in fluid ways; generally, they felt their choices were respected by others in the community, though instances of misgendering or harassment still occurred (mirroring real-world challenges). The ability to embody an avatar that aligns with one's felt identity or even to appear as fantastical as one wishes was seen as liberating and empowering by the interviewees, as long as the social environment remained supportive. On the flip side, the study acknowledges safety concerns: harassment does exist in social VR, and the chapter notes the importance of platform features (like blocking or muting tools) and community norms to protect users. Overall, Quent and Vogl's research provides an on-the-ground look at how identity expression and user safety play out in immersive social spaces, offering empirical insights to inform safer and more inclusive metaverse design.

Deborah Schnabel examines „Chances and Limits of Immersive Environments for Anti-Discrimination and (Historical-)Political Education". *She notes that each* new digital medium brings both problems and possibilities for civic education: on one hand, extremists quickly colonize new forums to spread racism and Antisemitism; on the other hand, those same forums offer educators innovative ways to reach people. Schnabel highlights the unique potential of VR to engage learners. For instance, virtual reality can preserve important historical testimonies (such as Holocaust survivor stories) by recreating sites and scenarios, enabling powerful experiential learning that would be impossible otherwise. She cites projects like the Anne Frank House VR tour and the "Inside Auschwitz" app, which give users immersive insights into history and empathy for victims. However, the chapter also underscores the ethical and pedagogical limits of such immersion. Schnabel discusses concerns about "artificial authenticity" – whether a simulated experience might distort history or provoke reactions

that educators can't properly handle. There is debate over how *realistic* these simulations should be: an overly realistic experience could be overwhelming or even inappropriate (for example, letting someone virtually "play" a victim of racism can cross ethical lines). The chapter describes how some projects deliberately include distancing elements (or even advise against using VR headsets in certain contexts) to avoid an "uncanny valley" of empathy that becomes counterproductive. In conclusion, Schnabel maintains that while immersive tech holds great promise for anti-discrimination and historical education by making lessons more engaging and visceral it must be used thoughtfully. The quality of outcomes will depend on aligning these new tools with sound educational principles, ensuring that empathy and critical thinking are fostered without trivializing or sensationalizing traumatic history.

In the chapter „Police Handling of Hate Crime: A Pilot Project to Use VR Technology for Professional Development in Sensitizing Police Officers to the Experiences of Victims of Bias Crime in Hamburg", the researchers Eva Groß, Ulrike Zähringer an Anabel Taefi report on a pioneering VR training program aimed at improving police responses to hate crimes. The authors describe how immersive technology was used to *sensitize officers* to the perspectives of victims of bias-motivated crimes. The rationale is that virtual reality can provide experience-based learning opportunities: by immersing police trainees in scenarios where they witness or feel the impact of racist or other bias-driven abuse, it can cultivate greater empathy and understanding. The chapter explains that trust in law enforcement, especially among minority communities, hinges on officers' ability to handle hate crime victims with professionalism and compassion. The VR pilot in Hamburg allowed officers to step into simulated environments that replicate common bias-crime situations and victim interactions. Preliminary results from the project showed promising benefits. Officers reported heightened awareness of victims' emotional states, and a better grasp of how their own behavior might affect victim trust. By *"walking a mile"* in a victim's shoes, even virtually, participants became more attuned to the subtleties of trauma and discrimination. Groß and colleagues also discuss the practical lessons learned: for example, how important it is to debrief participants after intense VR experiences, and how such training can be integrated into regular police education. They conclude that immersive training can be a powerful tool in building police capacity to combat hate crime, ultimately strengthening democratic resilience by improving the relationship between marginalized communities and law enforcement.

Jonas Fergert („Real Participation in Virtual Environments: Navigating Public Participation in the Metaverse") explores how immersive technologies could transform citizen participation in governance and public life, while also analyzing the obstacles that must be overcome. He begins by observing that the initial hype around the metaverse (sparked in 2021 by companies like Meta) has subsided, giving way to a more sober discussion about practical uses of these technologies. Fergert argues that this "hype hangover" period is an opportunity to proactively think about using virtual and augmented reality for civic purposes, not just commercial ones. One vision he discusses is integrating VR into public consultation processes – for example, virtual town halls or participatory urban planning where citizens can virtually experience proposed changes to their city and give feedback. Immersive systems can increase users' sense of involvement in democratic processes (a concept supported by research on how telepresence boosts engagement). The chapter notes that demand for digital participation tools was rising even before the metaverse, accelerated by the COVID-19 pandemic's push toward online engagement. However, Fergert also details significant challenges: ensuring equitable access to the necessary devices and internet connectivity, protecting personal data in virtual forums, and avoiding replicating the flaws of social media (such as algorithmic biases and commercialization) in the metaverse. He emphasizes that *deliberate design choices* are needed so that future virtual participation platforms encourage deliberation and inclusivity rather than division. In conclusion, this chapter paints a picture of both great potential and pitfalls in using VR/AR for public participation – with the core message that now is the time to shape these tools to serve democracy, before tech companies' agendas set the rules of the game.

Martin Müller and Matthias C. Kettemann („EU Platform Regulation and its Implications for the Metaverse: An Analysis of DSA, DMA, and Related Legal Acts") analyze the legal challenges posed by the metaverse and how existing law might apply to immersive digital spaces. They point out that, so far, no country or the EU has a comprehensive regulatory framework specifically for the metaverse, we are only at the stage of broad policy visions. Nevertheless, the authors show that many *pieces* of law will impact the metaverse: data protection rules, content moderation laws, product safety standards for VR hardware, and so on all form a patchwork of norms that govern aspects of virtual worlds. Key legal issues discussed include privacy and data security (given the vast personal data that devices and virtual interactions generate), user safety and content governance (how to deal

with illegal or harmful behavior in VR), questions of jurisdiction (which country's laws apply in a borderless virtual space), and interoperability and competition (ensuring open, non-monopolistic metaverse ecosystems). Müller and Kettemann highlight recent European regulatory approaches as especially relevant – for example, the EU's Digital Services Act (DSA), which sets obligations for online platforms and could enforce stricter content moderation and transparency in metaverse platforms. They also note the concept of the "constitutionalizing" of social media (embedding fundamental rights and constitutional principles into platform governance) and argue that a similar approach is needed for the metaverse. In essence, this chapter suggests that while the metaverse may feel like the Wild West, the rule of law *does* and *must* extend into it. The authors call for a combination of updated laws and proactive self-regulation to ensure that immersive digital environments develop in a way that protects users' rights and public interests.

In their contribution "Regulation of the Metaverse", Matthias C. Kettemann and Caroline Böck delve deeper into the normative foundations that should guide the metaverse's development, especially concerning the protection of fundamental rights. They build on the idea that social media underwent a "constitutionalizing" – where democratic societies asserted that platforms must uphold basic rights and values – and they argue that the metaverse now needs to undergo a similar process. Kettemann and Böck discuss how human rights (like freedom of expression, privacy, equality, and non-discrimination) can be translated and enforced in virtual environments that blur the line between physical and digital life. A core question in this chapter is how to prevent the metaverse from becoming a lawless space: the authors examine issues such as the lack of clear jurisdiction in virtual worlds, the challenge of holding platform owners accountable, and the potential role of international law or new institutions in governing the metaverse. They likely advocate for embedding public law values into the very architecture of the metaverse – for instance, through design choices that protect users by default and through governance models that include user representation. Kettemann and Böck emphasize that the rights and protections people enjoy "offline" should carry over to online immersive spaces, asserting that our rights must be "always on." They conclude with recommendations for policymakers and stakeholders on safeguarding democracy and the rule of law as we build these new worlds. This forward-looking chapter essentially serves as a legal and ethical com-

pass, insisting that innovation in the metaverse must go hand-in-hand with responsibility and respect for human dignity.

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