

From Virtual Rape to Meta-rape: Sexual Violence, Criminal Law and the Metaverse

Clare McGlynn^{*,} and Carlotta Rigotti^{†,}

Abstract—As the metaverse blurs the lines between physical and virtual realms, enhanced by haptic devices providing sensory feedback, it is poised to become integral to daily life. However, this new digital frontier is also a site for sexual violence. Women users increasingly report non-consensual touching, image-based sexual abuses and novel forms of gendered harm, often trivialised and inadequately addressed by current laws. Accordingly, this article proposes the new concept and terminology of ‘meta-rape’ to better capture the intense and embodied nature of these forms of sexual violence. We also provide a new categorisation of experiences of sexual harassment and abuse in the metaverse, together with a comprehensive analysis of the role and application of criminal law in tackling meta-rape. We suggest, contrary to conventional approaches, that current criminal laws could apply to some forms of meta-rape. We also propose strengthening and future-proofing criminal law, with laws proscribing intimate intrusions. By reframing our understanding of meta-rape, we aim to address the prevalence and impact of these gendered and sexualised harms, providing robust avenues for victim redress and promoting safety and autonomy in emerging virtual spaces.

Keywords: metaverse, virtual rape, virtual reality, technology-facilitated gender-based violence, extended reality, image-based sexual abuse

1. Introduction

In 2024, it was reported that the British police were investigating a case of ‘virtual rape’ in the metaverse—the immersive, virtual reality (VR) world commonly described as the ‘embodied internet’, where you are not just viewing content, but ‘you are in it’.¹ The police reported that the teenage girl’s avatar,

^{*} Durham Law School, Durham University. Email: Clare.McGlynn@durham.ac.uk. Orcid: <https://orcid.org/0000-0002-6186-0333>.

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¹ Io Dodds, ‘My Metaverse Diary: What It’s like to Live, Work and Shop inside the Internet’ *The Telegraph* (8 October 2022) <www.telegraph.co.uk/technology/2022/10/08/metaverse-diary-what-like-live-work-shop-inside-internet/> accessed 19 June 2024.

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a computer-generated representation of her, was ‘sexually attacked by a gang of strangers’, leaving her with the ‘same psychological and emotional trauma’ as someone who has been physically sexually assaulted.² While there have been accounts of ‘virtual rape’ for a number of years, this case made headlines worldwide as it was the subject of a police investigation, raising significant questions about the role of criminal law. Particularly, with the largest, private tech companies investing billions in developing the metaverse, Interpol and other law enforcement agencies have called for new laws to tackle crime in the metaverse.³ Others, however, dismissed this as an ‘imaginary’ crime, solved by simply removing the headset used to access the metaverse and therefore having no ‘real-world’ impacts.⁴

To address this growing concern over the rise of sexual harassment and abuse in virtual spaces, and to respond to pleas for legal clarity, we provide a comprehensive analysis of the role and application of criminal law to sexual violence in the metaverse where perpetrated by human users through their avatars. We provide a new categorisation of the varied forms of metaverse-related abuse and sexual harassment perpetrated primarily against women users and, contrary to conventional approaches, we suggest that current criminal laws could apply in some circumstances. We also recommend strengthening and future-proofing the law, such as through a law criminalising intimate intrusions, protecting against violations of sexual integrity.

Furthermore, we seek to shift the understanding of these forms of sexual violence and harassment, recommending moving away from the common expression ‘virtual rape’ and proposing the new concept and terminology of ‘meta-rape’. The aim is to disrupt conventional thinking by addressing the gendered nature of these forms of abuse and their dismissal as not ‘real’, providing an umbrella framework within which new experiences and modes of perpetration can be located and accurately understood as abusive. Building on a long trajectory of reframing and reconceptualising harms, particularly forms of violence against women and girls, this development of new concepts and terminology is vital to naming harms, reframing debates and therefore shaping legal reforms.

To make these arguments, section 2 introduces the metaverse and highlights its transformative potential on our lives, with section 3 outlining metaverse-related

² Rebecca Camber, ‘British Police Probe Virtual Rape in the Metaverse’ *Daily Mail* (1 January 2024) <www.dailymail.co.uk/news/article-12917329/Police-launch-investigation-kind-virtual-rape-metaverse.html>; Nancy Jo Sales, ‘A Girl Was Allegedly Raped in the Metaverse’ *The Guardian* (5 January 2024); Katherine Tangelakis-Lippert, ‘A Sexual Assault in the Metaverse Has Investigators Questioning the Future of Virtual Crime Prosecution’ (*Business Insider*, 8 January 2024) <www.businessinsider.com/police-investigate-digital-gang-rape-teen-vr-metaverse-horizon-worlds-2024-1?international=true&IR=T> accessed 17 March 2024.

³ Emma Woollacott, ‘Police Must Prepare for New Crimes in the Metaverse Says Europol’ (*Forbes*, 11 March 2024) <www.forbes.com/sites/emmawoollacott/2022/11/03/police-must-prepare-for-new-crimes-in-the-metaverse-says-europol/?sh=11c64aa42ad3> accessed 20 June 2024; Oceane Duboust, ‘Interpol Is Setting Up Its Own Metaverse to Learn How to Police the Virtual World’ (*Euronews*, 20 October 2022) <www.euronews.com/next/2022/10/20/interpol-sets-up-its-own-metaverse-to-learn-how-to-police-the-virtual-world> accessed 20 June 2024.

⁴ Daily Mail Comment, ‘Should Virtual “Crime” Be a Police Matter?’ *Daily Mail* (1 February 2024) <www.dailymail.co.uk/news/article-12917695/DAILY-MAIL-COMMENT-virtual-crime-police-matter.html> accessed 20 June 2024.

reports of sexual violence. Section 4 proposes the new concept and terminology of ‘meta-rape’. Section 5 analyses and categorises the different forms of sexual violence and abuse in the metaverse, identifying similarities with physical and online behaviours, as well as the entirely new ways in which sexual violence can and will be perpetrated. The nature of the harms of meta-rape are then examined in section 6, which emphasises the intense, embodied and immersive experience. Section 7 examines how current criminal laws may apply to some forms of meta-rape, while also identifying where new legislative measures will be required. It sets out how the law needs to be reformed, such as through a law of intimate intrusions, justifying the expressive and coercive powers of the criminal as a means of providing individual redress and encouraging cultural change. Ultimately, we conclude by urging a paradigm shift in our understanding of meta-rape, with criminal law playing a vital role.

2. The Embodied Internet: Understanding the Metaverse

Most people first became aware of the metaverse in 2021, when Facebook rebranded itself as Meta, in a deliberate move to signal its future direction.⁵ Shortly thereafter, Microsoft made headlines by announcing its ambitious plans,⁶ with the future of the metaverse being assured with Apple launching its own VR headset in 2023.⁷ Thus, while there has been some fluctuating interest in the metaverse,⁸ billions of dollars continue to be invested in its development. Additionally, providers like Roblox, with over 88.9 million daily users in 2024, illustrate the growing engagement with metaverse environments.⁹ Similarly, a 2024 survey indicates the steady growth of VR usage, with 33% of US teenagers owning a VR headset and 13% using it weekly.¹⁰

To be specific, the term ‘metaverse’ refers to the computer-generated, three-dimensional (3D) space where users can interact with each other and their environment through headsets, using hand controls to direct their avatar, their ‘virtual self’.¹¹ Commonly referred to as the ‘embodied internet’, or described as an experience of ‘not just viewing, but doing’,¹² the metaverse is not only a

⁵ Meta, ‘Introducing Meta: A Social Technology Company’ <<https://about.fb.com/news/2021/10/facebook-company-is-now-meta/>> accessed 27 June 2023.

⁶ Microsoft, ‘Mesh for Microsoft Teams Aims to Make Collaboration in the “Metaverse” Personal and Fun’ <<https://news.microsoft.com/source/features/innovation/mesh-for-microsoft-teams/>> accessed 27 June 2023.

⁷ Kellen Browing and Mike Isaac, ‘Apple Is Stepping Into the Metaverse. Will Anyone Care?’ *New York Times* (2 June 2023) <<https://www.nytimes.com/2023/06/02/technology/apple-metaverse-vr.html>>.

⁸ See Robbie Whelan and Joe Flint, ‘Disney Eliminates Its Metaverse Division as Part of Company’s Layoffs Plan’ [2023] *Wall Street Journal* <www.wsj.com/articles/disney-eliminates-its-metaverse-division-as-part-of-companys-layoffs-plan-94b03650?mod=Searchresults_pos1&page=1> accessed 27 June 2023.

⁹ Roblox, ‘Roblox Reports: Third Quarter 2024 Financial Results’ (2024) <<https://ir.roblox.com/news/news-details/2024/Roblox-Reports-Third-Quarter-2024-Financial-Results/default.aspx>> accessed 22 November 2024.

¹⁰ Piper Sandler, ‘Taking Stock with Teens: 21+ Years of Researching U.S. Teens’ (2022) and ‘Spring 2024 Generation Z Survey’ (2024), discussed in Sameer Hinduja and Justin W Patchin, ‘Metaverse Risks and Harms among US Youth: Experiences, Gender Differences, and Prevention and Response Measures’ [2024] *New Media & Society* 14614448241284413.

¹¹ Georg David Ritterbusch and Malte Rolf Teichmann, ‘Defining the Metaverse: A Systematic Literature Review’ (2023) 11 *IEEE Access* 12368.

¹² Institute of Engineering and Technology, ‘Safeguarding the Metaverse’ (2022) 6 <www.theiet.org/media/9836/safeguarding-the-metaverse.pdf> accessed 20 June 2024.

site for gaming, but offers new ways to experience socialising, entertainment and business.¹³ Dating platforms, for example, are exploring ‘meta-dating’ and its potential to transcend physical traits and gender stereotypes,¹⁴ with educational opportunities also being harnessed.¹⁵ Particularly promising are endeavours in medical training, where the metaverse can offer fertile ground for simulation-based skills acquisition.¹⁶

These transformational changes are due to the immersive, embodied, hyper-realistic nature of the metaverse, which is experienced as a seamless extension of the physical realm. The metaverse offers a fully immersive experience through haptic devices such as headsets, gloves and full bodysuits, which generate direct, physical sensations, making this experience markedly different from ‘viewing’ an online screen.¹⁷ While clearly having the potential to enhance positive experiences of embodiment and intimacy,¹⁸ these physical sensations may also intensify abuse.¹⁹ The synchronous nature of the experience also means that physical sensations, as well as verbal and non-contact harassment, happen in real time, similar to physical assaults offline. This full-sensory, physical nature of the metaverse means that it is experienced as intense, visceral and hyper-realistic—an ‘acute presence’.²⁰ This is the key point: the metaverse has been specifically designed to be a multisensory experience that blurs physical and virtual realities, with Microsoft referring to the technology being designed to ‘marry’ the digital and physical worlds.²¹

¹³ See Rajan Gupta and Saibal K Pal, ‘Metaverse Platforms and Use-Cases’ in Rajan Gupta and Saibal K Pal, *Introduction to Metaverse* (Springer Nature 2023); Leighton Evans, Jordan Frith and Michael Saker, *From Microverse to Metaverse: Modelling the Future through Today’s Virtual Worlds* (Emerald Publishing 2022).

¹⁴ Madeleine Aggeler, ‘“Phantom Touch” and the (Real) Pleasures of Virtual Dating’ *New York Times* (21 June 2023) <www.nytimes.com/2022/08/18/style/virtual-dating-metaverse.html> accessed 24 November 2023; KJ Dhaliwal, ‘Dating in the Metaverse: How Relationships Could Evolve as Technology Expands’ (*Forbes*, 21 September 2022) <www.forbes.com/sites/forbestechcouncil/2022/09/21/dating-in-the-metaverse-how-relationships-could-evolve-as-technology-expands/>.

¹⁵ Xinli Zhang and others, ‘The Metaverse in Education: Definition, Framework, Features, Potential Applications, Challenges, and Future Research Topics’ (2022) 13 *Frontiers in Psychology* 1016300.

¹⁶ Kadriye O Lewis, Vitaliy Popov and Syeda Sadia Fatima, ‘From Static Web to Metaverse: Reinventing Medical Education in the Post-Pandemic Era’ (2024) 56 *Annals of Medicine* 2305694; Ge Wang and others, ‘Development of Metaverse for Intelligent Healthcare’ (2022) 4 *Nature Machine Intelligence* 922.

¹⁷ Brenda K Wiederhold, ‘Haptics: Making the Metaverse a Touching Experience’ (2023) 26 *Cyberpsychology, Behavior, and Social Networking* 668; Kyung Rok Pyun, John A Rogers and Seung Hwan Ko, ‘Materials and Devices for Immersive Virtual Reality’ (2022) 7 *Nature Reviews Materials* 841.

¹⁸ Aggeler (n 14); Erika Limoncin and others, ‘The Role of Metaverse on Sexual Health of People with Disabilities: Narrative Review’ [2023] *International Journal of Impotence Research* <www.nature.com/articles/s41443-023-00807-0> accessed 24 June 2024; Leighton Evans, Jordan Frith and Michael Saker, ‘Worlds of Desire’ in Evans, Frith and Saker, *From Microverse to Metaverse* (n 13) <www.emerald.com/insight/content/doi/10.1108/978-1-80455-021-220221007/full.html> accessed 24 June 2024.

¹⁹ Gaëlle Clavelin, Jan Gugenheimer and Mickael Bouhier, ‘Potential Risks of Ultra Realistic Haptic Devices in XR’ in *CHI EA’22, Proceedings of the 1st Workshop on Novel Challenges of Safety, Security and Privacy in Extended Reality* (2022) <https://wenjietseng.com/sspxr/assets/pdf/SSPXR22_submissions/SSPXR22_paper_15.pdf> accessed 23 February 2023.

²⁰ Rachel Metz, ‘Harassment Is a Problem in VR and It’s Likely to Get Worse’ (*CNN Business*, 5 May 2022) <https://edition.cnn.com/2022/05/05/tech/virtual-reality-harassment/index.html?utm_source=optzlynewmarket-ribbon> accessed 17 March 2024.

²¹ Steve Boggan, ‘Metaverse: The World of Tomorrow or a Dystopia Waiting to Happen?’ *The Independent* (28 November 2021) <www.independent.co.uk/independentpremium/long-reads/metaverse-meta-facebook-explained-good-bad-b1962018.html> accessed 24 June 2024.

All these sensations are experienced through an avatar: our ‘virtual self’. Avatar creation enables users to experiment with and embody idealised or alternative selves, free from their existing physical traits,²² with multiple possibilities of customisation, as well as avatars developed from a selfie.²³ However, users commonly create avatars similar to their physical self in terms of gender, ethnicity and facial features.²⁴ Users commonly begin to identify with the avatar as a second self—a ‘virtual twin’—an entity to protect and feel concerned about, representing one’s personhood within the virtual world.²⁵ Avatars, therefore, need to be understood as ‘externalised projections of their users’ regardless of the ways in which that avatar is presented.²⁶ Accordingly, avatars ‘echo pieces of who we are’.²⁷ Furthermore, research shows that some users report feeling a ‘phantom touch’ or physical sensation through their avatars, even without the use of haptic technology.²⁸ This identification with one’s avatar, and particularly its physiological impact, is studied as the ‘Proteus effect’, with findings that the personal characteristics of avatars influence the cognition and behaviour of individuals.²⁹

Consequently, individuals may—consciously or unconsciously—adopt behaviours and attitudes in virtual environments that align with the traits of their avatars. In societies characterised by systemic violence against women, it may be that metaverse users replicate gender-based dynamics observed offline.³⁰ Similarly, it may also mean that when users align the gender and other personal characteristics of their avatars with those of historically oppressed groups, they are likely to experience similar levels of abuse offline and online.³¹ Young people

²² Donna Z Davis and Karikarn Chansiri, ‘Digital Identities—Overcoming Visual Bias through Virtual Embodiment’ (2019) 22 *Information, Communication & Society* 491; Guo Freeman and others, ‘(Re) Discovering the Physical Body Online: Strategies and Challenges to Approach Non-Cisgender Identity in Social Virtual Reality’ in *CHI Conference on Human Factors in Computing Systems* (ACM 2022) <<https://dl.acm.org/doi/10.1145/3491102.3502082>> accessed 24 June 2024.

²³ Carlotta Rigotti and Gianclaudio Malgieri, ‘Human Vulnerability in the Metaverse’ (Alliance for Universal Digital Rights 2023) 17 <<https://audri.org/new-report-exploring-human-vulnerability-in-the-metaverse/>> accessed 11 October 2023.

²⁴ Guo Freeman and others, ‘Disturbing the Peace: Experiencing and Mitigating Emerging Harassment in Social Virtual Reality’ (2022) 6 *Proceedings of the ACM on Human–Computer Interaction* 1, 13.

²⁵ Guo Freeman and Divine Maloney, ‘Body, Avatar, and Me: The Presentation and Perception of Self in Social Virtual Reality’ (2021) 4 *Proceedings of the ACM on Human–Computer Interaction* 1, 3.

²⁶ Olivia Bellini, ‘Virtual Justice: Criminalizing Avatar Sexual Assault in Metaverse Spaces’ (2024) 50 *Mitchell Hamline Law Review* 77, 99; Rune Klevjer, ‘Enter the Avatar: The Phenomenology of Prosthetic Telepresence in Computer Games’ in John Richard Sageng, Hallvard Fosheim and Tarjei Mandt Larsen (eds), *The Philosophy of Computer Games*, vol 7 (Springer 2012) <http://link.springer.com/10.1007/978-94-007-4249-9_3> accessed 22 November 2024. Valuable here are phenomenological understandings of harm and of the embodied self, with analogies being possible between philosopher Merleau-Ponty’s discussion of the embodied relationship between the self and a blind person’s walking stick, and the self and their avatar. See Maurice Merleau-Ponty, *Phenomenology of Perception* (Donald A Landes ed, Routledge 2012).

²⁷ Nina J Patel, ‘Reality of Fiction? Sexual Harassment in VR, The Proteus Effect and the Phenomenology of Darth Vader’ (*Medium*, 21 December 2021) <<https://medium.com/kabuni/fiction-vs-non-fiction-98aa0098f3b0>> accessed 23 February 2024.

²⁸ Qingxiao Zheng and others, ‘Facing the Illusion and Reality of Safety in Social VR’ 3 <<https://arxiv.org/abs/2204.07121>> accessed 9 April 2024. It is anticipated that in time the technology may advance to develop a neural link between the natural person’s brain and their avatar resulting in direct, ‘physical’ harm. See Ben Chester Cheong, ‘Avatars in the Metaverse: Potential Legal Issues and Remedies’ (2022) 3 *International Cybersecurity Law Review* 467.

²⁹ Nick Yee and Jeremy Bailenson, ‘The Proteus Effect: The Effect of Transformed Self-Representation on Behavior’ (2007) 33 *Human Communication Research* 271; Yansheng Liu, ‘The Proteus Effect: Overview, Reflection, and Recommendations’ [2023] *Games and Culture* 15554120231202175.

³⁰ Rigotti and Malgieri (n 23) 21–2.

³¹ Freeman and others, ‘(Re)Discovering the Physical Body Online’ (n 22) 13.

are increasingly venturing into metaverse environments, with some encountering various forms of abuse influenced by their gender. Young women, in particular, perceive a heightened risk of sexual harassment and often choose avatars designed to minimise attention, while keeping other avatars at a distance to protect themselves from abusive behaviour.³²

What is clear is that the metaverse is developing at pace and, while it is undoubtedly distinctive in its embodied, immersive nature, it is also the creation of its developers, who themselves are embedded in the social realities of gendered violence and inequalities.³³ Thus, while it is not possible to yet know the future nature of the metaverse, we do know that, as with all technological innovation, it will be used to perpetrate harassment and abuse. In anticipating this reality, and how it might be addressed, it is important to note that metaverse development is dominated by the largest private tech companies, like Meta and Microsoft.³⁴ Despite the interest from some governments and international organisations,³⁵ along with calls for decentralisation,³⁶ it is likely that metaverse governance will remain predominantly in their hands.³⁷ This means that while the focus here is on criminal laws and therefore regulation by states, the overall governance of the metaverse crosses borders, with its developers potentially seeking to evade regulation.

3. *Experiencing Sexual Violence and Harassment in the Metaverse*

As noted, the recent interest in sexual violence in the metaverse arose following a report to British police in 2024.³⁸ However, for women users, instances of sexual violence and harassment within virtual realms are not unfamiliar. The discussion of 'virtual rape' emerged as early as 1993 in the virtual world *LambdaMoo*, where a user utilised a text-based program to coerce other avatars into describing explicit sexual acts and engaging in sexual behaviours.³⁹ In 2007, the Belgian Federal Police initiated a criminal investigation into a 'virtual rape' incident in *Second*

³² Hinduja and Patchin (n 10) 10; Soyoung Park and Jiwon Kim, 'Fear of Sexual Victimization in Metaverse: A Comparison of Adolescent and Adult Female Users' (2024) 27 *Cyberpsychology, Behavior, and Social Networking* 490, 494.

³³ On how emerging technologies reflect human cultures, mirroring historical contexts, including gender discrimination, see Judy Wajcman and Erin Young, 'Feminism Confronts AI: The Gender Relations of Digitalisation' in Jude Browne and others (eds), *Feminist AI* (OUP 2023).

³⁴ Josephine Walbank, 'Top 10 Companies Investing in the Metaverse in 2023' (*Mobile Magazine*, 20 January 2023) <<https://mobile-magazine.com/articles/top-10-companies-investing-in-the-metaverse-in-2023>> accessed 24 June 2024.

³⁵ Deborah Piscione and Josh Drean, 'Yes, the Metaverse Is Still Happening' [2023] *Harvard Business Review* <<https://hbr.org/2023/05/yes-the-metaverse-is-still-happening>> accessed 28 June 2023; European Commission, 'Virtual Worlds (Metaverses)—A Vision for Openness, Safety and Respect' <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13757-Virtual-worlds-metaverses-a-vision-for-openness-safety-and-respect_en> accessed 10 March 2023.

³⁶ Shenghui Cheng, *Metaverse: Concept, Content and Context* (Springer 2023) 17 and Matthew Ball, *The Metaverse: And How It Will Revolutionize Everything* (WW Norton & Company 2022) 112.

³⁷ Ball (n 36) 24.

³⁸ Sales (n 2).

³⁹ Litska Strikwerda, 'Present and Future Instances of Virtual Rape in Light of Three Categories of Legal Philosophical Theories on Rape' (2015) 28 *Philosophy & Technology* 491, 493; Richard MacKinnon, 'Virtual Rape' (2006) 2 *Journal of Computer-Mediated Communication* 0, 3.

A 2018 survey reported that 49% of women experienced at least one instance of sexual harassment in VR.⁴⁷ In 2021, researchers reviewed *VR Chat*, a social app within Facebook’s Metaverse, and found that users were exposed to sexual harassment and abuse every seven minutes.⁴⁸ The following year, another study reported frequent encounters with sexual violence, including incidents of

⁴⁸ Center for Countering Digital Hate, 'Facebook's Metaverse: One Incident of Abuse and Harassment Every 7 Minutes' (2021) <<https://counterhate.com/research/facebook-metaverse/>> accessed 24 June 2024.

‘groping’ and simulated ejaculation.⁴⁹ These findings affirm the long-standing concerns about increasing violence and harassment in social media platforms and VR spaces, particularly within the gaming community.⁵⁰

Overall, sexual violence and harassment is being increasingly reported, with this abuse primarily directed towards woman-like avatars,⁵¹ with some victims behind these avatars being children.⁵² Although research on this subject is still limited, it is likely that victims endure varying degrees of abuse, influenced by intersecting personal characteristics and social structures of subordination. For example, as there are numerous instances of hate speech in the metaverse against Black and minority communities, some women and girls are likely to experience misogynoir, the combined effects of misogyny and racism.⁵³

4. Beyond ‘Virtual Rape’: Establishing the Concept of ‘Meta-rape’

The dominant framing of debates about sexual violence and harassment in the metaverse is that of ‘virtual rape’ or ‘virtual sexual assault’.⁵⁴ This draws on the terminology of ‘virtual reality’ associated with 3D computer simulations. However, the use of the word ‘virtual’ and the phrasing of ‘virtual rape’ fails to adequately address the variety, severity and distinctive nature of the harms. Accordingly, we suggest the alternative of ‘meta-rape’. Our aim is to provide both a new descriptor and a new conceptual tool. In doing so, we draw on a long trajectory of violence against women scholarship. Developing new conceptual apparatus is part of an ongoing process of ‘feminist naming praxis’⁵⁵ necessary to remedy forms of epistemic and hermeneutical injustice.⁵⁶ We can see this in the development of concepts such as sexual harassment, intimate intrusions, men’s stranger intrusions and coercive control.⁵⁷ It has also become particularly necessary in relation

⁴⁹ Sum of Us (n 45) 5. See also Institute of Engineering and Technology (n 12) 10.

⁵⁰ Lindsay Blackwell and others, ‘Harassment in Social Virtual Reality: Challenges for Platform Governance’ (2019) 3 Proceedings of the ACM on Human-Computer Interaction 1; Katherine Cross, ‘Ethics for Cyborg: On Real Harassment in an “Unreal” Place’ (2014) 8 Loading... 4.

⁵¹ Moira Donegan, ‘Virtual Reality Promised Us a New World. Instead, It’s Become a Breeding Ground for Harassment’ *Elle* (13 April 2023) <www.elle.com/culture/career-politics/a43520248/sexual-harassment-metaverse-virtual-reality-2023/> accessed 24 November 2023; Olivia Petter, ‘Why Is No One Taking Sexual Assault In The Metaverse Seriously?’ *Vogue* (20 March 2022) <www.vogue.co.uk/arts-and-lifestyle/article/sexual-assault-in-the-metaverse> accessed 24 November 2023; Tanya Basu, ‘The Metaverse Has a Groping Problem Already’ (*MIT Technology Review*, 16 December 2021) <www.technologyreview.com/2021/12/16/1042516/the-metaverse-has-a-groping-problem/> accessed 24 November 2023.

⁵² Sales (n 2).

⁵³ Esen Küçükütüncü and Dani Shanley, ‘Hate Speech in the Metaverse’ (2023) <www.metaverse-forschung.de/wp-content/uploads/2023/07/Hate-Speech-in-the-Metaverse_en.pdf> accessed 24 March 2024; Glitch UK, ‘The Digital Misogynoir Report: Ending the Dehumanising of Black Women on Social Media’ (2023) <https://glitchcharity.co.uk/wp-content/uploads/2023/07/Glitch-Misogynoir-Report_Final_18Jul_v5_Single-Pages.pdf> accessed 16 November 2023.

⁵⁴ Danaher (n 40) 365ff; Strikwerda (n 39) 492; MacKinnon, ‘Virtual Rape’ (n 39).

⁵⁵ Ros Walling-Wefelmeyer, ‘Scrapbooking Men’s Intrusions’ (2019) 75 Women’s Studies International Forum 102242.

⁵⁶ Paul Giladi, ‘Epistemic Injustice: A Role for Recognition?’ (2018) 44 Philosophy & Social Criticism 141; Miranda Fricker, *Epistemic Injustice: Power and the Ethics of Knowing* (OUP 2007).

⁵⁷ See Fiona Vera-Gray, *Men’s Intrusion, Women’s Embodiment: A Critical Analysis of Street Harassment* (Routledge 2018); Elizabeth Stanko, *Intimate Intrusions: Women’s Experience of Male Violence* (Routledge 1985); Evan D Stark, *Coercive Control: The Entrapment of Women in Personal Life* (OUP 2009); Catharine A MacKinnon, *Sexual Harassment of Working Women: A Case of Sex Discrimination* (Yale UP 1979).

to technology-facilitated abuse, where existing labels fail to recognise the nature and extent of women's experiences, often trivialising them, necessitating new terms and concepts such as image-based sexual abuse, cyberflashing and sexual digital forgeries.⁵⁸

We suggest that the term 'meta-rape' better describes the nature and extent of the harms being experienced, predominantly by women, as well as recognising the seriousness of the abusive behaviours. It is intended as an umbrella concept, illuminating the commonalities between seemingly disparate phenomena, as well as identifying the distinctive character and experience of meta-rape. Furthermore, it conceptually creates a broad and flexible framework in which new experiences can be located and accurately understood as abusive—especially important in this area where modes of perpetration rapidly change due to advances in technology. We also think that a new term can help reframe understandings and debates. In more accurately naming and framing these abusive practices, the notion of meta-rape aims to foster greater awareness, accountability and support mechanisms. In providing a new term, we hope to shift perspectives. We define meta-rape as encompassing all forms of non-consensual intrusive conduct of a sexual nature in the metaverse, committed by or experienced through an avatar.⁵⁹

To explain in more detail, the problematic nature of existing terms arises from the descriptor 'virtual', which risks undermining the reality of the experience. Definitionally, virtual is understood as something 'appearing to exist' but not 'existing in the physical world'.⁶⁰ Thus, embedded in the term 'virtual' is a distinction between 'real' and 'virtual' worlds; a separation between physical and digital realms. We see this in discussions contrasting the metaverse experience with 'real crimes' and referring to it as an 'unreal world'.⁶¹ The metaverse is considered a 'simulation' of life, not 'real life', with the label 'virtual' creating a sense of detachment.⁶² The concern is that where metaverse spaces are seen as 'virtual' and therefore less 'real', and as an independent realm disconnected from the offline world, people may feel more entitled to engage in harmful behaviour, without accountability.⁶³

However, as discussed below, sexual harassment and sexual violence in the metaverse are tangible, lived experiences, with real-world, physical ramifications: it is simply another version of reality, where users identify with and embody their

⁵⁸ Clare McGlynn and Erika Rackley, 'Image-Based Sexual Abuse' (2017) 37 OJLS 534; Clare McGlynn and Kelly Johnson, *Cyberflashing: Recognising Harms, Reforming Laws* (Bristol UP 2021) 14; Cyber Civil Rights Initiative, 'Written Statement of Dr. Mary Anne Franks President and Legislative Tech Policy Director, Cyber Civil Rights Initiative' (2024) <www.congress.gov/118/meeting/house/116953/documents/HHRG-118-GO12-20240312-SD008.pdf> accessed 25 June 2024.

⁵⁹ This definition could encompass a wide range of avatar-related behaviours, including abuse perpetrated by or against AI or computer-generated avatars. However, as previously mentioned, our focus is on behaviours enacted and experienced by individuals through their avatars.

⁶⁰ 'Virtual' <<https://dictionary.cambridge.org/dictionary/english/virtual>> accessed 25 June 2024.

⁶¹ Tanu Chaudhary, 'Virtual Rape by the Avatars in the Metaverse: Potential Legal Issues and Remedies' [2024] Legal Service India e-Journal <www.legalserviceindia.com/legal/article-16400-virtual-rape-by-the-avatars-in-metaverse-potential-legal-issues-and-remedies.html> accessed 25 June 2024.

⁶² However, it is sometimes suggested that virtual worlds inherently distinguish between legitimate and illegitimate forms of avatar violence, with the existence of social sanctions within these spaces, coupled with the 'perception of reciprocity' that encourages good behaviour among users. In Wolfendale (n 41).

⁶³ Johnny Hartz Soraker, 'Virtual Worlds and Their Challenge to Philosophy: Understanding the "Intravirtual" and the "Extravirtual"' (2012) 43 *Metaphilosophy* 499, 501; Huff, Johnson and Miller (n 41) 108.

avatars, considering them as extensions of themselves while engaging emotionally in social interactions. The distinctive nature of meta-harm lies not in the nature of the harm itself, but in the way it is inflicted—through users' attachment to and identification with their 'virtual twin'.⁶⁴ Crucially, the metaverse is being developed with verisimilitude and self-identification at its core: it is being designed to feel and be real, which is why harm is felt so acutely.⁶⁵ To separate the 'real' from the 'virtual' misunderstands the very essence and aims of the metaverse.

This is similar to challenges made in respect of the label 'fake' when applied to the experience of 'deepfake sexual abuse'.⁶⁶ The harms of this form of abuse are commonly dismissed on the basis that the altered imagery is not 'real' but 'fake'.⁶⁷ However, this does not align with victims' experiences, with one describing how, despite 'everyone repeatedly talking about the videos being fake, they in fact feel real'.⁶⁸ Accordingly, terms such as 'non-consensual synthetic intimate imagery' and 'sexual digital forgeries' are being used to shift away from assumptions around 'fake' imagery.⁶⁹ Moving away from the use of 'virtual' may similarly reframe understandings.

Furthermore, embedded in the dichotomy of 'virtual' and 'real' is a hierarchy, with the virtual associated with a simulation, not 'real life'. Particularly, there is a level of 'plausible deniability' in the way abuse is perpetrated through the guise of it being 'play'.⁷⁰ This translates into sexual violence in 'virtual' spaces not being considered as serious as that in the 'real' world. This was evident in responses to the 'virtual rape' reported in 2024, including reference to 'imaginary' abuse, and that addressing such incidents would waste police time.⁷¹ However, those who have been subjected to abuse in the metaverse report levels of harm similar to offline and online experiences, as discussed shortly. Thus, the label 'virtual' risks downplaying the seriousness of harms, with parallels to online abuse being minimised compared to 'real world' offline abuse.⁷²

⁶⁴ Wolfendale (n 41) 114.

⁶⁵ Petter (n 51). Additionally, metaverse simulations are being used therapeutically to desensitise individuals and reduce anxiety due to their lifelike nature: Institute of Engineering and Technology (n 12) 11. Similarly, experiments have found that virtually experiencing domestic violence from a victim's perspective affects men's socio-cognitive processing, with potential implications for therapy and education. In Sofia Seinfeld and others, 'Being the Victim of Virtual Abuse Changes Default Mode Network Responses to Emotional Expressions' (2021) 135 *Cortex* 268.

⁶⁶ Clare McGlynn and Rüya Tuna Toparlak, 'The New Voyeurism: Criminalising the Creation of "Deepfake Porn"' [forthcoming] *Journal of Law and Society*.

⁶⁷ Rebecca Umbach and others, 'Non-Consensual Synthetic Intimate Imagery: Prevalence, Attitudes, and Knowledge in 10 Countries' in *Proceedings of the CHI Conference on Human Factors in Computing Systems* (ACM 2024) <<https://dl.acm.org/doi/10.1145/3613904.3642382>> accessed 16 May 2024.

⁶⁸ Helen Mort, quoted in Rosie Morris and others, 'My Blonde GF: A Disturbing Story of Deepfake Pornography' *The Guardian* (23 October 2023) <www.theguardian.com/technology/video/2023/oct/25/my-blonde-gf-a-disturbing-story-of-deepfake-pornography> accessed 24 November 2024. See also Rana Ayyub, 'I Was the Victim of a Deepfake Porn Plot Intended to Silence Me' (*HuffPost*, 21 November 2018) <www.huffingtonpost.co.uk/entry/deepfake-porn_uk_5bf2c126e4b0f32bd58ba316> accessed 24 November 2024.

⁶⁹ Umbach and others (n 67); McGlynn and Tuna Toparlak (n 66).

⁷⁰ Donegan (n 51).

⁷¹ Daily Mail Comment (n 4); Sales (n 2); Theo Farrant, 'British Police Launch First Investigation into Virtual Rape in Metaverse' (*Euronews*, 1 April 2024) <www.euronews.com/next/2024/01/04/british-police-launch-first-investigation-into-virtual-rape-in-metaverse> accessed 25 June 2024; Snezana Farberov, 'Police Investigating First Case of Girl's Virtual Gang Rape in Metaverse' *New York Post* (2 January 2024) <<https://nypost.com/2024/01/02/news/police-investigating-first-case-of-virtual-rape-in-metaverse/>> accessed 25 June 2024.

⁷² Jo Smith, '"When I Saw Women Being Attacked ... It Made Me Want to Stand Up and Fight": Reporting, Responding to, and Resisting Online Misogyny' in Karen Lumsden and Emily Harmer (eds), *Online Othering* (Springer 2019) 294.

Accordingly, we suggest ‘meta-rape’ is a better term and concept to describe the nature and variety of sexual violence being experienced, predominantly by women, in the metaverse.⁷³ The prefix ‘meta’ connects to the metaverse as the focus of inquiry, and is not limited to specific virtual spaces, like gaming. Moreover, the word ‘meta’ originally meant beyond or after, meaning that meta-experiences build on existing behaviours (such as sexual violence) rather than being entirely new or different, as implied by ‘virtual’.⁷⁴ Further, the usage of the word ‘meta’ is unfamiliar and unstable, meaning that it is open to being framed in new ways, released from existing understandings.

Nonetheless, in labelling something as a meta-crime, and discussing meta-rape and meta-harms, there is an argument that this itself distinguishes unnecessarily between different forms of abuse. There is a risk, therefore, that separating this type of crime reinforces hierarchical assumptions about seriousness. However, the alternative is for little attention to be paid to the activities in question and for the specifics of this form of abuse to not be understood. We suggest that, on balance, there are differences in relation to modes of perpetration, experiences of abuse and investigatory strategies that will require specific knowledge and training, thereby justifying the use of the prefix meta.

‘Rape’ also serves as an overarching term to encompass the variety of forms of sexual violence and harassment. While the term ‘rape’ does commonly have a specific meaning in criminal laws, its exact formulation varies considerably across jurisdictions. Definitions vary, such as a focus only on penile penetration or encompassing oral penetration, the gender and sexuality of victims, or whether force, coercion or consent is a key element.⁷⁵ These differing definitions are significant, not semantic, and the term ‘rape’ is already therefore a flexible term within socio-legal discourse, to the extent that it has been considered devoid of an essence.⁷⁶ It is deployed here as a unifying label encompassing many differing behaviours, bringing together acts otherwise understood as disparate. It is also the term some victims use, describing their experience as ‘virtual gang rape’. This approach focuses attention on these shared features, such as the underlying dynamics of power, control and non-consent, rather than fragmenting experiences into distinct categories that might seem separate, engendering a more coherent understanding and response. Therefore, it is a continuum concept, as discussed further below.

The term ‘rape’ is also used to underscore the seriousness and potential harm of all forms of sexual violence, not just those legally defined as rape. In deploying the term ‘rape’, meta-rape challenges the tendency to downplay acts like

⁷³ Our focus is on meta-rape as experienced by human users, predominantly women and girls, through their avatars. For a discussion on sexual assault involving ‘wholly virtual’ incidents between automated avatars, see Danaher (n 40) 366.

⁷⁴ ‘What Is the Metaverse?’ <www.merriam-webster.com/wordplay/meaning-of-metaverse> accessed 24 November 2024.

⁷⁵ See Carlotta Rigotti, ‘A Long Way to End Rape in the European Union: Assessing the Commission’s Proposal to Harmonise Rape Law, through a Feminist Lens’ (2022) 13 NJECL 153.

⁷⁶ Joanne Conaghan, ‘The Essence of Rape’ (2019) 39 OJLS 151, 178.

‘groping’ or sexual harassment by drawing on societal understanding that rape can have profound emotional, psychological and social impacts. In this way, using the word ‘rape’ can help challenge the social and legal hierarchies that often place acts like harassment as less severe than rape. By framing all sexual violence under a term associated with serious harm, the aim is to resist distinctions that may imply that certain forms of violence are less significant.

This terminological choice is also reflective of the use and development of the term ‘rape culture’, which originated in the 1970s to describe the pervasive glamorisation and normalisation of sexual violence against women perpetuated through various means, including hegemonic masculinity, media portrayals, language usage and political discourse.⁷⁷ The word ‘rape’ was used as part of the term to encompass all forms of sexual violence and highlight the seriousness of the matters being raised. The term continues to be used when examining cultures of sexual abuse and harassment in general.⁷⁸ It is also used in connection with online experiences of abuse and harassment.⁷⁹ In these online contexts, it is very specifically used as a marker for wider forms of sexual violence, emphasising the interconnected nature of online and offline environments, not least because there is no such thing as physical rape online. In these situations, it is emphasised that rape culture manifests wherever people are, whether that be online, in physical spaces or, we would suggest, in the metaverse.⁸⁰

The term ‘rape culture’ is also used across public discourse and political activism more generally.⁸¹ In these wider cultural conversations, a single, more compelling term can sometimes have a greater impact than multiple phrases and therefore use of the term ‘rape culture’, and we would argue ‘meta-rape’ may attract attention, mobilise people and open conversations. It may therefore be a

⁷⁷ Dianne F Herman, ‘The Rape Culture’ in Jo Freeman (ed), *Women: A Feminist Perspective* (Mountain View 1984) 53; Susan Brownmiller, *Against Our Will: Men, Women, and Rape* (Ballantine Books ed, Fawcett Columbine 1993); Michael Kimmel and Michael Messner (eds), *Men’s Lives* (6th edn, Pearson A and B 2004) 14–16; Ann Burnett, ‘Rape Culture’ in Angela Wong and others (eds), *Wiley Blackwell Encyclopedia of Gender and Sexuality Studies* (1st edn, Wiley 2016) 1 <<https://onlinelibrary.wiley.com/doi/10.1002/9781118663219.wbegss541>> accessed 9 April 2024; Tracey Nicholls, *Dismantling Rape Culture: The Peacebuilding Power of ‘Me Too’* (Routledge 2021) 22 and 67.

⁷⁸ Emilie Buchwald (ed), *Transforming a Rape Culture* (revised edn, Milkweed Ed 2005); Jericho Hockett and Donald Saucier, ‘A Systematic Literature Review of “Rape Victims” versus “Rape Survivors”: Implications for Theory, Research, and Practice’ (2015) 25 *Aggression and Violent Behavior* 1.

⁷⁹ Alexa Dodge, ‘Digitizing Rape Culture: Online Sexual Violence and the Power of the Digital Photograph’ (2016) 12 *Crime, Media, Culture: An International Journal* 65; Kaitlynn Mendes, Jessica Ringrose and Jessalynn Keller, ‘#MeToo and the Promise and Pitfalls of Challenging Rape Culture through Digital Feminist Activism’ (2018) 25 *European Journal of Women’s Studies* 236; Anastasia Powell and Lisa Sugiura, ‘Resisting Rape Culture in Digital Society’ in Walter DeKeseredy, Callie Rennison and Amanda Hall-Sanchez (eds), *Routledge International Handbook of Violence Studies* (Routledge 2018); Nicola Gavey, *Just Sex? The Cultural Scaffolding of Rape* (2nd edn, Routledge 2019).

⁸⁰ Christopher Dietzel, ‘“That’s Straight-Up Rape Culture”: Manifestations of Rape Culture on Grindr’ in Jane Bailey, Asher Flynn and Nicola Henry (eds), *The Emerald International Handbook of Technology-Facilitated Violence and Abuse* (Emerald Publishing 2021) 362 <www.emerald.com/insight/content/doi/10.1108/978-1-83982-848-520211026/full/html> accessed 24 November 2024.

⁸¹ Amnesty, ‘Denmark: Pervasive “Rape Culture” and Endemic Impunity for Rapists Exposed’ <www.amnesty.org/en/latest/news/2019/03/denmark-rape-culture-exposed/> accessed 24 November 2024; UN Women, ‘16 Ways You Can Stand against Rape Culture’ <www.unwomen.org/en/news/stories/2019/11/compilation-ways-you-can-stand-against-rape-culture#~:text=Rape%20culture%20is%20allowed%20to,bears%20responsibility%20for%20an%20assault> accessed 24 November 2024; Rape Crisis England and Wales, ‘What Is Rape Culture?’ <<https://rapecrisis.org.uk/get-informed/about-sexual-violence/what-is-rape-culture/>> accessed 24 November 2024.

On balance, we suggest meta-rape as a means of identifying the specific arena for this abuse, the metaverse. We deploy the term ‘rape’ to emphasise the seriousness of the abuse and its gendered nature. This development of new conceptual tools and terminology is vital to naming harms and framing debates, and therefore to legal reforms and redress. The concepts we deploy play a vital, expressive role in shaping social norms, especially regarding what is un/acceptable conduct.

⁸⁵ This is why Fiona Vera-Gray developed the term 'men's stranger intrusions', to encompass the variety of perspectives. In Vera-Gray (n 57) 6–7.

Further, in communicating normative messages about certain behaviours, new concepts have the potential to affect the actions of individuals.⁸⁶ It may help to shift attitudes away from trivialising meta-rape behaviours towards understanding their seriousness and the consequent need for a societal response. This is true in all spheres, but it is especially significant in new environments, such as the metaverse, where our understandings of their nature and potential harms are still emerging.

Finally, even if new terminology is eventually replaced, it can in the meantime have important disruptive effects due to the unfamiliarity of a new term, making it 'effective in breaking old modes of thought'.⁸⁷ The choice of the term 'meta-rape', therefore, may disrupt conventional thinking, better raise awareness, change perceptions and effect change.

5. *Meta-rape as a Continuum Concept: The Spectrum of Sexual Violence and Harassment in the Metaverse*

The concept of meta-rape is proposed as an overarching concept: as a continuum concept. The idea of the continuum of sexual violence was first developed by Liz Kelly to explain the complex interplay among different manifestations of sexual violence and to challenge the notion of a hierarchy of sexual offending.⁸⁸ Kelly aimed to provide the conceptual tools by which women's experiences of men's violence could be better understood, as they were commonly overlooked by existing legal codes or analytical categories. Drawing on Kelly's pioneering work, we make two arguments: first, that there is a continuum of practices that together form our concept of meta-rape; and secondly, that meta-rape is on a continuum with other forms of sexual violence.

In relation to our first argument, we suggest meta-rape as a continuum concept on the basis of there being a 'basic common character' underpinning and linking what might otherwise be disparate phenomena.⁸⁹ Common characteristics here include the sexual nature of the meta-conduct, the gendered dynamics of both perpetration and victimisation, the resulting harms encompassing physical, psychological, professional and social ramifications, and the tendency for these forms of abuse to be minimised in public discourse. While recognising these common threads, though, it is essential to make space for the diverse, intersectional experiences of women, varying across identities and communities.⁹⁰

⁸⁶ Danielle Keats Citron, 'Law's Expressive Value in Combating Cyber Gender Harassment' (2009) 108 Mich L Rev 373.

⁸⁷ Sally Engle Merry, *Human Rights and Gender Violence: Translating International Law into Local Justice* (University of Chicago Press 2007) 178.

⁸⁸ Liz Kelly, *Surviving Sexual Violence* (Polity Press 1988) 74.

⁸⁹ *ibid* 76.

⁹⁰ Liz Kelly, 'Standing the Test of Time? Reflections on the Concept of the Continuum of Sexual Violence' in Jennifer Brown and Sandra Walklate (eds), *Handbook on Sexual Violence* (Routledge 2012). See also Shazia Choudhry, 'Towards a Transformative Conceptualisation of Violence Against Women—A Critical Frame Analysis of Council of Europe Discourse on Violence Against Women' (2016) 79 MLR 406.

Understanding meta-rape as a continuum concept also means that women can describe the abuse ‘without necessarily having to name it as a particular form of sexual violence’,⁹¹ as there may not yet be a name for the sense of violation, or the intrusion may cross many existing terms, none of which individually explain the experience. The concept can also highlight the overlapping nature of various forms of abuse which collectively exhibit a shared essence of coercion, intrusion, threat and force.⁹² More inclusive, wide-ranging concepts—continuum concepts such as ‘meta-rape’—therefore provide flexible frameworks in which new experiences can be located and accurately understood as abusive. This is especially important in this area, where modes of perpetration are rapidly changing as technology advances, enabling us to see connections between seemingly discrete forms of abuse, engendering a more comprehensive and effective legal and policy response.

Securing such responses will also come from recognising meta-rape as being on a continuum with other forms of sexual violence.⁹³ Meta-rape shades into other forms of abuse, both offline and online, and such overlaps are likely to intensify as we live more of our lives in the metaverse. Meta-rape will also become part of the broader panoply of gender-based violence, with forms of domestic abuse and stalking particularly likely to develop in the metaverse and be perpetrated across the variety of online, offline and metaverse realms.⁹⁴ By situating meta-rape on the continuum of sexual violence, we seek to generate legal and policy responses which make connections between such abuse and other forms of sexual offending, as well as with gendered societal practices more generally, such as victim-blaming.

Nonetheless, while we have characterised meta-rape as a continuum concept with porous boundaries, we offer below a five-part categorisation of meta-rape practices to improve understanding of the range and nature of behaviours.⁹⁵ We examine where behaviours overlap with, or depart from, physical or online experiences, or are entirely *sui generis* to the metaverse. The aim is to develop our understanding of how these abuses are perpetrated, enabling better identification of possible criminal law responses. While our categorisation proceeds according to current knowledge of perpetration and existing legal categories, the underlying starting point is the concept of meta-rape. We acknowledge that, in time, new categories will emerge and new ways of understanding the harms and experiences will need to be developed.

⁹¹ Kelly, *Surviving Sexual Violence* (n 88) 157.

⁹² Kelly *Surviving Sexual Violence* (n 88) 76.

⁹³ Trang Le, ‘Sexual Assault in the Metaverse Is Part of a Bigger Problem That Technology Alone Won’t Solve’ (*Lens*, 22 July 2022) <<https://lens.monash.edu/@politics-society/2022/07/22/1384871/sexual-assault-in-the-metaverse-theres-nothing-virtual-about-it>> accessed 17 March 2024.

⁹⁴ See also Erick Ramirez and others, ‘XR Embodiment and the Changing Nature of Sexual Harassment’ (2023) 13 *Societies* 36, 45.

⁹⁵ We note that women also experience other forms of abuse in the metaverse that are not inherently gendered or sexualised and have therefore been excluded from our analysis, such as hate speech, see Küçüktütüncü and Shanley (n 53).

Our first category is sexual assault, drawing similarities with offline physical forms of sexual violence. This includes the range of experiences based on contact between avatars, with users experiencing physical sensations via haptic technologies. It includes sexual assault by one avatar against another, often referred to as ‘groping’, which generates physical vibrations.⁹⁶ In identifying the physicality of this category of abuse, we are not suggesting a hierarchy based on physical or non-physical characteristics. We are, though, emphasising some similarities with well-known and understood categories of offline abuse, raising awareness that particular types of meta-rape may involve physical sensations, meaning they are experienced in particular ways. As well as physical impacts, research is highlighting the emotional impact of sexual assault in the metaverse, noting women users may experience a range of reactions, such as fear, anxiety and shame, including from the perceived risk of such harm.⁹⁷

The second category is sexual harassment, which includes the range of non-contact forms of harassment similar to those currently experienced both offline and online, encompassing any form of unwanted and potentially recurring verbal, non-verbal, environmental or physical conduct of a sexual nature.⁹⁸ While current understandings of sexual harassment can encompass physical experiences, for our purposes, this category is concerned with non-physical forms of sexual harassment and abuse, including visible sexual gestures such as simulated ejaculation.⁹⁹ It also includes equivalents to forms of street harassment such as intentionally blocking space and forced attention,¹⁰⁰ as well as verbal abuse and harassment such as rape ‘jokes’.¹⁰¹ For example, in one reported incident, two male users followed women avatars around, ‘crowding them, stalking them, looking at them closely, breathing on them’, as well as incidents where ‘users threatened to rape other users’ and sometimes repeatedly.¹⁰² As with victims of cyber harassment, this can lead to a range of harmful consequences, including depression, suicidal ideation and panic attacks.¹⁰³

The third category is image-based sexual abuse offences involving the creating, taking, sharing and threatening to share intimate images without consent.¹⁰⁴ Currently, these are offences largely perpetrated online, with victims often reporting devastating impacts across all aspects of their lives. Victims may also experience a decline in trust in social relationships and financial loss. Incidents of such

⁹⁶ Dodds (n 1).

⁹⁷ Park and Kim (n 32) 494.

⁹⁸ For a detailed analysis, see Ramirez and others (n 94) 45.

⁹⁹ Blackwell and others (n 50); Petter (n 51).

¹⁰⁰ Freeman and others, ‘Disturbing the Peace’ (n 24) 9.

¹⁰¹ Petter (n 51); Sean Russell, ‘I Enjoyed Playing in the Metaverse, Then I Went in as a Woman’ *The Times* (3 January 2024) <www.thetimes.com/article/metaverse-first-person-woman-sexism-technology-smw72fx6l> accessed 25 June 2024.

¹⁰² Center for Countering Digital Hate (n 48); Petter (n 51).

¹⁰³ Francesca Stevens, Jason Nurse and Budi Arief, ‘Cyber Stalking, Cyber Harassment, and Adult Mental Health: A Systematic Review’ (2021) 24 *Cyberpsychology, Behavior, and Social Networking* 367.

¹⁰⁴ Carlotta Rigotti and Clare McGlynn, ‘Towards a European Criminal Law on Violence against Women: The Ambitions and Limitations of the Commission Proposal to Criminalise Image-Based Sexual Abuse’ (2022) 13 *NJEC* 452; McGlynn and Rackley (n 58) 534. See also Clare McGlynn and Ruya Tuna Toparlak, ‘The New Voyeurism: Criminalising the Creation of ‘Deepfake Pornography’’ (2025) 52 *Journal of Law and Society*.

abuse, including non-consensual recording of sexual violence, have already been reported in the metaverse.¹⁰⁵ As the metaverse evolves, and with the advancement of avatar technology, the perpetration of image-based sexual abuse is likely to increase. This could include the unsolicited sending of intimate images,¹⁰⁶ as well as the non-consensual viewing and audio playing of pornography.¹⁰⁷ Additionally, it will be possible to generate without consent sexually explicit deepfakes of an identifiable avatar, especially as ‘virtual pornography’ is a rapidly advancing area of metaverse technology.¹⁰⁸

The fourth category is metaverse-specific forms of sexual violence and abuse, the first type of which overlaps with the above category. As well as technology being able to make sexually explicit deepfakes of an avatar, it is also possible to create an AI-generated avatar that closely resembles an identifiable person and/or their avatar, and to engage in sexual activity without that person’s consent.¹⁰⁹ While such activity with an AI-generated avatar is not directly abuse of a person, or that person through their avatar, it is a form of abuse that bears similarities to deepfake sexual abuse. Just as sexually explicit deepfakes generate significant harm through the loss of sexual autonomy and violation of the self, the same is likely to be true where an avatar-likeness of oneself is used for sexual activity without consent.

Other examples of metaverse-specific forms of meta-rape include experiences we are terming ‘shadow presence’, where the offender remains intentionally in the vicinity of a victim, even after being blocked.¹¹⁰ Victims describe this ghostlike presence as akin to real-life experiences of being followed, stared at and subjected to unwanted attention, but with the unsettling addition of it being manifested through a shadow avatar that can only be ‘sensed’.¹¹¹ Another specific form of sexual harassment is ‘passing through’ an avatar. While a personal boundary around an avatar is possible, where there is no such ‘bubble’, it is sometimes possible for an avatar to pass through the body of another avatar.¹¹² This can be experienced as destabilising and invasive, especially considering the personal identification with one’s avatar discussed above. Furthermore, even with a safe

¹⁰⁵ Sheera Frenkel and Kellen Browning, ‘The Metaverse’s Dark Side: Here Come Harassment and Assaults’ *New York Times* (30 December 2021) <www.nytimes.com/2021/12/30/technology/metaverse-harassment-assaults.html> accessed 19 December 2023; Sheera Frenkel and Kellen Browning, ‘The Metaverse’s Dark Side: Here Come Harassment and Assaults’ *New York Times* (30 December 2021) <www.nytimes.com/2021/12/30/technology/metaverse-harassment-assaults.html> accessed 19 December 2023; Patel (n 27); Jane Wakefield, ‘Meta Moves to Tackle Creepy Behaviour in Virtual Reality’ (*BBC News*, 4 February 2022) <www.bbc.com/news/technology-60247542> accessed 24 June 2024.

¹⁰⁶ Hinduja and Patchin (n 10) 7.

¹⁰⁷ Center for Countering Digital Hate (n 48).

¹⁰⁸ Ramirez and others (n 94) 11.

¹⁰⁹ Samantha Cole and Emanuel Maiberg, ‘“They Can’t Stop Us:” People Are Having Sex With 3D Avatars of Their Exes and Celebrities’ (*Vice*, 19 November 2019) <www.vice.com/en/article/5y2pk/they-cant-stop-us-people-are-having-sex-with-3d-avatars-of-their-exes-and-celebrities> accessed 25 June 2024. For an early discussion of how cyberspace is creating ‘unwilling avatars’ and situations of ‘forced avatarisation’, see Mary Anne Franks, ‘Unwilling Avatars: Idealism and Discrimination in Cyberspace’ (2011) 20 *Colum J Gender & L* 224.

¹¹⁰ Metz (n 20).

¹¹¹ *ibid.*

¹¹² The creation of safe zones, including protective bubbles surrounding avatars, was introduced only after initial reports of sexual harassment. See Wakefield (n 105).

zone activated around avatars, it appears that others can still invade this space and apply pressure using objects, potentially causing physical sensations.

This category of metaverse-specific sexual violence also includes the hacking of avatars, where another individual either steals someone's identity and/or gains control of their avatar, even while the user wears their own headset and haptic devices.¹¹³ The hijacked avatar may then be made to engage in perpetration of sexual activities or be subject to non-consensual acts. While impersonating someone's online presence through hacking is currently possible, the metaverse version will be intensified due to the control being taken of the avatar, personally identified with the individual, making it a particularly invasive form of abuse.¹¹⁴ Similar to experiences with cyberspace and teledildonics,¹¹⁵ avatar hacking in the metaverse will amplify opportunities for sexual deception relating to the identity of the avatar and controller.¹¹⁶

The fifth and final category is 'yet-to-be-imagined' forms of sexual violence, so this category is currently empty. The point is that there will undoubtedly be many new ways in which sexual violence is perpetrated in the metaverse which we cannot yet envisage—in the same way that years ago, it was not possible to conceive of AI-generated intimate imagery. All we do know, considering the ways that advancing technology has been used to harass and abuse, is that there will be in the future numerous novel methods through which sexual harassment and abuse is perpetrated.

6. *Meta-harms: Recognising the Harms of Meta-rape*

The reaction to the 'virtual rape' reported to police in 2024 exemplifies the challenges of recognising the serious harms of meta-rape. The police reported the victim suffered the 'same psychological and emotional trauma as someone who has been raped in the real world'.¹¹⁷ However, public responses tended to downplay the incident due to the perceived division between the offline, physical world and the 'virtual' metaverse. Others argued that the victim could simply remove the headset to end the experience; or that abuse in virtual realms is foreseeable and harmless, considering that characters in virtual games are often injured as part of a game.¹¹⁸

Conversely, we suggest that many forms of meta-rape are sufficiently harmful to warrant criminalisation.¹¹⁹ This approach is based on the individual and societal harms of meta-rape and emphasises the particular means of perpetration,

¹¹³ Strikwerda (n 39) 496; Carlo Tortora Brayda, 'The Huge Task Of Building Safety Into The Metaverse' (*Forbes*, 23 October 2023) <www.forbes.com/sites/forbestechcouncil/2023/10/23/the-huge-task-of-building-safety-into-the-metaverse/> accessed 24 March 2024; Melissa Heikkilä, 'VR Headsets Can Be Hacked with an Inception-Style Attack' (*MIT Technology Review*, 3 November 2024) <www.technologyreview.com/2024/03/11/1089686/hack-vr-headsets-inception/> accessed 9 April 2024.

¹¹⁴ Peter Casey, Ibrahim Baggili and Ananya Yarramreddy, 'Immersive Virtual Reality Attacks and the Human Joystick' (2021) 18 *IEEE Transactions on Dependable and Secure Computing* 550.

¹¹⁵ Robert Sparrow and Lauren Karas, 'Teledildonics and Rape by Deception' (2020) 12 *Law, Innovation and Technology* 175.

¹¹⁶ Ramirez and others (n 94) 11.

¹¹⁷ Daily Mail Comment (n 4).

¹¹⁸ Sales (n 2).

¹¹⁹ For similar analysis in contexts of image-based sexual abuse, including cyberflashing, see McGlynn and Rackley (n 58) 551ff; McGlynn and Johnson, *Cyberflashing* (n 58) 70–1.

through immersive, all-sensory behaviours. For some, these distinctive elements of meta-harassment suggest it is ‘more’ intense than online abuse.¹²⁰ Emphasis is also given to the synchronous and physical nature of some forms of abuse through haptic technologies, aligning them more closely with offline sexual assault than online abuse. The implication is a hierarchy of offending, with meta-rape potentially more serious and harmful than online abuse.

This parallels discussions of sexual violence generally, where there is a tendency to assume a hierarchy of offending, with physical experiences the most serious, followed by non-contact offline offences, then online abuse.¹²¹ This approach has long been contrary to victims’ experiences, such as when supposedly ‘minor’ forms of offending have devastating impacts.¹²² Physical injuries may appear to be the most serious, but the deep psychological impact is the most usual and often unrelenting effect of sexual abuse.¹²³ These hierarchical assumptions, therefore, fail to recognise how women’s lifetime experiences of abuse shape their experiences of harm, fear and threat.¹²⁴ Moreover, seeking to categorise offending in this way neglects the interplay between physical, non-contact, online and offline that is the reality of experiences of sexual violence and abuse which eschews any neat hierarchy.¹²⁵

Accordingly, we caution against a hierarchical approach to meta-rape that suggests it is more intense or ‘worse’ than other forms of offline or online non-contact offending. While such approaches are understandable in a political environment inimical to taking women’s harms seriously, the longer-term risk is to a more faithful understanding of women’s experiences, whether offline, online or in the metaverse. It is inevitable that as we spend more time in the metaverse, experiences of abuse will elide, with perpetrators following us into or out of the metaverse. In any event, a hierarchical understanding also fundamentally misunderstands the nature of many experiences of technology-facilitated abuse.¹²⁶ For some, the online experience will be ‘more’ harmful than offline, physical behaviours, such as where cyberflashing feels more threatening due to the anonymity of the sender of genital images, or where non-consensual images are shared online, creating an almost permanent record of abuse that is constantly being viewed and reshared. Accordingly, the virtual is not ‘more’ intense for being physical and immersive: the

¹²⁰ Blackwell and others (n 50) 13.

¹²¹ For instance, Ben Cheong defines ‘real crimes’ as ones occurring offline and argues that not all metaverse-related harms should be prosecuted due to their lack of physical harm. Cheong (n 28) 482.

¹²² Such as women’s experiences of sexual harassment and image-based sexual abuse, respectively: Vera-Gray (n 57) 138ff; Clare McGlynn and others, “‘It’s Torture for the Soul’: The Harms of Image-Based Sexual Abuse” (2021) 30 *Social & Legal Studies* 541, 550ff.

¹²³ Suzie Dunn, ‘Is It Actually Violence? Framing Technology-Facilitated Abuse as Violence’ in Bailey, Flynn and Henry (n 80) 31.

¹²⁴ In Kelly, *Surviving Sexual Violence* (n 88). For a discussion of the problem of hierarchical understandings in the context of technology-facilitated gender-based violence, see Bailey and Dunn (n 46) 45.

¹²⁵ Most cases of domestic violence, for example, involve technology, with perpetrators moving seamlessly between offline and online modes of perpetration. See Heather Douglas, Bridget A Harris and Molly Dragiewicz, ‘Technology-Facilitated Domestic and Family Violence: Women’s Experiences’ (2019) 59 *Brit J Criminol* 551.

¹²⁶ On the harms of technology-facilitated abuse, see Nicola Henry and others, *Image-Based Sexual Abuse: A Study on the Causes and Consequences of Non-Consensual Nude or Sexual Imagery* (Routledge 2020); Jane Bailey and others, ‘AI and Technology-Facilitated Violence and Abuse’ in Florian Martin Bariteau and Teresa Scassa (eds), *Artificial Intelligence and the Law in Canada* (Lexis Nexis Canada 2021).

experience is just different. Different victims will experience these abuses at differing levels of intensity depending on their own prior experiences, as well as their varied identities and characteristics, such as age, ethnicity, gender and sexual orientation.¹²⁷

Overall, therefore, the shorter-term gain of having meta-rape taken seriously, by emphasising the physical, synchronous and immersive nature of the experience, risks perpetuating a dualistic understanding that segregates online and offline spheres, virtual and ‘real world’ experiences, physical and non-contact abuses. This approach overlooks the interconnected continuum of gendered and sexualised harms, failing to acknowledge the seamless transition between technology-facilitated and offline experiences of sexual violence.¹²⁸ It also fails to recognise victim’s experiences, with Belamire saying the psychological trauma she felt ‘from real life groping versus that first virtual groping was about the same’.¹²⁹ Accordingly, we caution against an understanding based on a hierarchy.

In relation to the particular nature of the individual and social harms of meta-rape, it is vital to recognise, first, that meta-rape is wrong and harmful at a foundational level, as it is an infringement of sexual autonomy and integrity.¹³⁰ While the violation or intrusion is experienced through an avatar, the close association between the self and one’s avatar is experienced as an invasion of oneself.¹³¹ Meta-rape is a breach of a victim’s sexual integrity and autonomy in and of itself because, at its core, it is non-consensual conduct of a sexual nature: it is the ‘sheer use’ of a person.¹³² That is, the harm manifests regardless of whether there are subsequent physical, psychological, economic or social adverse consequences.

As well as the abuse constituting a violation in and of itself, meta-rape can also induce adverse psychological impacts, which can themselves lead to physical responses such as anxiety, panic attacks and potential depression, as well as feelings of degradation, humiliation and trauma.¹³³ We also see that responses to meta-rape can closely resemble offline reactions, including freezing,¹³⁴ alongside social trivialisation and victim-blaming attitudes.¹³⁵ These experiences of harm, therefore, parallel those encountered in offline and online. At first sight, the immersive realism of the metaverse may intensify the harm of such encounters, with some therefore emphasising the ‘embodied’ nature of metaverse harms.¹³⁶ However, extensive literature reveals that women who have experienced sexual

¹²⁷ Blackwell and others (n 50) 12–13; Freeman and others, ‘Disturbing the Peace’ (n 24) 13–15.

¹²⁸ Le (n 93).

¹²⁹ Julia Wong, ‘Sexual Harassment in Virtual Reality Feels All Too Real’ *The Guardian* (26 October 2016) <www.theguardian.com/technology/2016/oct/26/virtual-reality-sexual-harassment-online-groping-quivr> accessed 26 June 2024.

¹³⁰ On how technology-facilitated violence against women interferes with sexual integrity, see Jane Bailey and Carissima Mathen, ‘Technology-Facilitated Violence against Women and Girls: Assessing the Canadian Criminal Law Response’ (2019) 97 *Can Bar Rev* 664.

¹³¹ Belamire (n 42); Freeman and others, ‘Disturbing the Peace’ (n 24) 12.

¹³² Bailey and Mathen (n 130) 680.

¹³³ Basu (n 51); Freeman and others, ‘Disturbing the Peace’ (n 24) 9; Donegan (n 51); Ramirez and others (n 94) 10.

¹³⁴ Junmo Yoon, ‘Can We Do Anything About Sexual Crimes in the Metaverse?’ (*Inside Compliance*, 6 October 2022) <<https://blogs.luc.edu/compliance/?p=4849>> accessed 19 December 2023.

¹³⁵ Belamire (n 42); Patel (n 27).

¹³⁶ Freeman and others, ‘Disturbing the Peace’ (n 24) 21; Ramirez and others (n 94) 12.

As well as harms experienced by individuals, there are wider societal impacts of meta-rape, particularly where women and marginalised communities, who are more likely to face harassment, withdraw from metaverse participation as a means of self-preservation.¹³⁹ Short of withdrawing, the ways in which women, minorities and marginalised users interact online may be constrained, as exemplified by undertaking ‘gender camouflage’ to reduce the likelihood of abuse.¹⁴⁰ This silencing effect is well known online and is likely to intensify due to the growing prevalence of meta-rape.¹⁴¹ This gendered censorship means women’s engagement with the metaverse may be constrained, their options reduced, adversely impacting on all of society due to a lack of diverse participation. In being silenced in this way, women’s rights to freedom of expression are also being breached, which explains why suggesting removal of a headset is not an adequate response.

Our justification for criminalising some forms of meta-rape is based on the extent and nature of the harms experienced, as discussed above, as well as on the expressive role of criminal law. This expressive role has two aspects of particular relevance.¹⁴² First, criminal law addresses a form of hermeneutical injustice faced by victims whose experiences are not recognised and who struggle to narrate and name what has happened to them, and to be understood in a society where meta-rape is trivialised and minimised.¹⁴³ Constructing meta-rape as a criminal wrong means that victims' experiences are recognised as harmful and wrong, restoring 'some of the humanity' that victimisation removed.¹⁴⁴ This frees victims to speak,

¹⁴⁴ Catharine A MacKinnon, *Butterfly Politics: Changing the World for Women* (Harvard UP 2019) 331.

to share their experiences, to live more freely in society: a form of 'expressive empowerment'.¹⁴⁵ Women who have been subject to forms of meta-rape have described their experiences as analogous to existing criminal wrongs, such as a 'virtual gang rape', 'groping' and assault. In essence, therefore, criminalisation of behaviour such as meta-rape, whether or not a victim engages with the criminal justice system, is a form of recognition, performing a valuable expressive role. For some victims of sexual violence, such recognition can itself constitute a form of justice.¹⁴⁶

Secondly, the expressive power of criminal law plays a significant role in communicating society's commitments and beliefs, and therefore shaping people's behaviour. As Jane Bailey and Carissima Mathen argue in relation to technology-facilitated violence against women, the power of criminal law can be harnessed against behaviour the state wishes to single out as wrongful.¹⁴⁷ In doing so, the law can change attitudes, with Danielle Keats Citron noting that where 'public sentiment about specific behaviour is unclear, law provides expressive clarity, channelling shifts in beliefs, attitudes and behaviours'.¹⁴⁸ Indeed, it is the potential deterrent and therefore educative aspect of law's role, rather than its punitive aspect *per se*, which can encourage cultural change.¹⁴⁹ Accordingly, we advance criminalisation as a form of expressive empowerment, a remedy to hermeneutical injustice, to provide justice options for those victims who seek criminal justice, and as a foundation for cultural change.

Nonetheless, deploying criminal law as a means of tackling violence against women and girls has garnered significant opposition with the development of 'anti-carceral' feminism.¹⁵⁰ This critique suggests feminist engagement with criminal justice systems has been co-opted by a punitive, neoliberal state.¹⁵¹ This movement eschews any engagement with criminal justice agencies and condemns the introduction of new criminal offences.¹⁵² However, such an approach fails to provide redress options for those experiencing forms of abuse not yet recognised by criminal law, such as many forms of online abuse and meta-rape. It is not clear why those who have experienced 'newer' forms of abuse, including meta-rape, should be denied the opportunity to seek criminal justice redress and have their experiences recognised in criminal law. Indeed, the privileging of existing criminal offences risks reinforcing current criminal law categories and hierarchies

¹⁴⁵ Danielle Keats Citron and Jonathon Penney, 'When Law Frees Us to Speak' (2019) 87 *Fordham L Rev* 2317.

¹⁴⁶ Clare McGlynn and Nicole Westmarland, 'Kaleidoscopic Justice: Sexual Violence and Victim-Survivors' Perceptions of Justice' (2019) 28 *Social & Legal Studies* 179.

¹⁴⁷ Jane Bailey and Carissima Mathen, 'Technology-Facilitated Violence against Women & Girls: Assessing the Canadian Criminal Law Response' (2019) 97 *Can Bar Rev* 664, 678.

¹⁴⁸ Keats Citron (n 86) 1946.

¹⁴⁹ McGlynn and Rackley (n 58) 553.

¹⁵⁰ On the formulation of the term 'carceral feminism', see Elizabeth Bernstein, 'Carceral Politics as Gender Justice? The "Traffic in Women" and Neoliberal Circuits of Crime, Sex, and Rights' (2012) 41 *Theory and Society* 233.

¹⁵¹ Mimi Kim, 'From Carceral Feminism to Transformative Justice: Women-of-Color Feminism and Alternatives to Incarceration' (2018) 27 *Journal of Ethnic & Cultural Diversity in Social Work* 219.

¹⁵² Aya Gruber, 'Cautions against Criminalization' in Caletti and Summerer (n 46).

which fail to understand and recognise the multiplicity of victim's experiences and how abuse has evolved, particularly with new technology.¹⁵³

We suggest that meaningful criminal sanctions are only one part of a broader, multifaceted response to meta-rape and sexual violence more generally.¹⁵⁴ In the context of meta-rape, this means developing a nuanced approach that addresses both the unique challenges of immersive environments and the structural drivers of gender-based violence. Moreover, justice mechanisms must extend beyond criminal law to encompass robust platform governance, accessible civil remedies, public education, specialised training and other proactive measures that collectively contribute to meaningful prevention and redress.¹⁵⁵

A. Exploring the Application of Current Criminal Laws

We identified above five broad and overlapping categories of behaviours which come within our concept of meta-rape. We examine here the possible applicability of criminal law to the first two types of conduct, focusing on English law, with the remaining categories considered in relation to future law reforms.

(i) Sexual assault

We begin our analysis with sexual assault, or non-consensual physical touching, which is criminalised in many jurisdictions.¹⁵⁶ It is generally assumed that many sexual assault laws will not apply to meta-rape due to the requirement of physical, sexual touching of another.¹⁵⁷ However, despite this scepticism, it

¹⁵³ McGlynn, 'Challenging Anti-Carceral Feminism' (n 142).

¹⁵⁴ As exemplified by the adoption of Directive (EU) 2024/1385 on combating violence against women and domestic violence. See Rigotti and McGlynn (n 104) 471ff; HateAid, 'Letter to EU Co-Legislators to Combat Violence against Women' <<https://hateaid.org/en/letter-eu-co-legislators-combat-violence-women-domestic-violence/>> accessed 3 May 2024; European Women's Lobby, 'Violence against Women and Domestic Violence: A First Step towards a Europe Free of Male Violence against Women and Girls' <https://womenlobby.org/IMG/pdf/analysis_directive_on_vaw_and_domestic_violence.pdf> accessed 12 September 2022; Carlotta Rigotti, Clare McGlynn and Franz Benning, 'Image-Based Sexual Abuse and EU Law: A Critical Analysis' (2024) 25 German Law Journal 171.

¹⁵⁵ Civil and regulatory responses are vital. Civil remedies, increasingly recognised in common law systems to address technology-facilitated violence, empower victims to pursue claims, determine remedies and achieve outcomes like damages or injunctive relief, offering practical support that criminal sanctions alone cannot provide. See McGlynn and Rackley (n 58) 557; Tyrone Kirchengast and Thomas Crofts, 'The Legal and Policy Contexts of "Revenge Porn" Criminalisation: The Need for Multiple Approaches' (2019) 19 OUCJLJ 1. Policy makers must also address structural drivers of meta-rape through platform and AI regulation. Current self-regulatory measures, such as Meta's reactive introduction of 'Safe Zones', shift the burden of safety onto users instead of ensuring safety by design. Additionally, moderating metaverse behaviour rather than content requires shared norms, yet these are often shaped by dominant, male-centric perspectives, neglecting the experiences of women and other socially marginalised users. Legislative measures like the EU's Digital Services Act and the UK's Online Safety Act 2023 could extend to the metaverse. See Lorna Woods and William Perrin, 'Regulating the Future: The Online Safety Bill and the Metaverse' <<https://carnegieuktrust.org.uk/blog-posts/regulating-the-future-the-online-safety-bill-and-the-metaverse/>> accessed 26 June 2024; Rigotti and Malignieri (n 23) 21.

¹⁵⁶ Sara De Vido and Lorena Sosa, *Criminalisation of Gender-Based Violence against Women in European States, Including ICT Facilitated Violence* (Publications Office of the European Union 2021) 75. As avatars do not (yet) have genitals and no haptic device has been officially designed to simulate sexual penetration amongst avatars in the metaverse, we do not discuss penile penetration. Nevertheless, it is likely that as the technology develops, particularly in view of the exponential growth in VR pornography and teledildonics, it will be possible to penetrate an avatar without consent.

¹⁵⁷ Molly Clayton, 'Mother Says She Was Virtually Groped by Three Male Characters within Seconds of Entering Facebook's Online World Metaverse' *Daily Mail* (29 January 2022) <www.dailymail.co.uk/news/article-10455417/Mother-43-avatar-groped-three-male-characters-online-Metaverse.html> accessed 26 June 2024; Bellini (n 26) 95; Sales (n 2).

is possible to consider a prosecution in some cases of meta-rape as a form of sexual assault.¹⁵⁸

In English law, section 3 of the Sexual Offences Act 2003 defines sexual assault as the intentional, sexual touching of another person without consent, raising the question of whether two avatars interacting can constitute ‘touching’ for these purposes. It must be remembered that engagements in the metaverse include touch through haptic technologies, meaning that when two avatars interact, users may experience physical sensations. Section 79(8) of the Sexual Offences Act 2003 defines touching as including touching with any part of the body, with ‘anything else’ and ‘through anything’. This has been interpreted as including touching through clothing or with an object or instrument.¹⁵⁹ Touching could, therefore, be interpreted to include touching through an avatar, as that would be touching ‘through anything’ or with ‘anything else’. Accordingly, an avatar that touches another avatar without the other’s consent could constitute a ‘touching’ for the purposes of sexual assault: it is intentional touching, with physical sensations, of another person.

It would also need to be proven that the touching was sexual. A touching is defined as sexual, according to section 78 of the 2003 Act, if a reasonable person would consider that because of its nature it is sexual, such as penetration, or because of its nature it may be sexual and, due to the circumstances or purpose, it is sexual. While this would ultimately be a decision for a jury, this definition should mean that touching an avatar’s breast or groin area would be considered sexual due to the nature, circumstances and/or purpose.

Therefore, it could be said to be relatively straightforward that when avatars interact in a non-consensual and sexual manner, this can constitute sexual assault. Nonetheless, while this interpretation is possible, it is likely to require determined police, prosecutors and courts to interpret the law in this way and pursue such an action, in view of societal scepticism about this form of abuse. An analogy here may be drawn with cyberflashing. The offence of exposure in section 66 of the Sexual Offences Act 2003 requires ‘intentional exposure of the genitals’, without specifying physical exposure. This law could have been interpreted to cover the online sending of genital images without consent, but such an interpretation was consistently rejected, resulting in a specific criminal offence being introduced.¹⁶⁰ It seems quite probable that a similarly constrained approach will be taken to sexual assault in the metaverse, similarly necessitating a new criminal offence.

(ii) *Sexual harassment*

As with sexual assault, laws on sexual harassment vary considerably across jurisdictions, including a range of behaviours such as acts criminalised as sexual

¹⁵⁸ See also Danaher (n 40) 375–7.

¹⁵⁹ Peter Rook and Robert Ward, *Rook & Ward on Sexual Offences: Law and Practice* (6th edn, Sweet & Maxwell 2021) para 2.59.

¹⁶⁰ See Clare McGlynn and Kelly Johnson, ‘Criminalising Cyberflashing: Options for Law Reform’ (2021) 85 JCL 171.

assault, as well as non-criminal actions subject to civil laws, in particular employment and equality law.¹⁶¹ In many jurisdictions, the criminalised acts are forms of repeated harassment which may include a sexual element.

In England and Wales, section 2 of the Protection from Harassment Act 1997 specifically makes it an offence for an individual to pursue a course of conduct that they know or ought to know amounts to harassment. The behaviour must cross ‘the boundary between conduct which is unattractive, even unreasonable, and conduct which is oppressive and unacceptable’.¹⁶² It must also be shown that the offender knew or ought to have known that the conduct amounts to harassment. A conviction, therefore, will only follow if a ‘reasonable person’ would consider two or more instances of harassing conduct as constituting a *criminal* level of ‘harassment’.

If an individual in the metaverse, through their avatar, engages in a course of conduct amounting to (sexual) harassment, there is no reason why this provision should not apply. The behaviours may encompass a range of experiences described as sexual harassment, including sexual assault. It may also include verbal and text abuse, following and pursuing an avatar without consent and other associated forms of meta-rape such as ‘shadow presence’ and ‘passing through’. Some of these meta-behaviours are similar to online forms of harassment which do fall within the scope of the 1997 Act and there is therefore no reason why metaverse behaviours should not be similarly covered.

Nonetheless, as with sexual assault, the hurdle to overcome is not necessarily the specific text of the law, but the approach to its application. In particular, the commonplace trivialisation of meta-rape raises the risk that this conduct might not be perceived as crossing the criminal threshold. Further, it must be demonstrated that the offender knew or ought to have known that the conduct amounts to harassment. A defendant will certainly claim they did not consider the conduct to constitute harassment and, due to the societal minimisation of meta-rape, prosecutors may accept the defendant did not consider this harassment and that this was reasonable. This would be challenging from a victim perspective as it means there would be no redress until such time as society considers it reasonable to expect a defendant to know that these behaviours are sufficiently harmful that they should be seen as criminal.

B. Looking to the Future: Criminalising Meta-Rape as an Intimate Intrusion

The analysis thus far has suggested that existing criminal laws of sexual assault and harassment could (and should) be applied to appropriate cases of meta-rape. Beyond this application of the current law, this section examines the more

¹⁶¹ The Istanbul Convention, for example, requires states parties to prohibit, through criminal or civil means, sexual harassment, defined as any form of unwanted verbal, non-verbal or physical conduct of a sexual nature with the purpose or effect of violating the dignity of a person, in particular when creating an intimidating, hostile, degrading, humiliating or offensive environment. See Valeria Tevere, ‘Article 40—Sexual Harassment’ in Sara De Vido and Micaela Frulli (eds), *Preventing and Combating Violence Against Women and Domestic Violence* (Edward Elgar Publishing 2023) 482.

¹⁶² *Majrowski v Guy's and Thomas' NHS Trust* [2007], para 30.

metaverse-specific forms of meta-rape, the current lack of legal redress for such behaviours and therefore options for the future.

(i) *Image-based sexual abuse*

The third category of meta-rape identified above was conduct similar to existing forms of image-based sexual abuse. As we noted, there are already incidents of meta-rape being recorded and shared without consent.¹⁶³ It is also likely that the ways in which image-based sexual abuse can be perpetrated will evolve with technology, including sexualised impersonations of avatars, or a hacked avatar engaging in pornographic activities. While some of these behaviours may constitute criminal harassment if repeated and considered sufficiently harmful, they do not fall within current criminal laws prohibiting the taking, sharing or threatening to share intimate imagery which focus on realistic imagery of a 'person', not avatars.¹⁶⁴ Therefore, while criminal laws in many jurisdictions have been amended to include sexually explicit deepfakes, these provisions apply to realistic reproductions of known individuals.¹⁶⁵ While technology is advancing so that some avatars are already clear representations of an individual,¹⁶⁶ as this abuse is taking place in the metaverse involving avatars, not persons, current laws do not apply. Particular provisions, therefore, will be required to criminalise metaverse-specific forms of image-based sexual abuse.

(ii) *Metaverse-specific forms of sexual violence*

The fourth category of abuse we identified above is metaverse-specific acts, such as 'shadow presence' and 'passing through'. It is possible that such behaviours may form part of a course of conduct charged as harassment. In the context of intimate relationships, it might be possible to include such behaviours as part of a pattern of coercive control. However, this is unlikely due to these acts being generally unknown in terms of their specific nature (that is, understanding exactly what is happening), as well as a lack of knowledge or understanding as to their harmful impacts. For example, while meta-rape involving the recording or sharing of sexual imagery or videos is not covered by criminal law, the concept of non-consensual sharing of intimate material is known, with the effect that new laws and recognition of harms are likely to develop in due course. But with metaverse-specific forms of abuse, there is likely a higher mountain to climb before greater recognition of the need for change and then subsequent legal reforms.

¹⁶³ Patel (n 27).

¹⁶⁴ See eg s 66D of the Sexual Offences Act 2003, which refers to intimate images of a 'person'; art 5 of Directive (EU) 2024/1385 on violence against women, which refers to the depiction of intimate parts of a 'person'.

¹⁶⁵ Umbach and others (n 67); Suzie Dunn, 'Legal Definitions of Intimate Images in the Age of Sexual Deepfakes and Generative AI' (2024) 68 McGill LJ 1.

¹⁶⁶ Chris McKay, 'Meta Unveils AI-Powered Video Avatars for Creators' (*Maginate*, September 2024) <www.maginate.com/article/meta-unveils-ai-powered-video-avatars-for-creators/> accessed 24 November 2024.

Considering the challenges of applying current criminal laws to meta-rape, and the likelihood of new manifestations of metaverse technologies being used to perpetrate harms, it is important to consider whether additional approaches or offences are required.

Another similarly broad provision was mooted by the Hong Kong Law Reform Commission in 2012, which recommended expanding the law on sexual assault to cover ‘any act of a sexual nature which would have been likely to cause another person “fear, degradation or harm”’.¹⁷² The Commission stated that its proposal would acknowledge ‘the sexual nature of such activity and the need for respect for sexual autonomy’, and that such an expansion in the scope of sexual assault was justified because it is ‘a violation of another person’s sexual autonomy’.¹⁷³ Such a

¹⁷³ *ibid* 6.25–6.28. See also Thomas Crofts, ‘Criminalization of Voyeurism and “Upskirt Photography” in Hong Kong: The Need for a Coherent Approach to Image-Based Abuse’ (2021) 8 Chinese Journal of Comparative Law 505.

provision could be interpreted to cover meta-rape and respond to future technological developments. It might also usefully be expanded to include humiliation.

Drawing on the example of Swedish law and the recommendations from Hong Kong, Clare McGlynn has suggested developing a new criminal law prohibiting ‘intimate intrusions’ which is of sufficient general applicability to cover the range of ways in which intrusive acts impact on women’s autonomy, whether online, offline or in the metaverse.¹⁷⁴ Such a provision could provide a valuable tool to provide redress and hold perpetrators accountable for the range of ways in which abuse is committed now and into the future.

This approach, criminalising some forms of meta-rape as intimate intrusions via a law of more general applicability that covers online, offline and meta-abuse, is designed to be reflective of our current understanding of perpetration and victim’s experiences. But it is also based on the inevitability of there being new ways of abuse being perpetrated in the future, therefore incorporating our fifth category of meta-rape, the yet-to-be-imagined forms of abuse. At an expressive level, a law against intimate intrusions could contribute to understanding the continuum of meta-rape, as well as the continuum of sexual violence, where women’s experiences of abuse will commonly include online, offline and metaverse elements. At its core, this approach recognises the need to enshrine sexual autonomy and integrity into the law and to prohibit violations in their infinite variety.

8. *Conclusions*

The metaverse is a new immersive environment, amplified by haptic devices providing tactile and other sensory feedback, that is rapidly developing. It promises a dynamic space for entertainment, work, education, health and more, with advances in technology that are blurring physical, virtual and online realms. While it might be considered niche right now, before too long many will be engaging in the metaverse, in much the same way that we have integrated the internet and smart phones into our everyday lives. Our avatars will feel part of ourselves, an extension of our physical being.

However, while the metaverse offers as-yet-unknown opportunities, what we do know is that it is and will be used to perpetrate sexual violence and harassment. An increasing number of women users have reported such abuse, including non-consensual touching, image-based abuses and other intrusive experiences. While some such experiences closely resemble offline behaviours, others introduce entirely new forms of sexualised and gendered harm, all causing potentially significant consequences for victims, evoking fear, violation and trauma. Despite these lived experiences, reports of abuse have often been trivialised, with public opinion dismissing the metaverse as fictional, emphasising a clear real–virtual distinction. Furthermore, criminal investigations have yielded little due to this minimisation and the assumption that current criminal laws do not apply.

¹⁷⁴ See Clare McGlynn, ‘Towards a New Criminal Offence of Intimate Intrusions’ [2024] *Feminist Legal Studies* <<https://link.springer.com/10.1007/s10691-024-09547-y>> accessed 24 June 2024.

Consequently, we argue that effectively addressing sexual violence in the metaverse requires new terminology and concepts to better understand the nature, severity and diversity of victims' experiences. Current terms like 'virtual rape' are inadequate in conveying the seriousness of meta-harms, as they imply a false distinction between physical and technology-facilitated experiences. The proposal of a new term and concept—'meta-rape'—offers a more encompassing framework that emphasises the unique context of the metaverse, while connecting to broader societal issues of sexual violence and power dynamics amongst genders. This term also acknowledges the cultural roots of rape culture and its reproduction in virtual spaces. We suggest an understanding of the variety of experiences of meta-rape as a continuum, as well as recognising meta-rape as being on the continuum of sexual violence. Accordingly, the new concept names and frames victims' experiences in a way more reflective of women's gendered experiences of violence and abuse across physical, virtual and online realms, providing a form of hermeneutical justice for victims.

Further, in order to understand better the nature and variety of experiences of meta-rape, we offered a new categorisation of behaviours. These categories include metaverse-specific acts, as well as the final category being yet-to-be-imagined forms of abuse. While maintaining the need to understand these categories as fluid and on a continuum, they are put forward as an essential step in understanding the extent to which the current criminal law applies and the subsequent need to develop new legal remedies.

We suggest that, contrary to much public debate, it would be possible to apply existing criminal laws to some forms of meta-rape, partly due to the physical nature of haptic technologies. While this may be unlikely due to a lack of appreciation of the harmful nature of meta-rape and the scepticism of law enforcement, it is nonetheless possible. Simultaneously, if other metaverse-specific forms of abuse are to be criminalised, a legislative response will be needed. We suggest that rather than waiting until more is known about the modes of perpetration of abuse, more general approaches to criminalisation are taken, such as a law proscribing intimate intrusions.

Ultimately, we need a paradigm shift in our thinking generally about abuses perpetrated by and through technology and specifically about meta-rape. Instead of understanding virtual realities like the metaverse as not 'real', we must recognise them instead as just a different kind of 'genuine reality'.¹⁷⁵ We need to accept that, in all likelihood, meta-rape will become a common experience for women and girls, in the same way as they experience offline and online abuse. This requires a holistic and comprehensive response to meta-rape spanning criminal, civil and regulatory obligations, as well as greater public education and awareness-raising. In doing so, we must embed freedom and autonomy, alongside safety, for women, girls, Black and minority ethnic communities, and other marginalised groups. In this way, we could design out forms of meta-rape before they are embedded or invented, reduce the prevalence and harms of meta-rape where perpetrated and provide an expansive range of options for victim redress through criminal, civil and regulatory means.

¹⁷⁵ David John Chalmers, *Reality+: Virtual Worlds and the Problems of Philosophy* (Norton & Company 2022).