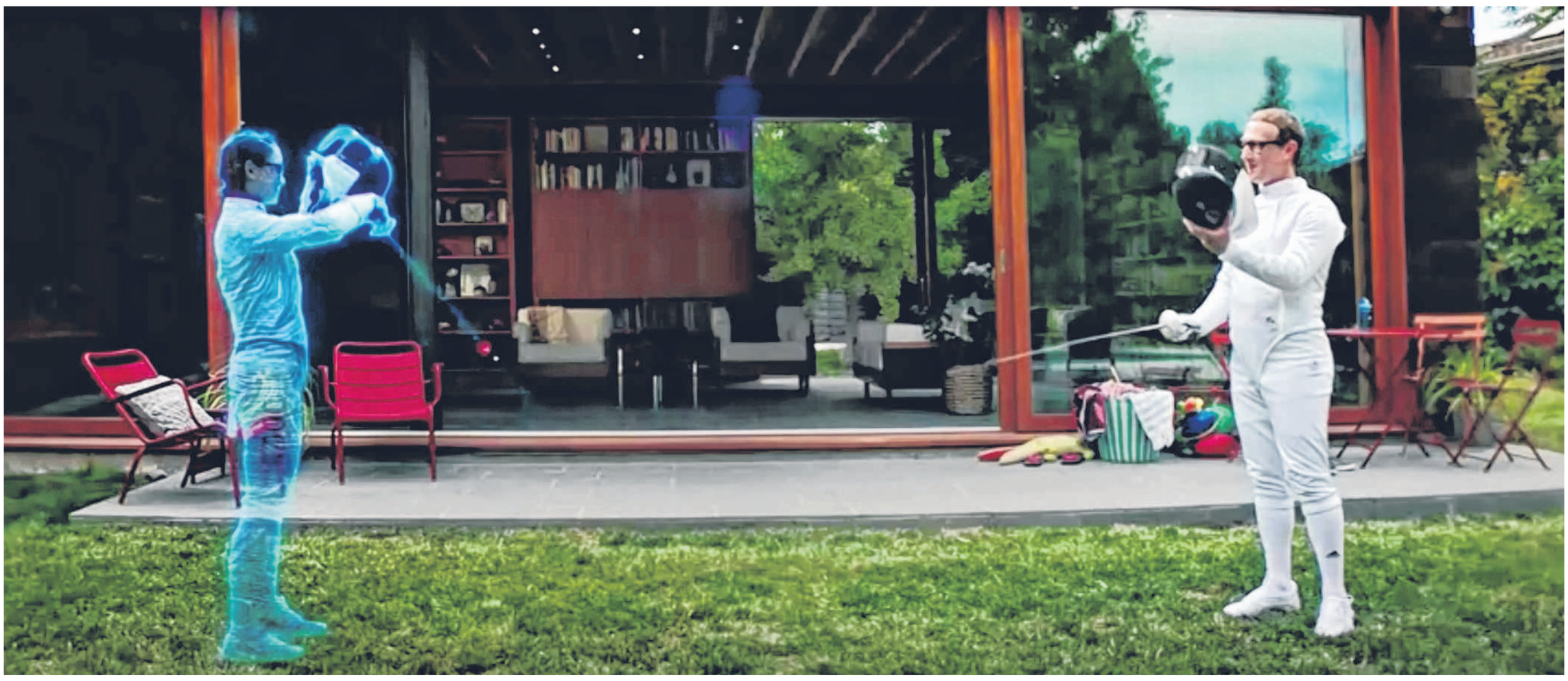

A photo from Facebook showing its CEO Mark Zuckerberg fencing in the metaverse with an Olympic gold medal fencer during a live-streamed virtual and augmented reality conference to announce the rebrand of the social media company as Meta last October.
PHOTO: REUTERS

The metaverse is not above real-world law

The metaverse is neither new nor lawless. As technology evolves, the challenge is to understand how law can work in different layers to regulate different aspects of an online experience.

Alexander Woon
For The Straits Times

Facebook recently rebranded itself as Meta and announced that it will pivot towards dominating the metaverse, a shared virtual world. The pitch is that the metaverse is like the American Old West: virgin territory, unregulated and unexplored, ready to be exploited by the brave and the bold.

This portrayal is just as misleading and romanticised as a John Wayne movie. The metaverse is not a new idea and it does not need to be unregulated. The claims that law needs to change fundamentally to adapt to the metaverse are misguided and belie a misunderstanding of what law is and how it works.

Law can and does exist in and around the metaverse. It is simply a question of understanding how law can work in different layers to regulate different aspects of an online experience.

A HISTORY OF THE METAVERSE

The term metaverse originates from the 1992 novel Snow Crash by American science-fiction author Neal Stephenson.

The modern idea of the metaverse was popularised by The Matrix – the 1999 film that made Keanu Reeves a superstar for his portrayal of a man kept in a virtual reality by malicious machines that feed off human energy.

The metaverse already exists, though not necessarily in sci-fi form. For example, since its first publication in 1974, the tabletop game Dungeons & Dragons encouraged metaverse-like play in which players could bring their character from one campaign and drop it into another at someone else's house.

These role-playing roots gave birth to the metaverse as it exists today. Gaming enthusiasts will find nothing new in the idea of avatars and shared realities. Massively Multiplayer Online games (MMO) are going strong, dominated by World Of Warcraft and Fortnite.

It was not just gamers who saw the potential. Second Life launched in 2003, with the idea of allowing people to live an entire simulated life wholly online.

The idea that the metaverse is somehow new and unregulated is therefore patently wrong. Indeed, there is not just one metaverse but many. There have been literally decades of developments that have necessitated legal regulation, primarily through intellectual property law and contract law.

LAYERS OF LAW IN THE METAVERSE

There are at least four layers of law to take into account: Law in the simulation; law of the simulation; law governing the simulation; and law of the location.

Law in the simulation refers to a simulated legal system. For example, in the Grand Theft Auto series of games, there is virtual law enforcement.

A breach of a simulated legal system results in a simulated legal response: If your avatar commits too many crimes, eventually virtual police officers are sent after you.

These simulated legal systems are not necessarily intended to facilitate functioning online communities. Often there are deliberate loopholes to encourage certain styles of play.

For example, in Eve Online, certain sectors of space are designated low security. If a player's spaceship is in one of these sectors when it is attacked, the virtual police will not respond. This allows for player versus player interactions.

Law of the simulation refers to the rules that define what is possible for the simulated universe. This is comparable to the laws of physics in real life, not man-made laws.

For digital simulations, the law of the simulation is the computer code that makes the simulation run. Breaking the law of the simulation usually does not require a further response. Either it is simply not possible, since the code does not allow for it, or the simulated reality ceases to function as intended: you get a glitch.

Law governing the simulation refers to the real-world laws that apply to the use of the simulation, such as end-user licence agreements (EULAs) – which we mostly click through without reading. EULAs are a manifestation of contract law. By using the software, we agree to be bound by terms and conditions. A breach can result in the user being suspended or being sued by the counterparty, usually the software owner.

Finally, there is the law of the location. Normal rules of criminal and civil law do not stop applying just because you are "in" the metaverse.

If you, while in Singapore, use your online avatar to harass someone, the provisions of the Protection from Harassment Act would apply and you could be prosecuted. It makes no difference whether you do so through social media or a metaverse.

Similarly, there is no reason in principle why civil laws would cease to apply in the metaverse: defamation in an online environment may be just as damaging as defamation in the physical world.

The law of the location also works on providers of metaverses. Law made by a nation-state may not apply directly within the metaverse, but it does indirectly shape the content of the metaverse by imposing legal obligations upon the metaverse provider.

These could include ensuring that there is no graphic content, or no false and misleading content, or to have security systems in place to detect and flag child pornography. We could also include in this category laws governing liability for harm caused by the simulation; for example, if the simulation causes seizures in users.

Of course, enforcement of the law may be an issue where parties are located across different jurisdictions or where their identities cannot be ascertained, but this is no different than in the current Internet paradigm.

The idea that law can work in layers is nothing new to most lawyers. For example, international lawyers will be familiar with the concept, as international law works concurrently but separately from domestic law.

NEW TECHNOLOGIES AND THE METAVERSE

The current metaverse hype is being driven by a confluence of new technologies.

Virtual reality (VR) refers to technologies that allow the users to immerse themselves entirely in a virtual environment. The gaming device, Oculus, is one such example. Much like in the film, Ready Player One, VR technologies allow users to experience being in a virtual world. Indeed, Meta and other large technology companies now seem committed to going this route.

Augmented reality (AR) refers to technologies that allow for a virtual overlay on the real world. For example, Google Glass – a set of glasses that projects a heads-up display onto its lenses so that the user has additional information about what he is looking at. The metaverse applications are also clear and compelling. Pokemon Go, a game in which people need to move to real world physical locations in order to acquire "pocket monsters" in their app, took the world by storm 2016.

Then there are blockchains, cryptocurrencies and non-fungible tokens (NFTs). A blockchain is a form of distributed ledger technology secured by cryptography. Cryptocurrencies are virtual currencies built on blockchains. Units of cryptocurrency, like Bitcoins or Ethers, are fungible – they are interchangeable and meant to be the digital equivalent of dollars and cents.

NFTs are a more recent development in which blockchain technology is used to create unique digital tokens that are not fungible. NFTs are supposed to represent unique assets, like pieces of digital art.

They are more like digital trading cards. An NFT of a piece of digital artwork supposedly confers "ownership" of the artwork upon the buyer but it does not necessarily stop people from viewing it or even making digital copies of the artwork. One analogy is that it is like owning the original Mona Lisa, of which there can be only one, while the rest of the world views only copies. It is controversial whether this rationale is convincing.

Ownership in the metaverse could be tied to NFTs. There are some companies buying up "digital land", spaces in a metaverse, whose title deeds are essentially NFTs. NFTs could theoretically represent anything in a virtual world – from pieces of unique clothing to houses to legendary weapons and so on. Given that digital items do a roaring trade in MMO games, it is not hard to see how these NFTs could become immensely valuable in real-world terms. Whether they should be allowed to is an open question which regulators are struggling with, since NFTs are highly speculative and pose financial risks to unsavvy purchasers.

THE CHALLENGE AHEAD

For the law, the challenge will be how to expand and integrate existing laws governing existing metaverses, like MMO games and social media networks, into something cohesive and effective.

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Much of the legal uncertainty surrounding the metaverse stems from the uncertainty surrounding the new technologies that are being added to it: VR, which is largely unregulated; AR, which continues to create privacy concerns, and is related to advances in facial recognition and surveillance technologies; and blockchain-based technologies like NFTs. Legal and financial regulators are watching the latter like hawks due to their propensity for extreme volatility.

Law in the simulation and the law of the simulation might be left to metaverse providers to decide. Those will depend entirely on the nature and purpose of the simulation – a metaverse designed for player-versus-player combat will necessarily have different rules than one designed for peaceful co-existence.

That said, there might be certain content regulation issues that crop up, say preventing simulation of excessive sex or violence, that might require government intervention.

What we as a society need to worry about is the law governing the simulation and the law of the user's location: on a governing law level, what should be allowed in EULAs? There is likely to be a massive inequality of bargaining power between the user and the service provider. This is a matter of contract law and how we define and prevent unfair contract terms – particularly regarding use of users' personal data.

In terms of the law of the location, substantive rules need to be developed about what is acceptable for metaverse providers. These could be related to data privacy, appropriate content, prevention of money-laundering and online crime, provision of misinformation and so on.

These obligations are already live issues with all online platforms, especially social media networks. It seems likely that regulation of the metaverse will evolve out of regulation of social media and online gaming. There also needs to be further development of law relating to jurisdiction and enforcement, as metaverse issues are likely to transcend national boundaries.

The need for regulation of the metaverse is clear. It is dangerous when technology outstrips the law by too large a margin: we are only now beginning to pay the price for the rapid development of social media, for example.

A clear focus on what the metaverse is and is not, what is new and what is not, is necessary if regulators and lawmakers are going to keep pace with technological change. This can be accomplished if we focus on the principles of law and how they apply to novel situations, and not get fixated on the technology itself.

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