



Metaverse, Avatar and Illusion of Lawless World: Rethinking Boundaries in Virtual World

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Abstract. The development of metaverse has brought great hope for many parties to be able to utilize this technological advancement. Not only within the scope of gaming, currently daily activities can also be carried out by someone in the virtual world, such as work, school and even daily life. However, metaverse also raises concerns for its users when avatars that represent the users can turn out to be victims of sexual harassment. This becomes a legal issue when it is committed by and to avatars in the metaverse. The methods used in this paper were normative juridical with statute approach, case approach, analytical approach, and comparative approach, as well as research specifications using the descriptive-analytical method. It is known that currently there is no regulation that can effectively provide protection for avatars in the metaverse. In fact, the efforts have been made from the plan to use the avatar creation registration system to biometric identification. However, legal instruments have not been able to fully address avatar activities that are categorized as sexual harassment in the real world although preventive efforts have been made by some parties through the Global Principles on Digital Safety or Digital Services Act issued by the EU. Therefore, it is expected that the presence of regulations can provide protection for avatars, one of which is by providing legal personality for avatars leading to the establishment of rights and obligations to its users.

Keywords: Avatar, Metaverse, Cyberlaw.

1 Introduction

After the statement of Facebook CEO, Mark Zuckerberg, regarding the mega project "Meta" that is being run and going to be developed by his company [1], the term of metaverse becomes popular and steals the attention of people all over the world, including legal researchers. Various studies are present, ranging from issues regarding privacy, data security, to jurisdictional issues because the transnational and cross-border nature of the metaverse will raise questions regarding applicable laws, jurisdictions, and competent authorities, especially when such actions are carried out by metaverse users who hide behind avatars [2]. Metaverse is a world that transcends countries and borders [3], with its four main components; one of which is immersion, a technology that blurs the boundaries between physical and virtual environments in a way that allows users and learners to experience a sense of immersion through AR and VR [4].

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Even in its development, metaverse technology is expected to integrate real world into virtual reality [5], which has the potential to trigger the raise of legal issues in the future. For example, the Barbados government opens a digital embassy in the metaverse [6] or the launch of a virtual campus of Muhammadiyah Cyber University based on immersive technology in October 2022 [7]. The development of metaverse is believed to take place in three phases: it is started by the digital twins, and then it is continued by the digital natives, and the last is the surreality where the virtual world and the physical world have united [8]. This digital transformation strengthens the assumption that the metaverse will further reduce the boundaries of a country, especially in terms of demographics and geography beyond geo in geopolitics [9].

It is a shared knowledge that it is not easy to be able to formulate policies or regulations involving the relationship between countries, even many countries. It is a new challenge for legal researchers to conduct a study of state borders within the scope of the metaverse, although South Korea has just attempted to introduce eight ethical principles for the metaverse which comprise of authenticity, autonomy, reciprocity, respect for privacy, fairness, data protection, inclusion and responsibility, as an explanation of the three values it embraces for metaverse users - intact self-identity, safe enjoyment and sustainable prosperity [10]. Some researchers consider that the metaverse world was born without leaving any country boundaries for its users, even firmly states the absence of borders and rules [11]. On the other hand, there are views that restrictions are still necessary, considering the consequences that can be experienced directly by users in the real world [12], such as cryptocurrency theft, the sale of fake non-fungible tokens (NFTS) [13], tax evasion or tax fraud [14], child sexual trafficking transactions [15], extremist [16], blackmail [17], to potential threats in the darkverse [18].

One of the problem faced today is the fact that smart technology has created a new space, which makes traditional laws difficult to implement, such as cross-border payments using virtual currencies or assets [19]. Therefore, it is important for each country to be more careful in ensuring the traffic of technology utilization, for example, China has imposed regulations that restrict users from being able to freely explore virtual worlds hosted outside their country's borders [20]. The new space ultimately makes the metaverse can be seen separately in two different areas, that are the enforceability of human aspirations to exist in a completely virtual space, which is in some ways better than the real world, as well as a set of actual technologies that allow fact and fiction to connect [21].

This paper attempts to study the metaverse in potentially problematic legal optics, when avatars commit acts that are considered illegal, such as sexual harassment that takes place in cyberspace. This study will have a long-term impact if in the end, avatar activities can be held legally accountable because it will lead to the next question related to which laws to be used and how the concept of restrictions in each country. Tracing the previous literature, this phenomenon resembles the rapid development of the Internet where ideas such as speculative jurisdiction [22] had become a discussion. It must be admitted that online sexual harassment has been going on for a long time in cyberspace. A study revealed that two-thirds of adults under 30 have been harassed online [23]. This behavior is known as technology-facilitated abuse or technology-assisted abuse [24]. Today, these problems have grown with the potential threat of online sexual

harassment carried out by avatars to other avatars in the metaverse, requiring critical study in finding solutions.

2 Methods

The methods used in this paper were normative juridical with statute approach, case approach, analytical approach, and comparative approach. The data used in this study were secondary data. Secondary data collection was carried out through literature studies. The legal materials used were primary and secondary legal materials. Data analysis was performed with descriptive-qualitative method. The specification of this study used descriptive analytical approach.

3 Results and Discussion

The term of metaverse first appeared in the Neal Stephenson's literary work entitled *Snow Crash* in 1992, which stands for meta-universe and is interpreted as a fictional universe [25]. Today, most researchers agree with the definition of the metaverse as persistent, synchronous & live, providing each user with an individual sense of “presence”, a fully functioning economy, bridging the digital and physical worlds, offering unprecedented interoperability of data, digital items & assets, and content [26]. In its development, legal researchers are working to ensure that the metaverse can run in harmony with the existing legal order although concerns about it have been classified as part of the three waves of technological disruption to the authority of law. This first wave of disruption describes a situation when the national legal system forces recognition of its authority so that all decisions must be respected, especially regarding cyber technology and activities in cyberspace as in the metaverse [27].

By 2023, there are 400 million monthly active users in the metaverse [28]. While in Indonesia, a study in 2022 recorded that 69% of Z Generation had an interest in the metaverse [29]. In the metaverse, all individual users have their own avatar according to the vision of metaverse that focuses on avatar-based interaction [30]. Metaverse experience begins when avatar has been created and it also becomes a general requirement to be able to enter the metaverse platform [31]. Through avatars which represent human users in the physical world, people can experience activities in real-time in various virtual worlds. A user can create different avatars on different applications or games [32]. The term of avatar itself has its roots in Hindu mythology and is used to describe the descent of a divine entity from the heavenly realms into the terrestrial realm, often taking an optimized form to accomplish a specific purpose [33]. In computing, avatars are graphical representation of users or characters or personas. Avatars may be represented in two-dimensional forms as icons in Internet forums and other online communities also known as profile pictures or three-dimensional forms, such as in games or virtual worlds [34]. Some people prefer avatars that are similar to themselves, while others prefer their avatars to be the ideal versions of themselves. Users adopting these avatars are reported to have higher satisfaction and attachment.

Users prefer to use avatars that have facial features similar to theirs than those that do not [35]. Cheong considered that an avatar should be granted legal personality in the metaverse. This legal personality can be granted through the registration process, in which each person only entitled to one avatar in the metaverse. This view is based on the concept of corporate law which requires registration, and it also requires other entities such as virtual stores to do similar registration [36]. Another idea is the concept of a biometric identity-based avatar to facilitate the verification process of its users [37]. This view is actually in line with the typology concept of digital rights that divides into three generations. The third generation is described to be consisted of the property rights owned by a new online persona, that is, a digital or virtual representation of an individual or legal entity that can exist and exercise the rights separately from the individual or legal entity who created it [38]. If this view is agreed upon, then the effort to strengthen it can refer to the interpretation of the United Nations Human Rights Council in the summer of 2016 stating that the same rights people have offline must also be protected online, so avatar users need to pay attention to the rights of other avatar users when making interaction in the metaverse [39].

Currently, avatar is considered to have a strong value because it represents a person in the real world, so crimes are possible to happen against him, such as electronic kidnapping of an avatar aiming to gain access to the financial system or even to commit terrorism [40,41]. In addition, today's advanced technology allows avatars to be easily copied and used in phishing, which is different from phishing in general [42]. However, not only the crimes against it, avatar can potentially commit illegal acts, for example, the case reported by parents who found out that their child's avatar in the roblox game was being raped by two other avatars. Some parents also reported that an avatar told their children to lie down, then the avatar also laid on it and began to move in a sexual way [43].

Dijazi stated that if an avatar makes a mistake, it needs to be understood that every avatar activity is controlled by its user and owner so that the generalization of provisions in the real world to activities in the virtual world can be implemented [44]. In line with the view that in the spectrum of cybercrime research, there are two extreme points. First, this type of crime is a new threat and second, it is like old wine in new bottles, which means that the crime is committed in cyberspace, but with the same crime basis [45]. South Korea has sentenced a person to prison for persuading underage victims to film and post pictures and videos of their bodies on the metaverse platform. The modus used by the perpetrator is to use an avatar to represent his age and offer gifts to attract the attention of the victims [46].

Another case occurred in September 2021, when a 14-year-old girl was forced to take off her avatar clothes in the metaverse and then told to have her avatar performed sexual acts. However, South Korea still faces obstacles, as the existing regulations are limited to dealing with physical abuse of humans although it is illegal for adults to initiate sexual conversations with minors [47]. Another case occurred at the end of 2021 when Nina Jane Patel was playing on the horizon venue game platform. Patel logged in as a middle-aged and blonde-haired avatar wearing jeans and a long-sleeved top. Patel's avatar was sexually harassed after several male avatars surrounded her, touching and groping her body. Patel asked them to stop and tried to stay away, but those avatars

followed her, continuing verbal sexual abuses. However, those avatars laughed aggressively and relentlessly, to the point of taking screenshots when they touched all over Patel's avatar. While doing that, the perpetrators even said "don't pretend you don't like it" [48]. In May 2022, another survivor recounted her experience while playing Meta's Horizon Worlds VR. The victim was lured into a room by several male avatars. Once in the room, the victim's avatar was touched without her consent, as they made lewd comments and handed out bottles of alcohol in the interaction that was recorded. When her avatar was touched in the game, the victim felt her VR controller vibrate, a game feature that is intended to enhance the user's experience [49]. In an Meta app, "Population One", Chanelle Siggins was reported to be approached by another player who then simulated groping and ejaculating onto her avatar. Another Population One user, Mari DeGrazia, reported witnessing harassment more than three times per week while using the app. DeGrazia was also subjected to sexual abuse while wearing a VR vest, as other players groped her avatar's chest [50].

One of the advantages of the metaverse is the sophistication of haptic technology, a device that makes the user can feel the touch that seems real from the activities that occur in the environment [51]. However, this technology can make the experience even more frightening. The panoramic view, audio, and even touch simulation provided by VR headset and controller create a multi-sensory experience, blurring the line between virtual and physical world, so it can directly attack the victim psychologically [52].

The European Union (EU) has taken a progressive step that is planned to be implemented in 2023, namely the Digital Services Act which aims to establish a rule book on how Europe regulates Big Tech and Digital Landscape. The regulation provides a strong portion in providing protection to children. Through this regulation, digital service providers are required to pay attention to moderation and content management, including illegal content, hate speech, and fake information [53,54]. Another good development to appreciate is the establishment of the Global Principles on Digital Safety: Translating International Human Rights for the Digital Context in early 2023 which emphasizes that government can distinguish between illegal and legitimate but potentially harmful content and distinguish appropriate regulatory actions, ensure laws and policies, respect and protect all user rights. The government must support victims and survivors of abuse or harm. Through these principles, the government needs to re-ensure human rights that need to be protected, even if it is taking place in the metaverse world. Digital service providers must ensure that these rights are maintained on their platforms [55]. One of the company's efforts to protect its users was performed by meta which launched Personal Boundary for Horizon Worlds. A feature intended to prevent others from entering the personal space of one's avatar, making it easier to avoid unwanted interactions. So it will be detrimental for someone who does not really understand about this feature [56]. Meanwhile, one of the measures taken by the government can be seen from the prosecutors in Belgium who asked the Belgian Federal Computer Crime Unit to travel to the scene of a crime in Second Life (a VR game) for the purpose of investigating a "virtual rape" involving a Belgian victim [57]. However, all of these

actions do not provide optimal protection for metaverse users because harassment are still possible without legal sanctions ensnaring them.

Therefore, it is necessary to reformulate the regulations that will be applied in the metaverse, especially when it comes to children or sexual activities. With the impact that can be felt by the victim, the debate between the physical and virtual worlds, it seems that it is no longer fully relevant to be implemented. It is expected that the word "physical" is reinterpreted, thus reaching the criminal element of physical touch, which is often at issue in legal evidence. If a Facebook user insults in the comments of other users, does it mean that the user is an avatar who is independent of legal responsibility?. If the avatar represents a person in the real world, then a real-world protection must be applied to protect the psychological safety of everyone. Therefore, the first step that can be done is to provide a legal personality, which will include the rights and obligations that must be taken care of when carrying out their activities in cyberspace. Further study is expected to be able to formulate the next stages related to the certainty of jurisdiction to implement, such as discourse about e-jurisdiction and metaverse grand charter of laws [58] by taking into account the concept of four layers of law, which are Law in the simulation; law of the simulation; law governing the simulation; and law of the location that can strengthen the argumentation basis of legal regulation in the metaverse [59].

4 Conclusion

This paper aims to trigger the emergence of critical studies on the protection of avatar users in the metaverse world who experienced sexual harassment. A set of regulations and policies have been formulated and implemented, but it does not fully provide optimal protection guarantees. The debate over the form of avatars and physical terminology is the main element that can become the gate to the reformulation of legal protection until finally, it will continue to be under the authority of the state in its regulation. The idea of providing legal personality to avatars is an interesting concept since it can expand the interpretation of the legal relationship between users and avatar owners when doing their activities in the metaverse. Moreover, further studies are needed regarding the jurisdiction and legal sanctions that will be implemented in the metaverse world.

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