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Metaverse, Religions and Metahumans: A Window to a Hypercontrolled Post-pandemic World

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Abstract. The creation of a Metaverses as an alternative to everyday reality heralds the first practical expression of transhumanism. The Metaverse is not, as is generally understood, an alternative reality similar to the virtual world of "Second Life", but rather a pretended "extension" of our daily life. The Metaverse heralds the ubiquitous presentation of an augmented reality that will be essential for work and private life. In this paper we will analyse the possibilities this new technology offers for both the improvement of our well-being and also greater social control and the manipulation of our feelings and desires with particular focus on the possible impact on individual identity, privacy and political consciousness.

Keywords: Metaverse, social control, metahumans, transhumanism.

Introduction

There has been intense debate around the notion that a true Metaverse is one which is connected to the real world, an extension of reality through

an intense experience of augmented reality. Thus, three different possibilities have been considered:

- Augmented reality. This does not constitute a true Metaverse given the extent to which it depends on the real world;
- Completely digital. It may be considered a Metaverse if it meets the criteria of immersive experience and realism;
- Mixed. This model of a Metaverse permits immersion into a completely digital world while also offering spaces within it that are connected to the real world, which notably expands the possibilities of using the Metaverse for something beyond gaming, recreation, shopping or merely as a means to escape reality. This model offers the possibility of including augmented reality applications that involve both universes.

1. Understanding the Metaverse

1.1. Types of Metaverse

From our point of view, a genuine Metaverse can only be a mixed system. Augmented reality, regardless of how visually realistic and immersive it may be, does not constitute a true Metaverse but is merely an extension of the possibilities of the real world; a completely digital environment provides only a technological step forward in the structure and, especially, the graphic design of the virtual worlds we are already familiar with, such as *Second Life*.

Some authors (Lee 2021) do not consider the Metaverse as substantially different from the Internet itself but rather its logical evolution given the gap between "Digital Natives" and previous generations who witnessed the transformation of the world by the Internet. These authors regard the Metaverse as a phenomenon of augmented reality that simply extrapolates the Internet from the computer screen to other, more portable devices. Evidently this view fails to take into account all the possibilities offered by what is not merely a new technology but a new form of relating to the world around us.

1.2. Structure of the Metaverse

Another important aspect to take into account, and which determines the nature of the Metaverse as a system of social control, is the accumulation of power within it. The most visible aspect of this power is revealed in its internal structure, that is, if the Metaverse has a centralised or a decentralised model. In the latter case, it is also important to consider if decentralisation is based on a model of diverse but unequal actors (again, as with the Internet of today) using a structure of nodes or if uses a *peer-to-peer* type model, the egalitarian or quasi-egalitarian model used, for example, in the management of cryptocurrencies.

It must be noted that the difference between a centralised and a decentralised model (but not *peer-to-peer*) is graduality. Centralisation does not require a single actor who centralises all experiences, that is, in the role of the virtual proprietor of the Metaverse, although only by virtue of their essential role as promoter, driver, developer and continuer of the experience. This extreme position is certainly possible but highly improbable, at least within an environment of free enterprise and free competition. However, there is also a form of centralisation in which few actors accumulate this power within the Metaverse, as the proprietors of the central nodes of the system. Thus, by centralising power in a few agents who exercise their control over specific areas within the Metaverse or geographical areas of the real world have themselves the capacity to impede or limit access without any cause and thus creating an unfair balance of power.

The question turns therefore not on centralisation or decentralisation but rather on *the degree* of decentralisation, and ultimately if this decentralisation gives users a quasi-egalitarian position, as is the case with *peer-to-peer* networks.

The term "quasi-egalitarian" indicates that these networks introduce, at least theoretically, a certain inequality between simple users and those who have the cryptographic capacity to influence the transmission (and thus the veracity) of blockchains, at least if they are able to impose their greater technological capacity (investment). The efforts of these users, known as *miners*, secure certain advantages not enjoyed by ordinary

users, although they do contribute decisively to the global security of the system.

It has been proposed to create a Metaverse using a *peer-to-peer* structure (Ryskeldiev 2018), based on the communication of data using plain text but the sheer amount of data the Metaverse will generate and the current state of technology leads us to believe this will only be possible far in the future and that, if this were the structure of the Metaverse, it would be so only for certain areas, spaces or aspects and not in its entirety.

It would seem then that the Metaverse will be structured in a manner similar to the Internet, and reflect the same tensions between the centralising tendencies of States and large corporations and the aspirations of greater decentralisation on the part of users.

2. The Metaverse does not exist: desire and technology

It is interesting to note that we are defining and attempting to understand the scope, impact and risks inherent to a phenomenon that *does not exist*. Considering the present state of technology, it may be years before the Metaverse becomes a reality and many more before it begins to meet our expectations.

Generally speaking, there is a commonly held notion that advances in technology have given rise to new and previously unknown desires, leading to the conclusion that technology rapidly advances in a manner which precedes our desires.

This vision of technology is in many ways false. It fails to take into account the depth as well as the haziness of our desires. A more considered reflection shows that our desires are in fact the foundation and driver of any technological advance. Technology brings to reality the previously existing desires of a great many people or even of a culture itself. The practical realisation of these desires was never brought into focus because of the lack of the technology necessary to make them a reality.

Thus, the Metaverse is a response to the deep human desire to expand the horizon of possible experience. There have been a great number of responses to this desire in recent times, vastly expanding our ca-

pacity to consume, to travel, to enjoy all kinds of experiences. However, the Metaverse holds the promise of virtually limitless expansion of our capacity for experience, to the extent that the opportunities exceed the possibilities of a human lifetime. In this sense, we also find a religious component in the Metaverse: the longing for a full and eternal life in a paradisiacal world without illness, suffering and death.

3. Data collection in the Metaverse

3.1. Data collection in Oculus and other VR devices

The functioning of the Oculus headset depends directly on the data it is able to collect of the environment as well as the body of the user.

The first prototypes of virtual reality headsets were developed by Ivan Sutherland in a military laboratory in the 1960's. These headsets used a system that detected head position based on the ultrasonic frequencies transmitted by the headphones and captured by sensors at the top of the device (Egliston & Carter 2021a). Later, in the 1980's and 1990's (Coyne 1994; Hillis 1999), new sensors appeared able to detect the eye movement of the user, some taking the magnetic field of the Earth for geospatial reference (Pesce 2020). According to Bailenson (2018), by the end of the 1990's a mid-range, commercially available system was capable of monitoring 18 different head and hand movements at a speed of 90 movements per second, meaning that a VR system could collect some 2 million data points on body language in only 20 minutes. Current models of the Oculus headset are able to identify and register biometric data to identify the user (Egliston & Carter 2021b). Using the data collected by an anonymised VR system, Miller (2020) was able to identify an average of 95.3% of the 511 participants in a study.

3.2. The use of sensors and Brain Computer Interface

As mentioned earlier, one of the fundamentals of the Metaverse is its fusion with reality, that is, creating an environment which combines the virtual and non-virtual. This fusion requires not only the sensors of the de-

vices themselves but also the user's environment. In fact, these sensors, installed anywhere and everywhere, are necessary for the many services provided by "smart cities", such as traffic regulation and optimisation.

Although the data collected by these sensors can be anonymised, and even managed through decentralised systems, in many cases the user is or may be identified along with their precise location at all times. This information is centralised in particular servers in the hands of private companies or State entities.

Many companies are making significant investments in the use of neural interfaces or other mechanisms based on the use of artificial intelligence and Deep Learning as well as conducting extensive research into the possible fusion of human mind and machine through a Brain Computer Interface: "*The greatest value of this technology lies in that through the fusion of human brain and machine, it breaks the current interaction between human and machine and human and environment, thereby breaking the limitations of human body and tools*" (Zhihan 2020).

The method consists in collecting data from encephalograms analysed using predictive algorithms, allowing the machine to measure and interpret cerebral activity, which may ultimately lead to the capacity to stimulate or provoke specific brain activity. In the medium term, the aim is to develop the capacity to interpret human movement, psychological state and emotions, all stored for the further advancement of Machine Learning.

The result is a huge amount of data requiring large investments in storage. Given the complexities of managing this data using blockchain, it will most likely be centralised with the attendant privacy and security risks.

Furthermore, it should be noted that data are "always captured, processed and analysed in accordance with some kind of aim or ideology (whether conscious or not)" (Egliston & Carter 2021a). This represents a new accumulation of power and, of course, new relations of power (Rupert 2017), with greater inequality and vulnerability of citizens.

4. The Metaverse as a system of social control

4.1. The risk of the accumulation of power

The problem then is not in technology itself but in the acritical or ideological perception of technology (consciously or unconsciously, as mentioned earlier). The lack of sufficient theoretical distance from technology makes it impossible to effectively question its important ethical and/or political implications. Such is the case that we may even face a real danger of our extinction as a species according to some experts (Bellamy 2018), because we believe in a future, non-human self, with augmented abilities and even freed from the burden of death itself. We must also consider the variations in the game of equilibriums and the circulation of power and how these may impact the consistency, security and quality of our democracies.

Democracy can be understood as a system for the distribution of power in which wherever there is an accumulation of power there are mechanisms to control its exercise. This does not mean that democracy demands power be shared equally; modern democracies face challenges and seek goals which require large centres or concentrations of power that make imbalances, often significant imbalances, of power inevitable. If we consider public education or healthcare systems, or even large international sports events or business enterprises, these goals of modern democratic societies require that certain institutions accumulate and exercise great power (particularly the State itself).

Although democracy is perhaps the political system that is able to incorporate greater imbalances and tensions, its essence is compromised when the accumulations of power are unjustified, arbitrary or lack mechanisms of control over the exercise of power and ensure that the imbalances do not undermine the fundamental rights and freedoms of citizens.

We find a specific example in the application of total control by Chinese authorities during the COVID-19 pandemic, denounced by Amnesty International, using these technologies to prevent travel of those regarded as dissidents. One example is the Chinese lawyer, Xie Yang, who

was prevented from travelling to Shanghai because the Chinese authorities learned he was planning to visit the mother of Zhang Zhan, a woman who was jailed for reporting on the initial outbreak of the virus in Wuhan.

Controls on the exercise of power in a democracy are stricter where its concentration is greater; and these controls must be as effective and robust as the accumulated power itself. However, we now observe how new technologies for the collection of personal data are producing a concentration of power lacking any countervailing regulations or limitations, generating a dangerous imbalance of power.

4.2. Legal regulation of life and relations within the Metaverse

The Law is, essentially, the primary instrument of social control. It has a triple function: exercise control seeking an appropriate balance between security and the rights and freedoms of individuals, to protect these rights and freedoms and finally to regulate and control the undue accumulation of power.

Initially, we may assume that the Law regulating the Metaverse would treat this "space" like any other, with the peculiarity that the space is populated by avatars controlled by physical persons just as with the Internet.

However, the Metaverse also presents new problems, many of which are difficult to foresee at the moment. There may, for example, be interconnected parts of the Metaverse that are not subject to the same tax laws or the same structures of causality as in the physical world, with consequences on the notions of legal responsibility and even the nature of certain legal precepts. Additionally we may find that users demands protection for an avatar which may include notions of freedom of movement and physical integrity. It is not inconceivable that an avatar, or the user in relation to the avatar, has a right to privacy within the Metaverse, or other rights. In any case, it will be necessary to adapt existing legal regulations to this new situation in which "literally *everything and everyone* will be the product". (Di Pietro 2021)

4.3. Social control

In early 2022, the city government of Seoul announced a plan to modernise its relation with citizens called "Metaverse Seoul". The technology is used not for commercial or entertainment purposes but to provide public services, integrated into a global Metaverse (Thien 2022). Similar uses have been considered in the cultural sphere (Kim 2021).

It could be argued that anyone wishing to avoid leaving a data trail in the Metaverse is free to do so, but affirmations of this nature are dubious at best. When technology becomes a permanent element within a culture it becomes impossible to escape its pull, or at least at a significant social and lifestyle cost (Falchuk 2018; Rospigliosi 2022). If the Metaverse becomes the tool which substitutes, transforms or integrates the Internet as part of daily life, if the virtual world to which it gives access is linked to the real world, if its use extends to the workplace, education and public services and authorities of all kinds, we can no longer speak of an "alternative universe" but rather an another part of the real world. There will not be a "real world" and a Metaverse but both will be completely connected, although we understand the difference between the "physical" and the "virtual" this distinction is becoming increasing blurred as the language of science leads towards a reconsideration of the concept of the "physical" or "material". This new reality has been described using the term "Phygital" (Gaggioli 2017).

The Metaverse is not viewed as a utopia by potential users, rather it is considered as a heterotopia, and the public seems resigned to its development regardless of their desires or scepticism; something to adapt to with the hope its advantages outweigh its potential for greater social control on the part of governments and private interests (van der Merwe 2021; Zhao R. 2021).

An analysis of the fundamental aspects of social control that will be affected by the Metaverse must include notions of space, time and meaning.

The principal concern regarding the notion of space in terms of social control is simply the ability to know the physical location of individuals at all times. This is an essential element in the effective delivery of

public services and commercial applications, as seen in *smart cities*. The management of traffic or emergency services requires the proliferation of sensors everywhere in the city, and also on the bodies of the inhabitants themselves, to ensure optimum traffic circulation, response to traffic accidents or emergency medical needs. All new vehicles in Europe are now required to be fitted with Intelligent Speed Assistance (ISA). The ISA permits the continuous monitoring of every vehicle to prevent speeding using a system of satellite-connected sensors (Aparecido 2022). Sensors are also installed throughout urban areas for security reasons, including cameras with facial recognition technology, making it impossible to hide one's location or identity.

The Metaverse will imply a multiplication of these sensors. Firstly and most importantly for our physical connection to the virtual world. Just as physical world will be united to the digital world, so our physical bodies will be not merely represented by an avatar but fully integrated into the digital world. In this way, not only our location but our entire ergonomics and physical presence will be always monitored.

This will also lead to a new experience of space (Hemmati 2022). The perception of physical space will be expanded through the virtual experience but beyond this, given the possibility of placing ourselves at any point in the Metaverse, it will be less and less meaningful to speak of places as being "distant". The shrinking of space, the possibility of being present at any point will suppose a new way of relating to three-dimensionality.

This leads us to time. The transformation of space inevitably supposes a different perception of time, and with this, a very different perspective of social control. The power to transform immediately anywhere into "here" is also the power to transform anytime into "now". This is not merely the possibility of a Metaverse in which there is an experience, imaginary and artificially created, of past and future. But rather a mutation of the speed of life when spatial distances and travel times are eliminated. While our mental representation in the Metaverse may involve an avatar walking through a three-dimensional space from one place to another, as in *Fortnite* or *Roblox*, part of the mechanics of the games them-

selves, this does not necessarily need to be how space is represented in a Metaverse. In fact, the contrary is true. The experience of time and space in a Metaverse tied to the physical world and superimposed upon it, will not be so dissimilar from the world we inhabit today, but if we substitute this physicality for representation in a virtual space the experience can be dramatically different. Thus, I can visit an office immediately, sit at a table and speak to someone. Although we are not physically present, if the quality of the graphics is sufficient and the conversation is in real time, within an immersive environment this observation becomes irrelevant. Just as we can participate in a demonstration, go to a party, concert or any other interactive event, or simply "travel" from one place to another, the experience in our brain is the same if we are physically moving through space or not (Wickens 1992; Nannan 2022). Thus, an instantaneity is produced which alters in many ways the nature of our experience of progressive time, although not entirely. The change is even greater if we travel though our memories, or even live a past experience that is indistinguishable from the present or do so in the future.

We may also be able to interact with persons who have no physical reality but who nevertheless act, interact, are seen as speak as if they were a real person.

This situation elevates social control to a different dimension entirely. Just as there exists this feeling of instantaneity, which is more than a mere feeling, social control is also situated in this same temporal realm. Knowledge of our acts, desires, intentions, conversations, opinions, difficulties, etc, is also instantaneous and can be managed for purposes of social control through algorithms which produce effects (such as arrest) without human intervention. This may be simply by closing the doors of the place we happen to be or even that we are marked in some way that immediately classifies us as suspicious. The consequences of this in a virtual world (where we deal with public authorities or receive public services, etc) can be especially immediate and intense.

And this leads us, ultimately, to the influence of the Metaverse on meaning itself: the meaning of life, of one's identity and of the cosmos. The possible changes here are largely unpredictable. The combination of

the COVID-19 epidemic and the digital revolution, including the rise of the Metaverse, has decisively affected human life, and will also affect religious activities. Some authors even speak of a "Church 4.0" phenomenon: there would be a Church born in Jerusalem (1.0), a Church developing under the Roman Empire (2.0), from the evolution of Christianity after the Protestant Reformation (3.0) and a new Church being born from the pandemic and the fourth industrial revolution (4.0). (Jun 2020).

What will be our perception of death if our avatar, repository of our consciousness and identity, can live on in a virtual world that is indistinguishable and completely enmeshed in the physical world? What if, although we are physically no longer there, we continue to act, to fall in love, to speak with our loved ones, to work and play carrying on a normal life including having an income, expenses, hobbies, etc? What them will be the meaning of the words "I" or "me"? What will it mean to speak of God the creator or the hope fulfilment beyond death? What will we understand by "life"? There is even discussion of a new "posthuman mystic", which will attempt to respond to these questions (Bolger 2021) and new forms of finding God within the Metaverse (Jun 2020).

If our emotions, feelings, beliefs, memories and experiences are, to a greater or lesser degree, part of the Metaverse, transformed into data, can this data not be modified by those who control the Metaverse for the purposes of social control, or even oblige us to have experiences induced by others?

The exposure to external power and control inherent in this new paradigm is such that it is also indiscernible. In the "phygital", what is the 'self', 'we', our thoughts and feelings become data that can be manipulated and modified using algorithms. This gives rise to the question about what new balance will established between security and social control and the fundamental rights and freedoms of citizens. Although we are far from being able to answer this question, we see that technology is developing rapidly while mechanisms of democratic control and understanding of these new phenomena lag far behind. This discrepancy between power and control may give rise to significant conflicts and controversies in the near future.

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