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THE METAVERSE
A STUDY ON THE VIRTUAL AND THE SACRED

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Abstract

In this article, I investigate the relationship between the sacred and technology through the lens of the Metaverse. I place theological anthropology in relationship with the Metaverse and the related, although theoretical, hypothesis of an invasive computer simulation. Initially, I consider the possibility of a continuum between the Metaverse and the simulation hypothesis. I conclude that there is no real continuum, as they differ greatly. Accordingly, the Metaverse cannot produce effects on human nature as theologically conceived. Next, I examine the hypothesis of the possible effects of the Metaverse on Christian life. I resolve that these effects are real, but only in case the sense of the sacredness of human nature is lost. Thus, a sense of the sacredness of human nature protects Christian life from the effects of an invasive virtual reality.

Keywords: Metaverse, simulation, theology, anthropology

The Metaverse may be virtual, but the impact will be real.
Meta Platforms, Inc., doing business as Meta

1. Introduction

The announcement of Mark Zuckerberg that his company will change its name from Facebook to Meta is, of course, outside the boundaries of serious theological reflection [Samantha Murphy Kelly, *Facebook changes its company name to Meta*, CNN Business, October 29, 2021, https://www.cnn.com/2021/10/28/tech/facebook-mark-zuckerberg-keynote-announcements/index.html, accessed on 23.04.2022]. His project of the 'Metaverse', however, is another matter. (The word 'metaverse' appeared for the first time in Neal Stephenson's sci-fi novel Snow Crash. The term refers to a convergence of physical, augmented, and virtual reality in a shared online space [1].) In brief, Zuckerberg envisions a near future in which people become so accustomed to virtual reality that they feel at home more there than in the objective, material reality. The Metaverse, in other words, will become not only a natural environment but a meaningful place to live [Mark Zuckerberg, *Keynote*, Facebook, October 28, 2021, https://www.facebook.com/

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facebookrealitylabs/videos/561535698440683/, accessed on 23.04.2022)]. The eventual shape of the Metaverse is far from certain, but underlying trends in how individuals value their digital identities and manage their payments online make the project not only reasonable but also attractive for technological and economic motives [A. Sanwal, *Metaverse of madness: 13 big industries the rise of virtual worlds could disrupt*, CB Insights, 18.05.2022].

More significantly, the Metaverse, a virtual world of worlds, carries a massive technological vision with a remarkable level of sophistication in addressing crucial issues such as identity and life in a virtual world where people are supposed to do their working, playing, and socializing. This vision has been fuelled and justified in the work of philosophers and scientists who have investigated the hypothesis of a virtual reality that is the individuals' natural habitat. That vision has also been popularized in science fiction writings and even in a powerful series of movies. The Metaverse brings back the theme of a life in a computer simulation (or simply 'simulation'), or even of a simulated life. The theme has a recent history in the philosophical interpretations of the movie *The Matrix*, the work on the simulation argument of Nick Bostrum, the reflections on the nature of the virtual reality of David Chalmers and on the digital afterlife of Eric Steinhart, and finally, the presentation of the cosmological theories of theoretical physicist Max Tegmark [2-10]. This is the theoretical context of reference. As a vision, the Metaverse does not come unexpectedly, although someone may be uncomfortable with the idea of becoming, so to speak, virtualized. The point is that the Metaverse seems particularly timely and trendy in the sense that it seems to speak directly to the most immediate and pressing postmodern concerns of the day: the digitalization of all. For this reason alone, it would deserve careful consideration.

The rise of the Metaverse is a once-in-a-lifetime opportunity to reassess once and for all the relationship between Christianity and virtual reality. The literature on the virtual reality can be divided between those who investigate the ontological transformation (i.e. the passage from the universe of reality to that of virtual) and those who attempt to find the Archimedean point that allows separation of the virtual reality from the reality (for example, the simulated people from the machines that run the simulation). This article belongs to the first stream of literature.

The question I would like to answer is this: does the Metaverse affect theological anthropology, that is, a theological interpretation of the nature of human beings and their relationship with God? The question is whether the virtual alters the divine-nature relationship that constitutes human nature. Is the Metaverse capable of unleashing irreversible processes in and on human nature itself? In brief, is the Metaverse compatible with the sacredness of human nature? A plain, simple answer could be yes, of course it is compatible. Almost two decades ago, Pope Benedict XVI described the digital environment as "part of the daily experience of many people" [Pope Benedict XVI, *Address for World Communications Day*, 2013, www.vatican.va/content/benedict-xvi/en/messages/communications/documents/hf_ben-xvi_mes_20130124_47th-world-communica

tions-day.html]. People go to work, go shopping, and enter virtual reality; there is nothing special in dealing with the artificial: the basic architecture of reality stands. Therefore, neither human nature nor Christian life is significantly touched by the virtual reality.

The affirmative answer of Pope Ratzinger can take readers by surprise, particularly if they have read the enormous literature on Theology and technology that proposes an antagonistic model between the two. In their *Theology and Technology: Essays in Christian Analysis and Exegesis*, for example, Carl Mitcham and Jim Grote stated that technology, by its very nature, distracts Christians from living a serious Christian existence, whether that be in worship, in charity, or in proclaiming the Kingdom of God [11]. In the same volume, Albert Borgmann argued that technology distracts the faithful from the most fundamental aspects of the authentic Christian life [12]. In the rest of this article, I show that both technologists and Christian authors, although with different perspectives and intents, seem to agree on the proposition that virtual reality has the potential to change both human nature and, *at fortiori*, human life. I will also explain why Ratzinger diverts from those authors and why I think he is correct. This article, in fact, is an interpretation of Ratzinger's position. I set a clear distinction between 'human nature' and 'Christian life'. The former is theologically conceived in terms of human sacredness - the relationship between the divine and the natural order; the latter is understood in terms of rituals, pastoral concerns, and expressions of spirituality. I conclude that the Metaverse cannot affect the nature of human beings and their relationship with God, but it may affect important religious elements of human life if the overall sense of the sacredness of human nature is lost.

Before proceeding, I want to clarify the distinction among three distinct anthropologies. The first is the Christian anthropology: human beings are neither angels (because they need a material body) nor animal (because they enjoy a divine component). The second is the anthropology of the simulation hypothesis: human beings are angels (because they do not need a body). In the memorable words of Ludwig Wittgenstein, "where our language suggests a body and there is none: there, we should like to say, is a *spirit* [Geist]" [13]. The third is the anthropology of the Metaverse: human beings belong to the natural order of things. To borrow a sentence from W.V. Quine, "I am a physical object sitting in a physical world" [14]. The reader may want to consider these distinct anthropologies in addressing the rest of the article.

The article is composed of an introduction and three sections. The first section interprets both Ratzinger's position on virtual reality and the Metaverse. The second section investigates the computer simulation hypothesis. The third section addresses the option of a continuum between the Metaverse and the simulation hypothesis. The fourth and final section returns to Ratzinger's position on virtual reality and the Metaverse, this time addressing the relationship between the sacred and the virtual.

With regards to terminology, I define 'sacred' in terms not of separation (i.e. the sacred and the profane), but rather of the relationship between the order of the divine and that of Nature. It is not only my definition but, more importantly, Ratzinger's. (It is a long story, but in brief, Ratzinger recovers this definition from Henri de Lubac, particularly from de Lubac's book *Surnaturel* [15].) Human nature has a sacred status because it belongs at the same time to the order of the divine and the order of Nature. The 'sense of the sacred' is the recognition of this sacred status. 'Christian life' is the religious dimension of human life, namely the pastoral, the liturgical, and the spiritual. In this text, I sometimes rely on 'human life' as a synonym. By 'simulation hypothesis' I mean the notion that human existence is a simulated reality. I use the expression 'virtual reality' to enclose both the Metaverse and the simulation hypothesis. As usual, the Church is feminine.

2. The Pope and the Metaverse

In an address for World Communications Day, Pope Emeritus Benedict XVI (b. 1927) famously observed that "the digital environment is not a parallel or purely virtual world but is part of the daily experience of many people, especially the young" [Pope Benedict XVI, *Address for World Communications Day*, 2013]. There is more grain than one may think in this statement. The pope does not confront the virtual world or indulge in apologetic remarks. He rather assimilates the virtual into a specific view of theological anthropology. Human beings maintain a natural desire to see God while living his/her ordinary life that, in the case of many, especially the young, includes the experience of the virtual world. In other words, the link that connects the natural and the divine (as 'the sacred') is not compromised by the existence of the virtual world and its use. Thus, the world changes around the essential, supernatural nature of human beings, whose nature does not change. The virtual does not affect the sacredness of human nature. But there is more: in Ratzinger's opinion, it seems that the Christian life is unaffected, too. It is like the pontiff had mentioned the car, more than a century earlier, and explained that it is not a machine but part of the daily life of a growing number of people. It is like Pope Benedict XVI has dismissed the postmodern notion that there is no ultimate 'real reality' and reassured people that they do not risk suffering because they have no way of distinguishing the reality from the illusion, the real from the virtual. Does the pontiff's view stand in the case of the Metaverse? I will return to this point in the last section.

For Ratzinger, individuals interact in the real world, and the virtual reality is part of the world. Individuals interact in the public space, and the digital environment is part of it. But the public space will be soon replaced by the Metaverse. The Metaverse promises to provide a virtual universe in which individuals can interact, trade, and socialize like in a public space, even though the Metaverse is not a public space controlled by the state. The Metaverse, in fact, is a privately owned virtual reality, like a bar or a theatre, with a private owner (or concurrent property owners) overseeing and regulating the individuals' operations

and interactions. For some, the Metaverse is the next phase of the Internet: users have enjoyed the 2D Internet, and now they move to the 3D Internet. Scholar Douglas Rushkoff of CUNY offers a powerful and intriguing description of this maximalist version of what the Internet could become: "Zuckerberg wants the Metaverse to ultimately encompass the rest of our reality - connecting bits of real space here to real space there, while totally subsuming what we think of as the real world. In the virtual and augmented future Facebook has planned for us, it's not that Zuckerberg's simulations will rise to the level of reality, it's that our behaviours and interactions will become so standardized and mechanical that it won't even matter. Instead of making human facial expressions, our avatars can make iconic thumbs-up gestures. Instead of sharing air and space together, we can collaborate on a digital document. We learn to downgrade our experience of being together with another human being to seeing their projection overlaid into the room like an augmented reality Pokemon figure." [Douglas Rushkoff, *What Mark Zuckerberg's Metaverse Means to Our Humanity*, Rushkoff Blog, October 29, 2021, https://rushkoff.com/what-mark-zuckerbergs-metaverse-means-to-our-humanity/, accessed on 29.04.2022] According to Rushkoff, Metaverse is a world in which the virtual and the real are connected, although the virtual understanding of reality will become predominant.

In a recent report, the Metaverse has been defined as "a vision, not a specific technology" [A. Sanwal, *Metaverse map*, CB Insights, June 21, 2022]. As a trillion-dollar opportunity, it has attracted legions of established companies and venture capital-backed start-ups that are developing the distinct technological layers - from the hardware devices that will allow individuals to experience the Metaverse to the applications that will enable them to trade and communicate in shared virtual worlds. These activities go from superfluous to necessary, like buying digital clothing for users' avatars and receiving remote and home health care services [A. Sanwal, *Hiring Freeze*, CB Insights, June 22, 2022; A. Lennox-Miller, *Feeling the Pressure of Expiring Waivers*, CB Insights, June 23, 2022]. As a vision, it does not come with a shared definition; some mention 3D Internet, and others frame the Metaverse as a much more complicated reality than just 'virtual' reality. According to Matthew Ball, one has to imagine "a massively scaled and interoperable network of real-time rendered 3D virtual worlds, which can be experienced synchronously and persistently by an effectively unlimited number of users" [16]. In his definition, Ball has pointed out that one of the main features of the Metaverse will be its "unprecedented interoperability" - the ability to move avatars and goods from one place to another, no matter who runs that specific area of the Metaverse [16]. Although tech giants may work together to foster development of industry standards that would make the companies' nascent digital worlds compatible with each other, equally possible is that the term 'metaverse' as in the singular could be replaced by the term 'metaverses', as in plural: Facebook Metaverse, Apple Metaverse, and Microsoft Metaverse. Finally, for some the Metaverse neither really refers to any single emerging technology nor to the next generation of the Internet, rather to a shift in how users interact with the Internet. In sum, it is the idea that individuals can do more than just share

information and trade digitally: they can create and participate in a world - or a multiworld - that is different from the physical one. It is a multilayered, invasive, all-inclusive video game. It is a metaphysics. Call it 'cyberspace' or 'Matrix'.

3. Computer simulation

As mentioned, the theoretical background of the Metaverse has been articulated in the last decades by philosophers and scientists under the umbrella term of simulation hypothesis. There are three different versions of the simulation hypothesis. In the first, the people are not simulated but the world in which they live is. Their brain is biological but it has been connected to a machine that creates the artificial reality in which they live. In the second, both the people and the world are simulated. This means that people's minds are simulated. Outside the simulation, however, programmers and machines run the simulation. The first option (simulation I) has been masterfully described in *The Matrix* trilogy. The second (simulation II) has been addressed in philosophers' and scientists' writings. Lastly, the entire Universe is a simulation such as there are no elements of reality that are outside the simulation. In this article, I leave out this last version.

In *The Matrix*, people live their life as foetus-like organisms immersed in a sort of amniotic fluid, relegated to a passive state of living batteries providing the Matrix with energy. In turn, the Matrix, the mega-computer directly attached to individuals' minds, is responsible for the artificial virtual reality in which the people believe to be. People believe they exercise their free will in a world that closely resembles that of the western postmodern world. Once they awake to their true situation, they have a real fight against the machines. In simulation II, however, this dialectic between objective (natural) reality and artificial reality is absent: the simulation concerns the understanding of all of existence as a simulated reality. In this simulated reality, the individuals are simulated; as a consequence, they believe that the simulation is real. More precisely, the individuals have been programmed to believe that their existence and the world in which they live are, actually, real. But, of course, it is a simulation pursued by real entities, engineers, and intelligent machines who (which) maintain the ongoing simulation. The whole package, humans and their world, is simulated. Only the creators of the simulation are real. In his book *Reality+*, philosopher David Chalmers drafts a distinction between 'bio-sims', who have a real body outside the simulation, and 'pure sims', whose entire existence is inside the simulation [8, p. 30-31]. In *The Matrix*, humans have a biological brain that is plugged into the Matrix. The world they experience is digital and simulated, but their brains are biological. In the simulation II, the entire existence is artificial. People are digital artefacts only. They are in the simulation without a separate cognitive system attached. Instead, the creators just run the simulation, including a simulation of brains, and minds emerge within it. In sum, both in Ratzinger's view and in the movie, people have a physical existence. This is no longer true if one moves to the simulation II. The difference between *The Matrix* and the simulation II is

clear: the former maintains the separation between the physical reality and the artificial reality, the latter collapses the physical into the artificial, to the point that, to borrow a line from Chalmers, life in an artificial world can just be as meaningful as it is in a physical world. In other words, the artificial life in the simulation II is real.

While a popular interpretation of *The Matrix* suggests that the artificial is the prison in which people lose their freedom, in the movie the opposite is true: people receive freedom at a mental level so that they survive in a physical prison. They are mentally free (under certain standards) but, without a doubt, they are physically unfree. This dialectic between freedom and non-freedom, too, is absent in the simulation II. It is meaningless to debate whether these artefacts are free will agents because they are the construction of either programmers or machines. They may be constructed with free will, temporary free will, permanent free will, free will exercisable on certain circumstances of subjects, and so on. Whatever the configuration, these artefacts do not have an existence independent from the programmers of the machines. Like in *The Matrix*, their free will can be constructed, manipulated, assigned, and revoked. Unlike *The Matrix*, however, there is no Red Pill that awakens the humans to the dramatic situation of their condition. There is no way out. For those minds within the simulation, the digital world is real, and there is nothing beyond that. The best-known scene in the first *Matrix* movie occurs when Morpheus offers to Neo the choice between a Red Pill and Blue Pill: the former opens the door to the external reality, the latter to the virtual reality regulated by the Matrix. But this choice is a real choice only in the situation described by the pontiff. In the virtual reality of the Matrix, however, the real choice is whether to take the red pill. In the simulation II, there is no choice at all.

In *The Matrix*, the mega-computer generates the artificial reality because it needs the energy produced by the humans. In the simulation II, instead, the purpose of the engineers is unclear. The difference is not insignificant. In the movie, the artificial sustains the mental activity of the human beings forced through the manipulation of their mind to live a claustrophobic life in water-filled cocoons. They are kept alive to generate the energy for the Matrix, and the artificial is necessary to produce energy. The utilitarian character of the artificial is proved when one thinks that in *The Matrix*, the human bodies provide the energy that sustains the mega-computer; if they die, the machine stops working. In the fourth instalment of the series, *Matrix Resurrections*, the machine recognizes that humans can produce more energy through a different kind of manipulation: no longer control but enjoyment. Nevertheless, the main theme remains, that is, the Matrix needs the energy generated by the bodies: the artificial, used as a device to control or eventually enhance humans, is a means to an end. The scope of the humans populating the simulation II, instead, is unknown. They may be there for *divertissement*, research, or business. They may be there for pleasure, tedium, or sadistic satisfaction. In *The Matrix* humans are instruments, but in the simulation II, they can be anything their generators will [17].

4. Multiverse and simulation

First of all, I am interested in investigating the possible connections between the Metaverse and the computer simulation. Is there a sort of continuum between the Metaverse and the computer simulation, so that the former can be interpreted as a prelude to the latter? In other words: is an occasional use of the simulation - as occurs in the case of the Metaverse - a preliminary step toward a life in a simulation and ultimately to a simulated life? Or do the Metaverse and the computer simulation belong to different technological paradigms? To answer this question, one has to look again at the basic assumption of the simulation I and simulation II.

In his book *Reality+*, Chalmers draws a distinction between 'bio-sims', who conserve their real body outside the simulation, and 'pure sims', whose entire existence is inside the simulation. In *The Matrix*, in fact, the body of the human beings is immersed in an amniotic liquid, while their biological brains are plugged into the Matrix. The world they experience is digital and simulated, but their brains are not; they are biological. This is the condition of 'bio-sims'. The situation of the 'pure-sims', instead, implies that their brains are computational. This means that their brains may well be part of the same computer that is simulating the physical world. To fully appreciate the difference between these two options, it is worth remembering that Chalmers is known for formulating the 'hard problem' of consciousness, which asks how seemingly immaterial experiences arise out of the material brain [18]. His answer is a form of dualism where (1) the mental supervenes 'naturally' on the physical, and (2) mental states are ontologically distinct from and not reducible to physical systems. And yet, both mental states and physical systems are different kinds of properties or features that enable a human being to have both kinds of properties at once. Based on these two assumptions and the distinct form of dualism that emerges from them, Chalmers interprets the condition of 'bio-sims' as coherent to the hypothesis that consciousness has to be biological: the biological brains are connected to the Matrix. On the same assumptions, he frames the condition of the 'pure-sims' as consequential to the possibility that the mind itself is part of the simulation. In this case, the simulation of a human mind may or may not have the same kind of consciousness as the original brain. Chalmers argues that a simulation of a human brain would have the same kind of mind, the same kind of conscious states, as the brain it is simulating. If a simulated consciousness is the same as consciousness, it means that consciousness can be copied. As a matter of fact, it could be enhanced, too. I will return to this point.

Of course, if what matters is consciousness, then living in a simulation is meaningful. In an interview, Chalmers mentioned that the way life remains perfectly meaningful, simulation or non-simulation, is interesting for him as a philosopher. In fact, he stated, "this can teach you lessons about what it is that is most meaningful in life. Maybe it's not what the world is made of, but more like your conscious experiences and your relationships with other people, all of which can be present in a simulation just as much as in ordinary reality." [19] Thus, the

place in which human experiences happen is not so relevant because what matters is consciousness. Consciousness is explanatorily relevant to anything significant that happens in the world. Obviously, the primacy of a disembodied consciousness is one possibility among others: I think of the primacy of human experience and of an embodied consciousness, for example [20]. The question, however, is bigger than that. To simulate consciousness equals creating it artificially. And to do that one must first understand how the brain does it as a distinct biological process in real life. Therefore, only a civilization advanced enough to build a conscious machine out of nonbiological materials can produce consciousness. Here the point is not simply that people of this era still lack a theory of the brain, but that, quite inevitably, they lack a detailed theory of the laws that bridge the brain and consciousness, too.

I understand that the simulation is not a scientific hypothesis right now; it is a thought experiment for how reality could be. That said, I take the example of the digitalist philosophy of Eric Steinhart. At the risk of oversimplification, Steinhart's digitalism centres on the idea that brains (and eventually the whole body) can be framed in terms of purely informational process. (While Chalmers calls himself a property dualist, Steinhart rejects substance dualism and embraces patternism, which states that persons are bodies and that bodies are material machines running abstract person programs [21].) He notes that: "Older writers conceived of the soul as the form of the body. But digitalists think of this form computationally: the soul is the body-program. Although persons are entirely material machines, this materialism does not entail mortality. On the contrary, the very fact that you are a material machine serves as the major premise in a series of naturalistic conceptions of life after death. Since life is a purely informational process, it can be copied, it can be enhanced." [22]

In brief, Steinhart argues not that the brain is computable, but that it can be seen as a simulated mind. The biological materials that produce consciousness can be understood in the same fashion as the nonbiological materials. Of course, it is conceivable that Science might show that human brains are a bunch of software processes, but to do so would require a major scientific revolution, and such a revolution does not seem to be at hand. The problem is not just that Steinhart fails to give the reader any reason to suppose that the specific mechanisms by which brains cause consciousness could be explained by 'information', rather that he could not. It is true that, as Steinhart mentions, scientists and philosophers like Moravec, Tipler, Bostrom, and Kurzweil are digitalists. And it is also true that these thinkers have reframed "things like souls and gods - souls are programs and gods are universe-simulating computers" [22]. But it is also true that scientists know too much about how the world works to take this view seriously as a realistic hypothesis. It is a speculation with no foundation within the current knowledge about how the world actually works. In the present day, people with a headache take pills for pain, they do not rebut their brain. And astronauts go to space, and space seems fairly real. Of course, as a science fiction fantasy one can imagine that the Moon is simulated, and thus was the landing of Apollo 11, but science fiction is not science. And it is not Philosophy either.

Philosophers and futurists have reasons to believe that we cannot rule out that we are in a simulation. It is a hypothesis to take seriously. But it is a thought experiment for how reality could be, and no one has so far put it forward as a scientific hypothesis. Therefore, I answer no to the question on a continuum between the Metaverse and the simulation hypothesis. The Metaverse, in fact, does not have to build an artificial replica of a brain to cause consciousness. Therefore, the human nature is not at risk with the Metaverse. The computer simulation is exciting, but it can get overly intense; the challenge is to keep it consistent not only with the evidence from Science but with human beings' total world experience.

5. Metaverse and Christian life

Pope Ratzinger had in mind neither *The Matrix* nor the simulation when he made his statement. In his view, the artificial is a space in which one comes and goes. "It is part of the daily experience" of each of us [Pope Benedict XVI, *Address for World Communications Day*, 2013]. The essential nature of the human being, suspended as it is between Nature and the divine, does not change. But what about the form of life, the practical existence of each of us? Do the ways people live, think, and believe, change? Most Catholic ethicists, who are concerned with the relationship between the character of virtual reality and the character of Christian life, would answer positively to this question. Already today virtual reality is used to train surgeons, design cars, and replace morphine in cases of high pain. Because of its ability to tap into brain pathways, virtual reality is also showing promise in the fields of cognitive and behavioural therapy as a substitution for prescribed drugs. For example, a study from the University of Maryland suggests that the mental capacity or faculty of retaining and reviving facts in a virtual situation is 9% more accurate than in a real situation [23].

Even in the rudimentary way available these days, virtual reality can trick the human brain and convince it that it is in the presence of a real world. The user literally experiences presence, that is, to be present, with the emotional and physiological status that comes with it. The same can be said concerning embodiment, namely, the feeling of agency and control that one has within his/her own body. Like presence, it is not something that human beings are typically conscious of on a day-to-day basis. Yet, it has an enormous impact on the perception of the world and ourselves. An example of this is called the 'rubber hand illusion', which is a simple demonstration that shows how the human brain can be easily tricked. In the 'rubber hand illusion', scientists use a fake hand to trick the human brain and explore how the mind combines information from the senses to create a feeling of body ownership. In an immersed virtual reality, the same reaction can be produced with regard to the entire body. After a few minutes in a virtual reality situation, the brain starts adapting and thinking that it is our body [T. Nguyen, Speech at TEDxMinneapolis, November 21, 2018].

The Metaverse is not the real world but has the potential to become the symbolic universe in which we (i.e. modern humans) live. Yes, we interact with the real world including, as the pontiff rightly noted, computers, telephones and the Internet. But the Metaverse is not computers, telephones and the Internet, because it is not an object in the world; as a symbolic universe, it provides the very frame of how we approach objects. Ideally, people bring their epistemic frameworks into the digital environment. Alternatively, people switch from an epistemic framework suitable for the 'real' reality to another better suited for the digital reality. But there is more than a chance that people bring back from their experiences in the digital world certain epistemic frameworks that are applied to the 'real' reality. Not all reality is just in one's brain: people interact in a real world but through epistemic frameworks imposed on them by the digital universe in which they occasionally live. The main point in discussion, at this point, is whether the Metaverse is compatible with the Christian life, namely, the sense of self in relation to the eternal world.

Roman Catholic social ethicist Levi Checketts offers an interesting perspective when he reassesses the technology-religious relationship in terms of the 'profane' nature of technology and the 'sacred' nature of Christianity. In this view, "the profanation of technology threatens the sacrality of Christendom, while the sacrality of Christianity offers a respite from the alienating nature of technology" [24]. This, however, is not Checketts's view and in fact he contends ultimately that "technologies and technological artefacts not only are not opposed to Christianity, but that they can be sacred, or at least sacramental" [24, p. 133]. His point is that, if technology is opposed to Christianity, technology cannot be sacred. But, if technology is compatible with Christianity, technology can be sacred (or at least sacramental). Like others, Checketts accepts the definition of sacred as separation [25].

As mentioned, I consider the sacred in terms of integration in distinction of the two orders, the divine and the natural. It is not an entity, but a relationship: the relationship between the Creator and His creation. To paraphrase a sentence of David L. Schindler, sacredness, with its call to share in the perfect love of the Trinity, is inclusive of the objective order of human beings. Sacredness is intended to comprehend the order of human beings in its entirety. (The original quote reads: "In a word, holiness, with its call to share in the perfect love of the Father in the Son by the Spirit, is inclusive of the objective order of intelligence and of the meaning and truth of all created entities. Holiness is intended to comprehend the order of being in its entirety." [26]) In brief, sacredness is the name of the relationship between the order of the divine and that of Nature. In a strict sense, therefore, nothing is purely profane. Some theologians would push the envelope even further: the whole Universe is sacred. Or, in the words of Bryan C. Hollon, who is echoing Henri de Lubac on this, "everything is sacred" [27]. The subject of sacredness is God and all other things insofar as they are related to God. The sacred does not stand for separation, but for unity in distinction of the order of the divine with that of human and non-human nature. The qualification 'in distinction' protects Christianity from the risk of pantheism.

But what is the exact meaning of the expression "everything is sacred?" As said, it supposes that the sacred stands for unity in distinction of the order of the divine with that of Nature. To understand this statement, one may look at the work of French philosopher Jean-Pierre Dupuy, who has condensed his thoughts on the role of the sacred in human life in a beautifully written book, *The Mark of the Sacred* [28]. The core of the statement is in Dupuy's distinct understanding of the sacred. He borrows from French sociologist and anthropologist Louis Dumont the concept that the sacred is a form of hierarchy between the order of the religious and the order of the mundane. Hierarchy suggests the relationship of 'encompassing' and being 'encompassed'. Dumont, in fact, articulates this concept of hierarchy in terms of the "encompassing of the contrary" [28, p. 3]. He offers an example from the Bible: Adam is the first human being and the first man. As the first human being, he encompasses his contrary, Eve, and as the first man, he is the contrary of Eve, the first woman [29]. Dupuy offers examples taken from Dumont's work: in theodicy, good coincides with (a) the totality, and (b) the element that is contrary of its complementary element, that is, evil. The essence of theodicy in Dumont's words is that "good must contain evil while being its contrary" [28, p. 4]. Theodicy is about good, but good encompasses evil.

The dispositive of the encompassing of the contrary works as follows: what is superior at the encompassing level becomes inferior in the encompassed level, and vice versa. Dumont rediscovered pope Gelasius' influential letter to Emperor Anastasius, *Duo sunt*. In this letter, dated 494 C.E., the pontiff defined a distinction between 'two powers' that he called the 'sacred authority of priests' and the 'royal power'. These two powers, he said, were to work in harmony, although emphasizing the distinction between the two. Thus, in religious matters, the emperor must bow to the will of the pope, but in mundane matters, the pontiff must bow to the will of the emperor. But, pope Gelasius noted, "of these [the sacred authority of the priests and the royal power] that of the priests is the more weighty, since they have to render an account for even the kings of men in the divine judgment" [30]. According to the Gelasian doctrine, therefore, the royal authority is inferior to priestly spiritual authority although the priestly authority is inferior to the royal authority in the mundane domain. Dumont elegantly summarized the Gelasian doctrine: "priests are superior, for they are inferior only on an inferior level" [28, p. 4].

What is it exactly that Dumont provides to Dupuy? The point that Dupuy wants to make is that when the hierarchical order enters in crisis and eventually collapses, the superior no longer contains the inferior while at the same time being its contrary. Instead, the government of the superior on the inferior is replaced by the self-government of the inferior. The inferior self-transcends itself and takes the appearance of the superior becoming the authority of itself. In brief, the inferior steps outside of itself, so that it stands in a relation of exteriority to itself, and in this way it creates a self-regulating system. An example may help: in theodicy, the good governs evil while at the same time being its contrary. When the sacred is overturned and the hierarchy collapses, good and evil become identical; evil, as an inferior, self-transcends and takes the appearance of its

contrary - that is, good [28, p. 5]. I offer another example: in the decades of the Cold War, the nuclear bomb seems to have been effective in preventing the world from disappearing in a nuclear holocaust. The nuclear bomb, which is evil, self-transcends and becomes good in a relationship of self-exteriority. The bomb governs the bomb [28, p. 16]. Even though his reflections are not centred on technology, in his book Dupuy has polished a formidable sentence: "desacralization threatens to leave us defenceless against our own violence by unchained technology" [28, p. xvi]. Once the sacred is lost, technology becomes self-governed and the authority of itself. Technology governs technology. That sentence looks particularly remarkable if one knows that Dupuy is an engineer by training and the author of books on Cybernetics and Cognitive sciences [31, 32]. Of course, Dupuy has in mind an anthropological understanding of the 'sacred', the result of a mechanism of self-externalization. Here he follows not only Dumont but also René Girard in the idea that ritual practices allow humans to project authority beyond their control; therefore, ritual practices produce self-limitation [33].

There is a difference between Dupuy and Pope Benedict XVI. The former sees the ritual as a retaining wall against the abuses of technology; the latter probably had in mind human nature working at the same scope. That said, their logic is the same: as long as the sense of the sacred is conserved, and therefore the hierarchy between the order of the religious and the order of the mundane is at work in the social imagination, virtual reality, and therefore the Metaverse, cannot affect human life. This is probably what Pope Benedict XVI had in mind when he pronounced his positive words about virtual reality. Virtual reality is part of the daily experience of many people and belongs to the order of the mundane, which is under the government of religion. Ratzinger would probably maintain his point: Christian life is not at risk as long as the sense of the sacredness of human nature is maintained. Another way to put it is this: one need not be worried about the Metaverse. The Metaverse is not a problem; the desacralization of human nature is a problem. To paraphrase Dupuy, desacralization threatens to leave us defenseless against our own violence by unchained virtual reality. In positive terms, the sacred is our best line of defense against the dangerous effects of technology on our life. The solution to the threat of the Metaverse is not to reduce virtual reality but increase the sense of the sacred.

6. Conclusions

It is simplistic to see the Metaverse as a specific application of the computer simulation. The Metaverse, in fact, does not assume the artificiality of the entire reality like the simulation does. The Metaverse, however, may impact the pastoral, liturgical, and spiritual dimensions of life. The impact, however, is likely only in case the sense of the sacredness of human nature is lost. Thus, a sense of the sacredness of human nature protects Christian life from the challenge of an invasive virtual reality.

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