

On the Metaverse and its Implications for Human Identity

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1 Introduction

The metaverse is fast becoming a sophisticated virtual space providing enhanced immersive experiences to its users. Facebook, with its rebrand to Meta, has signaled a commitment to building such a place and other companies are following suit. While the technology itself is still lacking in most respects, the intention is clear: to increasingly move interactions between humans and their environment from the physical to the virtual.

This transition is of high interest for philosophers because of the plethora of questions it raises regarding our identity as humans and the way we perceive our environment. As soon as virtual worlds become immersive enough so that users lose themselves and are able to live a different life online, their identity, one might argue, changes, even if only temporarily. For this to be true, the virtual world undoubtedly needs to be advanced enough to support a life which is as good as, or even better than, the life in the *real* world. To better establish a common context from which arguments can be had, we need to define what the metaverse is exactly.

The metaverse we speak about in this paper is a broader concept than the examples produced by contemporary tech companies. When we discuss the metaverse, we are talking about a futurist example of a complete world comparable to ours in all but its physical roots. While such a metaverse would indeed allow the advantages discussed today, such as a distinct reduction in the need for physical transportation, and the ability to experience food separate from sustenance, this paper targets a broader interpretation. A metaverse which encompasses every aspect of life would allow us to be immersed for much longer periods of time, transforming from merely a tool to something more. Indeed, if the metaverse encapsulates our life as a whole, then we may no longer consider it a tool that we use and rather ascribe it a new category.

This paper aims to discuss the question of whether a metaverse, with its immersive and ubiquitous character, has implications for our personal identity. We therefore pose the thesis that the metaverse does in fact have major implications for our identity as humans. We assume that personal identity is invariably linked with our

identity as humans and will thus use the terms interchangeably. It remains an open question to define personal identity in a way which encapsulates every aspect we commonly associate with it. The requirements on a model for personal identity turn out to be fairly complex because identity over time plays an important role in ethics as well. Since there is no single account of identity, we will frame our thesis in the differing views of *animalism*, *psychological continuity* and the *embodied mind theory*, and argue whether living in the metaverse constitutes a change of identity from our previous selves under these frameworks.

2 Discussion

Assuming that the sophistication of the metaverse improves over time such that a life in the virtual world has obvious benefits over a life in the physical world, it stands to reason that more and more people would subscribe to the idea of ‘unplugging’ themselves from the physical world. While they would still have their physical bodies grounded in the physical world, their mind and *person* would not be present anymore. Rather, it would be transferred from the physical world into the virtual world where their presence would be felt again by the people around them.

Presence in this sense is not to be understood as simple nonexistence akin to non-player characters (NPCs) in computer games. These characters commonly do not interact with the actual player apart from having short, fixed and prerecorded exchanges where the player is severely constrained in their ability to influence the nature of said exchange. Instead, presence in the virtual world is to be understood in the Heideggerian sense of *Dasein*. Only if persons are fully aware of their existence in a virtual world, and have the feeling that their personhood is a product of the virtual environment they are in, will they be able to experience *Sein*. However, there is one sense in which *Dasein* in the virtual world is still contingent on *Dasein* in the physical world. The relation of a person to the inevitability of death does not exist in a similar way as it does in the physical world. If a virtual world allows for a nearly unlimited amount of self-expression, it must also necessarily allow the virtual person to conquer death. The person in the physical world is arguably acutely aware of the insignificance of death in the virtual world because death has no real, tangible consequences for their physical being. Therefore, depending on how *person* and *personhood* are defined, not all of what constitutes a human being as a person is transferred to the virtual world.

This dualism or ‘splintering’ of one’s identity complicates the analysis of human identity in the metaverse. There seems to be a rift or a decisive change between the person in the physical world and the continuation of said person in the virtual world. It remains open to argument whether the virtual person is indeed a continuation of the physical one or a being in its own right. In any case, assuming that this rift exists, which is supported by the fact that the appearance, behavior, mannerisms and even the personality of a person will markedly change once plugged in to the virtual world, at least a part of a person’s identity will undergo changes as well. These changes, especially if substantial, have the potential to cause existential crises in individuals if they are not equipped to deal with them. Since identifying implications for human

identity in a metaverse heavily depends on how *human identity* is defined, we will turn to the prevalent identity theories to further our argument.

2.1 Animalism

The term *animalism* has been introduced by Snowdon [11] to describe the view that we are essentially animals. It is also commonly referred to as the *biological view*, *organism view* or *biological approach*. Animalism provides an answer to our fundamental nature as human beings, namely that we are essentially animals. This materialistic view disallows an interpretation of human beings being a combination of mental states or of us having souls as our essence. Instead, what makes us humans human is the fact that we are biological creatures and exist only insofar that our organisms are functioning and grounded materialistically in reality.

From animalism we cannot only draw conclusions about our fundamental nature—our identity as humans—but also about our persistence as beings. A human being x at a point in time t_1 is identical with y at a later point in time t_2 , if all the necessary conditions that make x an animal also make y an animal. In this sense our being is reduced to that of an animal as it exists over time. Unfortunately, this type of definition does not provide a satisfactory answer to the question of what our human identity is because the necessary conditions are not further explained.

It also does not deal with the question of what makes us persons. While it is plausible to say that if someone is a person that someone is also necessarily an animal, the inverse does not seem to be true [8]. Animals like cats, for example, are usually not labelled as persons. On the other hand, we might call angelic creatures or robots—if they are sufficiently advanced—persons as well but then it seems false to draw the conclusion that they are also necessarily animals. If we made such a conclusion, we would have to alter the definition of what constitutes an animal to the point where the term becomes essentially nondiscriminatory and therefore useless.

The persistence question is of high relevance for our identities in general. When do we as humans cease to exist? Depending on how animalism is interpreted, death, as we commonly understand it, might not even be possible. As soon as animals die, they are not animals anymore because the necessary conditions for them to be labelled as animals in the first place are not satisfied. This is only one interpretation of death under animalism and there are many more because the *necessary conditions* are open for debate. Nevertheless, the transition a human being undergoes when their life increasingly takes place in a virtual world, i.e. the metaverse, can be construed as death for the remaining *biological* part. An animalist might therefore argue that the human being as an animal dies during the transition to the metaverse. Since *we are essentially animals*, it follows that a significant core of what we are is left behind.

An argument against the thesis that humans as animals die once they live their lives in the metaverse is that their body will technically remain in the physical world in one form or another. This assumes that their mind is not *uploaded* to the metaverse which brings a host of other issues with it (see [6] for a detailed account of whole brain emulation). However, the distinction between technically

still having a human body and definitely not having one is arguably not relevant if the overwhelming majority of time is spent in the metaverse. The connection between the physical body and the rest is already weak to the point where complete severance of said connection has few consequences. On the other hand, if the virtual part is dependent on the physical body to feel sensations and to have authentic experiences, the body will remain part of one’s identity even if only as a ‘glorified’ interface for a machine to stimulate our virtual feelings.

If the fact that *we are animals* is true and, even stronger, that *we are essentially animals* is true, it stands to reason that we are leaving part of what makes us human—our essence—behind as soon as we enter the metaverse. We argue that it is highly problematic for a ‘thing’ if its essence is suddenly disjoint from ‘the rest’. We can therefore conclude that plugging ourselves into the metaverse is indeed problematic for our personal identities.

2.2 Psychological Continuity

One of the main criticisms brought against animalism is that it does not take our minds, our experiences and psychological states into account. In fact, animalism only cares about the mind insofar that it is thought to be grounded in the physical substance of the brain and that the preservation of that brain is paramount to ensure continued existence of a human being. Most people will arguably object to the idea that what makes them ‘them’ is purely their biological body and the fact that they are animals. The idea that persons consist of a conglomerate of experiences, memories and psychological states is much more in line with the common perception of ourselves. Nichols and Bruno [7] provided empirical evidence to support this claim.

We note that memory of past experiences on its own is not considered to be enough to sustain a person’s identity. This is illustrated by a thought experiment where a person at a young age remembers doing a specific action. In this case we say that the child remembers learning how to ride the bicycle. At a later age that same person still remembers the experience. Later still the same person remembers other things about the younger person which suggest that the two persons are psychologically ‘linked’ across time. However, the old person does not remember the experience of learning how to ride the bicycle anymore. The young child is the same person as the middle-aged person and that person is in turn the same as the old person. The old person, however, is not the same as the young child because it cannot remember the experience of learning how to ride the bicycle anymore. The contradiction lies in the fact that personal identity is transitive over multiple instances of one person across time but memory is not. Thus memory on its own is not a *sufficient* criterion for personal identity but it might be *necessary*.

The idea of psychological continuity is that a person at one time is the same person at another point in time if both persons’ psychological states are causally linked with each other [10]. If I happen to have a certain psychological state now, it is likely a state which is dependent on or produced by a previous psychological state. Expanding this concept to a series of psychological states provides *psychological continuity* over time and allows us to pinpoint what or who a person is at different

snapshots in time. In this sense psychological continuity answers the persistence question of identity in an elegant way.

The transition of a person's life from the physical world to the metaverse is consistent with psychological continuity with regards to personal identity. Whether the 'next' psychological state in a series of states is occurring while the person is in the virtual world or not is irrelevant. The person in the metaverse still has recollection of previous memories, experiences and their general state of mind, even if all of those happen to originate from the physical world. The continuity is not disturbed in any way as there is no event of fission taking place, which would allow the current person in the metaverse to be causally linked with two different but apparently continuous previous persons.

Contrary to animalism, psychological continuity does not pose any problems for personal identity in our opinion. Considering that there is no transfer of one's mind into another body—which is where psychological continuity typically falters—it stands to reason that the virtual body is merely an extension of the already existing body in the virtual world. However, if the metaverse allows for mind uploading or whole brain emulation, our justification does not hold.

2.3 Embodied Mind

Perhaps the clearest and most commonly used argument against an all encompassing metaverse and the idea of mind uploading, a process where we remove the conscious mind from the body or otherwise wholly sever our connection to the physical body, is the theory of the embodied mind. The embodied mind theory makes the clear distinction that the identity of a mind relies on its physical properties, a clear conflict with the presumption of the mind upload hypothesis which goal is to sever the mind from the physical realm. This in itself may not be considered as big of an issue as it may initially seem though, as if indeed the body is a vital part of the mind, why can we not consider it part of the mind and include the body in our simulation. If we consider a metaverse as a simulation of an entire reality, the simulation of one's body should not be a big leap.

It is precisely this conclusion which Cappuccio [1] argues is shortsighted, and he proposes the following argument; From the fundamental principle of embodied mind theory it follows that the mind strongly depends on its bodily implementation. Simultaneously it follows from the key assumption of mind uploading that the mind is substrate independent, that is to say, it can exist on different substrates, similar to how software can exist on varying computer systems. While it may seem like there is already a conflict here, this may not necessarily be the case, as the interaction with the body, or substrate, does not definitively rule out compatibility with different substrates. Instead we must look deeper at the implications of mind uploading; mind uploading not only requires the mind to be able to be replicated on different substrates, but it must also be possible to transfer the mind from one substrate to the other. From this we must conclude that, given the principle of embodied mind that the body is physically constitutive—and must therefore be persistent—the core principle of embodied mind is incompatible with the key assumption of mind uploading, disregarding any technical discussion on the feasibility of a suitable

virtual substrate. [1]

We can state without further hesitation that given the embodied mind theory, we must definitively lose our individual identity through the process of mind uploading.

3 Conclusion

In this paper we have looked at the concept of a metaverse and the implications it may have for our personal, individual, identity. In doing so, we framed the concept in different ways and explored various aspects which might affect our identity. First, we discussed what it means to have an identity, and introduced the concept of an existential crisis in those cases where the ubiquitous nature of our virtual personification creates a rift between it and our physical being.

We then discussed various outlooks on the concept of identity, and discussed their implications in the context of a metaverse. In Section 2.1 the concept of animalism is explained and we consider what it means for us to be *essentially animals*, discuss the importance of death and our biological nature, and finally conclude that we must be losing a part of our whole when we enter the metaverse, which in turn affects our identity. Yet, we also determine that animalism may not fully capture the essence of our being, in particular that it fails to acknowledge the intricacies of our minds, experiences, and psychological states.

In section 2.2 we discussed this point, and introduced the empirically backed notion that persons consist of a conglomerate of experiences, memories, and psychological states, leading to the concept of psychological continuity. We concluded that psychological continuity is not problematic for our individual identity in the context of a metaverse provided that we do not transfer the mind. As long as the mind is not transferred, the psychological continuity is sustained—we retain our memories, experiences and general state of mind—and our identity is not at risk.

Finally, in section 2.3 we discussed the embodied mind theory and its implications with regards to the metaverse and mind uploading. In the section we discussed the various arguments for the incompatibility between mind uploading and the embodied mind theory, and yet again concluded that mind uploading, or the transfer of our mind, must result in a loss of personal identity.

At the start of this paper we asked the question whether a metaverse would have implications for our personal identity, and we posed the thesis that this was indeed the case, human existence in a metaverse has a major impact on our identity as humans. From the discussions in our paper we conclude that there are two major approaches to the question of an immersive metaverse.

First, and perhaps more meaningful, is the concept of true transcendence, uploading our mind into a virtual existence, wholly severing our connection to the physical realm. For this version we clearly conclude that our identity would be lost in the transfer process, and even if a mind does end up in this virtual world, it would no longer share its original identity.

Second, we consider the more realistic scenario of an embodied human connecting to the metaverse, with the physical body acting as an interface. This version does not run into the same issues as the first example, as the embodied mind theory is

no longer an issue and psychological continuity is sustained, yet we argue identity is still affected. The full immersion in a virtual world would, despite the person not necessarily fully detached from the physical one, induces a rift between the physical person and their continuation in the metaverse. Although we may not speak of a true loss of identity, there is still a strong and significant effect.

These arguments lead us to accept our thesis and to agree that indeed human existence in a metaverse has a major impact on human identity, even if it does not necessarily conduce to a complete loss.

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