The Dissemination of Metaverse from an Embodied Perspective and Its Shift Towards Human Physicality

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Abstract

The Metaverse is a digital society that seamlessly merges reality and virtual, where users take the form of digital avatars. As the Metaverse evolves, user consciousness may detach from physical bodies and exist autonomously in the virtual world. The Metaverse's dual nature, both virtual and real, strengthens individual consciousness, but it can also lead to a dissolution of practicality and cognitive subjectivity. This prompts a reconsideration of the evolution of human nature, as the maturity and evolution of the Metaverse not only changes the fundamental structure of human existence but also alters corresponding methods of communication.

Keywords: Metaverse, virtual technology, subjectivity, body, reconstruction

1. How to Define the Body?

In communication studies, the body is not merely defined as a physical entity, but rather as dynamic and situational, influenced by cultural, social, and power factors. Throughout the history of communication research, numerous scholars have developed models to conceptualize communication processes, using key terms such as source, transmitter, channel, receiver, and destination to describe individuals' connections. Significantly, during the oral communication age, information transmission required the use of the body.

Locke's liberal individualism established the dominant view of the body in communication studies, emphasizing that "the body is the source of private property, and that labor on the body creates personal property, while the body also serves as a container for individuals' internal attributes" (Liu Hailong, 2018). As such, communication is not possible without the use of our bodies.

2. Possible Directions for Future Development of the Metaverse

Since the explosion of Metaverse popularity in 2021, it has been two years, and its full potential has yet to be achieved. As such, predicting its future development requires looking at literature, film, and gaming trends.

In the movie *Ready Player One*, a virtual world called the "OASIS" is created, where users engage in immersive game experiences through external devices. The protagonist, Wade, enters the OASIS using VR peripherals where he has a permanent identity ID, Parzival. This absence of a physical body and presence of a virtual one is the mainstream direction of Metaverse development research. By integrating

technology with the human body through VR glasses, smart wristbands, smart helmets, and other sensor-like devices, a virtual identity can be created to enter the Metaverse.

In the age of oral communication, communication between individuals was face-to-face and directly between their bodies. (Chen Xiang, 2012) Thus, in this communication stage, an individual's thoughts and body were intimately connected, and the body was the sole carrier of communication behavior.

The continuous development of modern technology has brought about changes in the form and status of the body in communication and transmission due to the emergence of virtual reality technology. The Metaverse has created cyborgs as the primary form of communication, where machine devices are integrated into the body. Some of the famous cyborg characters in movie history include General Grievous in *Star Wars*, Motoko Kusanagi in *Ghost in the Shell*, Kaneda in *Akira*, and Ataru in *Battle Angel*.

While current technology does not yet allow people to become cyborg warriors like General Grievous, prosthetic-like sensors can upload human body data to the Metaverse to create a virtual identity, with the virtual body becoming the primary subject of communication.

In Western traditional thought, the physical body has been viewed as subordinate to the soul. For instance, the 17th-century French philosopher Descartes proposed the concept of "Mind–body dualism," suggesting that there exist two entities in the world: a "material entity" that has only spatial attributes and cannot think, and a "spiritual entity" that can think but lacks spatial attributes. However, the emergence of cyborgs presents a completely different status that merges consciousness and physicality, breaking the dualistic opposition between body and mind.

During the era of traditional mass communication, the physical constraints greatly limited the scope of communication. Face-to-face language or physical information exchanges could only be transmitted over short distances. However, the emergence of new media technologies represented by the internet, known as the third technological revolution, has broken through the temporal and spatial limitations of oral communication. Nonetheless, in the representation and reproduction of the

subject, a screen always exists, which reduces the amount of information obtained during the communication process.

In the Metaverse, the human body will be at the forefront of information dissemination, and virtual cyborgs will replace the physical body. These cyborgs simulate all human senses, such as vision, touch, and hearing, thereby creating a sense of "realness" for the human body. This allows the human body to avoid technological "dissection" to some extent, and re-centers information transfers around the human body.

The second form of the Metaverse is more "sci-fi," as it involves people inhabiting a digital utopian world as digital information through decoding and encoding. The structure of the body is completely deconstructed, and consciousness exists independently in the form of various information symbols.

The concept of "Uploaded Intelligence" (UI) is introduced in the American TV series *Pantheon* by LOGORHYTHMS which is a method of uploading the human brain to a computer. This innovative technology enables the human brain to be uploaded to a computer, freeing consciousness from the physical body's limitations, including aging and death. In essence, UI scans the neural connections in the human brain at a molecular level, uploads all information, including thoughts, consciousness, emotions, and skills to the cloud, and encodes it into a dynamic simulation of the brain.

David, the father of Maddie in the series, is a prime example of a UI person. His consciousness has been uploaded into a digital utopian world after his death, freeing him from the restrictions of his physical body. David's consciousness lives in a digital utopian world in the form of digital information through the encoding and decoding of numerical data. With the help of the game *Reign of Winter*, David and Maddie can have a reunion and hold conversations in a virtual gaming world. This idea raises the question of whether virtual bodies can completely replace physical bodies in the future Metaverse.

3. The Potential Dissolution of Subjectivity in the Metaverse's Implicit Trust in Machines

The Metaverse presents itself as a dual world, comprising both a virtual and a physical reality. While it enhances human subjectivity through its various virtual experiences, it also results in a gradual transfer of human subjectivity from the

physical to that which lies at the level of consciousness. This transfer commences with the generation of virtual assets and entertainment content, ultimately leading to the establishment of a new world founded on the implicit trust placed in machines. This phenomenon has the potential to trigger the dissolution of both human practical and cognitive subjectivity.

3.1 The Potential Relinquishing of Human Subjectivity Through Personalized Recommendations

The Metaverse is undeniably constructed upon the foundation of circle culture, which relies on the logic of group classification based on personalized recommendations. The cornerstone of this approach lies in algorithms that possess intelligent decision-making capabilities and have the power to intervene in individual user preferences. As a result, humans, to some degree, surrender autonomy over their decision-making to algorithms, resulting in a weakening of their subjectivity.

Media information transmission plays a crucial role in people's ability to establish a cognitive world. If users are exposed to content exclusively curated by algorithms for an extended period, they may begin to believe that they are autonomously constructing an objective world through technological services. In reality, this single pattern of information transmission exacerbates cognitive biases, significantly increasing the potential for manipulation of individuals by technology.

3.2 The Backlash of Objectification and the Infringement of Personal Information by Technology

In June of 2022, a Weibo user unveiled that the Study App *Xue Xi Tong* had leaked 170 million pieces of personal information. This incident sparked media coverage, and it was suggested that some users may have sold relevant data information. One particular user was found to have offered *Xue Xi Tong* data at a unit price of 10 yuan per person, with purchase of the full database costing 3000 yuan. The truth of this incident is yet to be fully uncovered, but it highlights the long-standing problem of the backlash technology can generate in people's lives.

Rights form the fundamental element of subjectivity. When individuals relinquish their autonomy to technology and allow themselves to be manipulated, controlled or alienated, various rights that people possess as subjects can be violated. Illegal organizations collect, mine and analyze personal data submitted by users in attempts to obtain confidential information and infringe upon their privacy for profit. In the future, the human-machine relationship in the Metaverse will tend toward integration, with not only identity information, but even individual consciousness and human thoughts being potential targets for infringement by technology.

3.3 The Identity Crisis Triggered by Compensatory Virtual Reality

The Metaverse is a utopian virtual world that has been constructed beyond reality through the application of advanced technology by technocrats. "What is missing in the real world will be compensated for in the virtual world, and when possible, the compensation in the virtual world will be realized in the real world." (TURNOCK J., 2013) According to the theory of "compensatory virtual reality," users who cannot achieve self-value recognition, survival experiences or who are faced with pressures and emotions they cannot release in the real world can be compensated through new virtual identities.

In the Metaverse, everyone possesses their unique digital identity or virtual ID. These digital "selves" can serve as either a mapping of reality or an ideal fiction, and users can communicate freely through their virtual IDs. However, virtual communication in the Metaverse is not truly face-to-face, and the resulting sense of presence is merely a technical illusion. This could cause users to indulge in virtual communication and neglect reality, leading to difficulties in distinguishing between the virtual and the real. This, in turn, can create cognitive barriers or make it challenging for individuals to integrate into the real world. Such neglect can make it easy to forget social roles and responsibilities in the real world, leading to a failure to identify with reality's 'I' and the Metaverse's 'I.'

3.4 The Rational Degradation Triggered by User Inertia

In entering the Metaverse, individuals are placed in a position where they must unilaterally or passively accept the Metaverse creator's design. They are transformed from people in the real world to mere objects in the Metaverse. The Metaverse, founded upon data and computer hardware, creates settings that

offer only the illusion of reality, with users being passive participants in these experiences.

The Metaverse is constructed over three layers: the data layer, the interaction layer, and the technology layer, each one comprised of abstract digital information. The abundance of information resources can limit people's enthusiasm for rational thinking, ultimately resulting in the degradation of user subjectivity within the Metaverse.

4. Conclusion

The primary theme of the television series *Pantheon* examines the struggle and reconciliation of identity recognition for User Interfaces (UI). Whether it is a UI or a clone, both raise the philosophical question of "what does it mean to be human?" Can individuals who have lost their physical bodies and cannot be touched still be considered human? Is consciousness the sole defining character of a human being? Can UI technology offer freedom from death?

When Maddie and Ellen encounter the resurrected David, they respond differently. Maddie, who receives mental support from UI David, still sees him as her father, while Ellen views him as a collection of electronic signals.

What remains to be seen is how future humans will exist in the Metaverse. As a higher form of a virtual environment, it will eventually evolve into a hybrid form with cyborgs in the Metaverse. We are cyborgs, and cyborgs are us. As humanity progresses and technology evolves, the subjectivity problem associated with virtual reality technology can only be truly resolved by strengthening human subjectivity in reality. "The best way to predict the future is to create it," we should always look forward to the future of the Metaverse.

References

Chen Xiang. (2012). On the relationship between media system and body: Based on A. Hart's "media system theory". *Journal of Southwest University for Nationalities (Humanities and Social Sciences)*, *33*(09), 159-162.

Liu Hailong. (2018). The body problem in communication and the future of communication research. *International Journalism*, (02), 39.

TURNOCK J. (2013). Removing the Pane of Glass: "The Hob-bit", 3D High Frame Rate Filmmaking, and the Rhetoric of Digital Convergence. *Film Criticism*, *37/38*(3/1); 30-59.

Yan Shichao. (2022). The loss and recovery of human subjectivity in the era of artificial intelligence. *Science and Technology Communication*, 309-0153-04.