

Honors 100

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The Quest to the Unknown: The Simulation Theory

Curiosity is the innate driving force of the human mind, motivating people to explore the unknown realms of life. Uncertainty causes people to formulate answers to questions through the imaginative and experimental processes. People discover new possibilities of life by tackling ideas that are deemed impossible. The decision “let’s go to the moon” by President Kennedy in 1961, for example, led the United States to achieve the unthinkable: the successful landing of Apollo 11 (Garber). In today’s society, space exploration continues to rapidly advance, such as SpaceX’s mission to take humans to Mars by 2026 (Sheetz). As time passes, humans hope to surpass milestones that were viewed as impossible by preceding ancestors. They rely on digital technology to assist them in their quest of finding answers. However, the search for the unknown also forces humans to risk their overall understanding of life. Our ability to advance technology is not only contributing to a heavily technology-dependent future, but it is also guiding us to better understand reality: nothing is what it seems to be.

The Simulation Theory, a scientific hypothesis first proposed by Rene Descartes in the 17th century, raises the idea that all components of life, from atoms to living species, are fabricated lies (Moravec). This hypothesis focuses on how humans are not the creators that they portray themselves to be; instead, humans are actually the creation of an unknown entity (Alexander). Posthuman civilizations are believed to be the creators that have reached the Simulation Point, as detailed in *The Simulation Hypothesis* by Rizwan Virk, a computer scientist

and video game creator. Virk argues for the plausibility of the Simulation Theory by discussing scientific, philosophical, and religious evidence that demonstrates how the human race is controlled by posthuman civilizations. These civilizations are societies that have surpassed the Simulation Point, so they have “developed the necessary technological powers to create” hyper-realistic simulations (Virk 28). Unlike the human race, posthuman civilizations have reached the maximum computing powers that have yet to be discovered by modern-day people.

In a simulated world, everything, from inanimate objects to humans, is considered digital information ingrained by posthuman civilizations. The unknown creators have the ability to simulate multiple realities that are indistinguishable from actuality; therefore, humans are not aware that they are potentially programmed objects. As technology evolves, the Simulation Theory strengthens because “everything [humans] have achieved and . . . care about depends crucially on relatively minor changes that made the human mind” (Bostrom, 00:02:34-00:02:42). This implies that the original creators of the human mind control all aspects of humankind, including knowledge, thought, and technology. Proponents of the Simulation Theory believe life is a simulation rather than a reality since, according to Elon Musk, “The odds that [humans] are in a base reality is one in billions” (Musk, 00:02:28-00:02:32).

People’s ability to develop new inventions, such as video games and virtual reality headsets, strengthens the Simulation Theory and illustrates the limitless potentials of technology. Nick Bostrom, a Swedish philosopher and advocate of the Simulation Theory, proposes three possibilities in *Are You Living in Computer Simulation?*. He illustrates that humans have not surpassed the posthuman level, posthuman civilizations would only run simulations that do not relate to them, and humans are currently living in a simulation (Bostrom 1). The computing powers of technology have significantly evolved, leading to the possibility that advanced

civilizations can already generate inauthentic reality-based simulations. Within the simulation, the subjects are controlled by the original race that designed the reality-based creations. The basic idea of the Simulation Theory, according to Bostrom, is it would “be rational to think that [humans] are likely among the simulated minds rather than among the original biological ones” (Bostrom 243). There is the possibility of life being created by an external entity; people, therefore, do not have control over their own realities because they are just digital information. Therefore, the occurrence of one of these three proposed ideas is very likely because technology is continuously evolving and developing to the point that is beyond human comprehension.

The history of video games, for example, illustrates the possibility of the Simulation Theory. Elon Musk is one of the leading faces in the technology industry, and he supports the Simulation Theory by discussing the development rate of video games. In 1972, *Pong* was introduced to the public by Atari as one of the first modern-day arcade games (Virk 36). This simple game only consisted of one sphere and two rectangles, where it did not require complex programming. The creation of *Pong*, however, became a basic foundation for future technological creations. For example, the development of *Second Life* by Linden Lab in 2003 transformed the meaning of playing video games; players were not “just creating an avatar to represent [their] character but creating parts of the world” (Virk 45). Players can completely disassociate themselves from their physical world by transforming into their virtual identities in this video game. They are allowed to form relationships, have jobs, and maintain virtual currencies, factors that all simulate physical reality (Virk 45). Players of *Second Life* already possessed the inability to distinguish between their lives on-screen and off-screen, where this illustrates how technological improvements only blurs people’s idea of reality. The history of video games, therefore, evolved from small pixels to photorealistic realities within the short time

span of forty years. This rapid improvement showcases the endless potentials of technology, such as how humans can transform simple codes into complex games that are played by millions of users.

The extreme advancement of video games questions the validity of reality because experiences seen on technological devices become indistinguishable from the physical world. The fast rate of video game advancements has only occurred in recent years, where in the future, this rate can grow exponentially. This phenomenon showcases the possibility that posthuman civilizations have already surpassed the Simulation Point, so they have the ability to develop real-life simulations that created humans as subjects in their games (Virk 31). The Simulation Theory, therefore, raises the idea that people are similar to avatars in video games. The aspects of life that humans are conditioned to, such as relationships, priorities, and goals, are all displayed in virtual realities. Modern-day video games include “millions if not billions of individual agents of consciousness, complete with individual quests and storylines for each agent” (Virk 32). From having to overcome challenges to fulfilling their life purposes, humans, like avatars, are set on a journey to accomplish different tasks. People’s quests vary depending on their identity and environment because “while the world [humans] see is in some sense ‘real,’ it is not located at the fundamental level of reality” (Bostrom 253). Humans’ inability to comprehend reality causes “the boundary between what is physical and what is computer generated to fade” (Virk 202). The mixed reality becomes a transitioning point for future digital creations because technology can take people further out of the physical environment and into the virtual world.

The creation of highly advanced immersive technologies, such as virtual reality (VR) headsets, can place people into a three-dimensional online world. The human brain is influenced by virtual stimuli and past experiences to believe that the individual is actually in the simulated

environments. Users of VR headsets can move and behave as if they are in physical reality. They possess the ability to look in any direction, feel the environment, and consciously make decisions with each action, where these factors further engage users into the inauthentic reality (Penn and Hout). Consequently, humans cannot understand that they are in a simulated environment, which is why they perceive their virtual pain, joy, and sadness as real emotions. The ability for humans to wear a headset that simulates an alternate universe supports the Simulation Theory. People do not comprehend that they are living in a simulation because the created environments, such as those seen in VR headsets, were created with intentions of making the human experience feel authentic. The human mind is vulnerable to virtual stimuli, so “the more convincing (or immersive) the virtual world is, the more [humans] start believing [they] are in the virtual environment” (Penn and Hout). As a result, people are not aware that they are living in a simulation because their understanding of reality is restricted by their conditioned surroundings.

As technology continues to evolve, the credibility of the human mind begins to diminish. Instead of living in the physical world, humans are part of the “Great Simulation,” a virtual reality that arises from the Simulation Theory. In the “Great Simulation,” humans believe they are real but in fact are just meaningless pixels. Data and computation, therefore, become the two defining elements of human existence, excluding consciousness, morality, and rationality. People’s consciousness becomes viewed as “a set of information and a processing of that information” (Virk 93). Their consciousness, therefore, becomes a simulated factor that limits people’s ability to generate their own decisions, thoughts, and behaviors. Consciousness becomes digital information that develops in human beings, allowing people to act and function as programmed objects. This also relates to biological reality, specifically human growth, because “there must be some information . . . [that] tells the cells how to grow” (Virk 94). The biological

existence of humans becomes discredited because even the simplest unit of life, cells, relies on a computational system. From consciousness to the human body, information is transported, shared, and processed in order for the entire body to function. As a result, humans' innate dependency on programmed information, similar to algorithms of technology, further reveals the interconnectedness between reality and simulated environments.

The development of science, specifically the quantum indeterminacy, fosters people's inability to break the simulation because knowledge becomes optimized. Quantum indeterminacy is the principle of existence that explains how particles, such as electrons, only consist of properties when being observed to ensure optimization (Virk 97). Without observations, the state of the particles remains unknown. For example, Erwin Schrödinger, in 1935, performed an experiment where he placed a cat in a box that was filled with radioactive materials (Castelvecchi). Schrödinger's cat experiment developed the quantum indeterminacy because the status of the cat remained unknown until the box was opened (Castelvecchi). The cat had a fifty percent probability of being alive or dead while it was trapped in the box, where this ambiguity contradicts reality. Similar to Schrödinger's cat experiment, all events of a person's life remain unpredictable until he or she encounters that situation. The idea that the future determines the outcome of life's phenomenon supports the Simulation Theory. Humans are only introduced to components that are needed for life to exist. As a result, "the fate of humanity may depend on what the superintelligence does," which is why humans do not have control over future events of their lives (Bostrom, 00:07:39-00:07:43). People do not have control over their realities because their perspectives, knowledge, and thoughts are dependent on the simulated phenomena. Therefore, factors that humans have never encountered remain nonexistent until there is a form of interaction that takes place. By doing this, knowledge and energy are optimized

for when the interaction does occur, where this is similar to how video games are rendered to maximize computing resources.

Because it is impossible to comprehend what lies beyond the unknown until it is reached, humans must not develop a concrete perspective of life. Perspectives, ideas, and milestones will change as humans continue to evolve throughout time. Technology's newfound advancement and popularity illustrate how the truth is only discovered when humans take the initiative to follow their quest to the unknown and use their imagination. The gradual change of technology, from telephones to automobiles, showcases people's potential in uncovering ideas that were viewed as impossible in the past. As a result, humans must dive into the unknown despite the inadequate understanding of the direction of which they are heading. There is an endless possibility of answers, right or wrong, that await to be discovered; humans must make the decision to act on their curiosity in order to search for their truths. The existence of life's complex elements, such as the Simulation Theory, do not lose credibility because of humans' inability to see them. Instead, humans gain clarity since those ideas foster their curiosity in proceeding further into the unknown.

Works Cited

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