

What are some of the ways the narrative of SOMA comments on the idea of consciousness?

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1 INTRODUCTION

Consciousness has been one of the main topics of philosophy and psychology since ancient Greece. Now we can explore this topic with Science fiction and try to find an answer to it. It could also grant some insight into what constitutes consciousness about digitized humans and in contrast to potential general AI which replicates human consciousness. In this research paper, we are exploring some of the ways in which the narrative of SOMA comments on the idea of consciousness. SOMA is a particularly interesting game from the standpoint of alterity and estrangement, as explained by Gualeni (Gualeni, 2022). First of all the idea of consciousness will be explained, and then copying your consciousness will be discussed and finally the idea of living artificially in a computer will be explored.

2 SHORT SUMMARY OF SOMA

At the start of the game Simon, The main character of SOMA, is involved in an accident and the doctors tell him he only has a few months left to live. As a treatment plan doctors scan his brain. This brain scan, however, was distributed and as a result Simon's scan eventually ended up in a "cortex chip" implanted in a body in an underwater facility where the rest of the game takes place. He wakes up here in his new form and tries find out what happened to him. Early on he meets Catherine, who is also existing as a digital copy, who explains that a comet wiped out all life on the surface and what remains of humanity is contained in this underground facility. Both of them navigates through this facility to launch a super computer called "The Ark" into space, which contains a virtual reality where they will put all the digital copies of humans they could get a hold off, so that humanity would, at least in this digital form, survive.

3 WHAT IS CONSCIOUSNESS?

There is no collective answer to consciousness. Koch (Koch, 2018) argues, if he follows the definition of other philosophers, he would come to the conclusion that the universe is meaningless and our experiences are just illusions. He mentions the pain from the tooth abscess he would have will not go away by simply saying it is just an illusion. Instead he argues we should focus on the part of the brain that activates when we have a toothache, this will lead to the minimal way to experience consciousness.

He mentions if someone has a brain injury that makes them less mobile or paralyzes the body they would still feel the emotions, smell etc. So we do not need whole brain activity to be conscious. and if someone loses their cerebellum that helps them control their motor ability to play piano or do ice skating they would still recall memories and will not lose their sense of self so we do not need cerebellum either. Furthermore, he inspects people with brain tumors in

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the frontal lobe. After the surgery these people had some problem with motor movements, repeating the same word and movements over and over again but their personality and IQ improved without changing their conscious experience. He argues our consciousness lies within the hot zone where the posterior cortex is. If we damage this part of the brain a little bit the patients would have a hard time seeing colours, space and motions which would disturb their experience as a being and individual and would have a significant impact on their character.

If we look into a more abstract and meta-physical way to look at consciousness instead of a scientific one, we can find Gennaro (Gennaro, n.d) who argues that consciousness cannot be physical because it does not have connection with the mental as they are part of the duality. and this leads to the belief in life after death. If consciousness is not physical then that means it continues to experience things even after death although if it is physical then consciousness dies with the brain. He mentions this brings the definition for the soul but the problem is the term soul is hard to differentiate to mind. Even religious texts struggle with this idea of explaining what is a soul because it is not explainable. Although he tries to explain it with patients that have near death experiences, where they were floating to a light and saw doctors working on their body.

In SOMA The definition of consciousness is not heavily discussed as the main characters were not fit for this philosophical debate. During a part of the game Simon ponders whether or not his spot in heaven is already taken by the original Simon (who died many years earlier) and if that meant his current self would be denied entry to Heaven and potentially get stuck in Limbo. This sentence shows that Simon believes in an idea of Heaven but cannot rationalize his current experience with his belief. Meanwhile some of the other characters were committing suicide in the hopes of transferring their soul into their copies believing that if they die before their copies diverged (created new unique experiences/memories) they would be their original self in a new body. Here the game actually supplies a definition of consciousness, as this belief stemmed from the idea (that one character came up with) that consciousness is essentially a continual stream of experiences and by killing their original self the continuity is upheld through the copy. So in the SOMA universe most people seem to believe in the idea of humans having soul (or something akin to it) but cannot rationalize their current experience and idea of heaven with the situation they are in.

4 IS COPYING CONSCIOUSNESS POSSIBLE?

In SOMA the copying of consciousness is a part of the premise, so naturally it is possible in the context of the game. How this

copying is achieved in-game is by producing a complete scan of the individual's brain, which can then be used to create a "living" copy of that individual. Simon goes through this process at the start of the game, and later one of the copies (the one the player ends up controlling) gets copied over to a new vessel two times. First into a new body and then, at the end of the game, into The Ark. But, though this process is shown to be possible in-game, would such a thing be possible in real life? According to Watanabe (Watanabe, 2023) it would theoretically be possible to make such a digital copy in the real world, though no such copying has been achieved yet. One thing both Watanabe (Watanabe, 2023) and SOMA make clear, though, is that such a copying of the mind would not include the *transfer* of the individual's consciousness to the copy, simply a *replication*. In the game this gets communicated to Simon (and by extension the player) directly via Catherine, because Simon was under the impression that he would "himself" get transferred over. This point about the practical implications of copying is similarly brought up in Cyberpunk 2077 (CD PROJEKT RED, 2020) in relation to "soulkiller", a program in the Cyberpunk 2077 world which kills a person and saves a copy of them digitally.

4.1 Is a copy of your consciousness also you?

In SOMA copied minds never saw themselves as artificial, they were seeing themselves as human with body and thought they were the original ones. Most of the robots Simon encounters in the game calls themselves humans and sees themselves as flesh and blood. When Simon then points out that they are robots they don't believe him. Then throughout Simon's journey he realizes that he is himself a robot, but was oblivious, or possibly even in denial, of that fact. So from a subjective viewpoint these copies which the player encounters in the game certainly believe themselves to still be "themselves". However, the awareness they have of their situation is often quite low. According to Tasha Eurich (Eurich, 2018) there are two types of Self-Awareness: internal and external and they are divided by high awareness and low awareness. At the start of the game Simon starts with both low internal and external awareness. He is in perfect denial about his situation. With the help of Catherine, he reaches a high internal awareness by accepting the fact that he is a robot, but still struggles with external awareness because he remains ignorant to how copying works. At the end of the game he becomes fully self aware about everything and what he wants to accomplish but by that time the tragedy already happened and he is all by himself.

5 DOES A COPY OF YOURSELF DEVALUE THE ORIGINAL SELF?

One viewpoint brought up in the game is that at the point of copying, the "original" (i.e. the one currently being copied/brain scanned) and the copy being created are essentially the same individual as they are at this point identical. But, as time goes on the copies evolve into separate individuals as they gain their own personal experiences and memories. So one way of looking at it, based on this viewpoint, is that in the initial state when the copies are essentially identical to the original there is no real value in the copies as they haven't yet become an independent entity. But that as time goes on and they diverge from the original they gain value as they grow



Figure 1: Simon seeing himself in the mirror. In-game screenshot (Frictional Games, 2015).

into their own independent being. In this way the original holds basically all the value initially but the copies gain value as unique individuals as they diverge, though at no detriment to the value of the original as it.



Figure 2: Human Simon vs Robot Simon (Logri, n.d)

6 WHAT VALUE DOES OTHER COPIES CARRY TO THE COPIED PERSON?

In one part of the game Simon "revives" a scientist in a simulation to get some information out of him. Every time Simon revives him, he quickly realizes he is in a simulation upon which Catherine (who accompanies Simon throughout the game in the form of a brain chip in a tool Simon has) shuts down the simulation and the scientist "dies". This becomes a game inside of a game. You change something in the simulation to see if it works then shut down the simulation. At first even if you see this scientist as a human being by bringing him back so many times you become desensitized about his situation as he becomes someone to get some information to progress the game. When you get the information you need you can either delete his data, or keep it in the database, but at that

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point you revived this scientist numerous times and you are the only thing that can bring him back so the choice doesn't matter.

At the end of the game a copy of Simon makes it to the arc and he meets with Catherine. At that point, Simon thinks their actual self made it into this artificial world and he is so happy about it, probably not thinking about the copies he left behind while his previous version stayed behind and arguing with Catherine why they are still not in the computer. At that point Simon says they deserve to be in that computer because he was the one who did everything which means he sees himself as an individual being and the copy is not an extension of him. Meanwhile Catherine says they should be happy that some version of them made it into the computer and gets to live the life they wanted to live. So the copies of Simon are not holding any value to him as they are not sharing same consciousness as him

7 DO WE NEED PHYSICAL BODIES TO BE HUMAN?

Simon starts out as a born and bred human, in a human body, with a human mind. At the start of the game Simon, because of the lingering effects of the brain damage he suffered in the car crash, goes to get his brain scanned as part of an experimental treatment. After the brain scan Simon (or rather, a copy of him) wakes up in an underwater facility as a "cortex chip" implanted into a woman's dead body. This is Simon's first potential step away from being human. Simon is later copied to a new cortex chip and inserted into another body, and finally in the end he gets copied again but this time into a computer. However, while Simon himself is never implanted into a robotic body, many of the characters encountered are brain scans in cortex chips put into robotic bodies.

Essentially the game presents three different states of being: the original human state, a brain scan (stored in a cortex chip or computer), and as a brain scan implanted into a new body (either robotic or human). To help answer the question of whether physical bodies are necessary for being human we can pose a different question: Does Simon, at any point during the game, stop being human? At the start of the game we can conclusively say that he is human as he hasn't in any way been altered from his natural human state. Then he is put into a dead body but still can move around and function as a human. In the end of the game Simon and Catherine upload their brain into the computer and they experience something like virtual reality. They see 3D space and have a human body despite being in a computer, furthermore they view themselves as human beings and actually happy about their situation. They definitely seem to remain conscious (or something akin to it) but the question of whether or not they remain human is harder to answer. They certainly seem to move further away from humanity, losing their original human bodies and brains, but from how the game presents it their minds seem to remain intact (at least for Simon who acquires human bodies, the ones who acquire robotic bodies seem to fare worse), so the question then becomes: Is that enough for them to still be considered human? There really isn't any answer to this as presented by the game, and similarly it would be hard to answer looking at it from the viewpoint of reality as well.

8 CAN YOU BE HAPPY IN AN ARTIFICIAL WORLD AS A COPY?

When Simon and Catherine copy their minds into the Ark and realize they didn't make it, but rather their copies did, the credits rolls and the player sees the point of view of the copy of Simon that made it into the Ark meeting Catherine in the Ark and celebrating their success. From that moment the Ark will be their home for eternity and the question is will they be bored eventually? We don't have any explanation in the game to address this question but we can look into the religious explanation for heaven as the theme is similar. In Islamic definition (Mohammad, 2022) of heaven when the person goes to heaven it is personalized for them and they are in different levels of heaven according to their good deeds. God's answers to this question is the introduction of exponential pleasure. If a person eats a fruit then eats it again later the fruit becomes more juicy and delicious than the previous one. so the humans will not get tired from doing the same thing over and over again. So this kind of implementation would make people happy and satisfied in an artificial world where they would stay till eternity.



Figure 3: The actual physical Ark which gets sent into space at the end of the game. Concept art from SOMA (Frictional Games, 2015)



Figure 4: Inside of the simulation in the Ark. In-game screenshot (Frictional Games, 2015).

9 CONCLUSION

In this paper we explored some of the ways in which SOMA comments on the idea of consciousness. The idea of consciousness does not have a direct answer to it but we can say that if we look into it scientifically we can find that it is in the hot zone of our brain. If we look into it spiritually consciousness is divided between mind and soul. Maybe in the future copying the consciousness would be possible but we have to be able to copy our memories and reflexes for that and over time the copy will diverge from the original self because of its different external experiences. Whether or not such a copy requires a physical body to be human might be hard to answer, but there are certainly ways in which the functions of the human body can be replaced for a more human experience. In SOMA, the body's role in the experience of human consciousness is replaced by new robotic and human bodies and sensations replaced by simulations.

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