

To Upload is to Live Forever: Explicating the Eschatological Implications of Mind-Uploading in Neal Stephenson's *Fall or, Dodge in Hell*

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Abstract

The article seeks to analyze the apocalyptic and eschatological dimensions of mind uploading that is, transferring of mind and consciousness from a biological to a computational substrate as described in Neal Stephenson's novel *Fall; or, Dodge in Hell* (2019) primarily from a Christian religious perspective. The first section will deal with the implications of uploading of mind and consciousness to a nonbiological digital substrate, the second will look into the idea of the soul in a digital world and see how it relates to the traditional Christian and also non-Christian concepts soul, afterlife and immortality; and lastly, the third section will depict how the idea of digital reincarnation of God has been employed in the novel and in what ways it differs from or conforms to the traditional picture of a Judeo-Christian deity.

Keywords: Apocalyptic, Simulation, Eschatology, Technoutopian, Posthumanism

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Introduction

If the Universe itself is computational, then anything that it contains like life, mind, consciousness and physical laws everything should be computational and thus can be simulated. Wolfram's cellular automata theory and Seth Lloyd's projection of the universe as a quantum computer functioning on qubits are such computational theories of Universe. Now, this article

wants to analyze Neal Stephenson's *Fall; or, Dodge in Hell* (2019) and see the broader implications of such a reality where anything and everything can be simulated. More specifically, the study will deal with the apocalyptic, eschatological implications of brain-porting scenario involving scanning a human brain capturing all of its salient detailsⁱ as portrayed in *Dodge*. The apocalyptic eschatological dimension of brain uploading or emulation involves assessing the impact of such a project which will not only dramatically alter the present world, but also herald the coming of a new age that would be dramatically different from and insuperably better than the presentⁱⁱ. The overarching theoretical framework employed in this study will primarily be based on but not limited to Stephen Cave's Replication View of immortality based on his Soul Narrative of immortality, Martine Rothblatt's theory of mind files, mindware and mindclones and Karl Rahner's concept of *Vorgriff*.

Apocalyptic, Eschatological Dimensions of Whole-Brain Emulation

Richard "Dodge" Forthrust, the CEO of an MMORPG called T'Rain and the protagonist of Neal Stephenson's *Dodge* seeks ways to continue his life beyond the cessation of his physical body in the meatspace and for this purpose is busy constructing a most immersive form of simulated reality. In man's quest to transition from a physical, material reality to one which is digitally defined, highly fluid, and purely information-laden, the first problem that he might encounter is that of the hard problem of consciousness. David J. Chalmers opines, the really hard problem of consciousness is the problem of experience. When we think and perceive, there is a whirl of information-processing, but there is also a subjective aspectⁱⁱⁱ. A successful replication of thinking, feeling avatars in the hyperreal world of simulated afterlife hinges on our ability to grasp the fundamental nature of consciousness itself. Stephen Cave whose Replication View of resurrection will be used in this study to analyze the idea of immortality through brain uploading as explored throughout the novel, has opined that The crucial question for the plausibility of the Soul Narrative is therefore whether your mind or consciousness can, like the captain of a sinking ship, leave your dying body to continue its existence^{iv}. According to transhumanist philosopher Martine Rothblatt, the two most important determiners in our quest to attain technology-powered immortality will be mindware, or a digital file of one's thoughts, memories, feelings and opinions and mindclones- that is, intellectually and emotionally alive virtual humans^v. Consciousness is a phenomenon that has always fascinated many eminent

physicists, neuroscientists and philosophers alike. Consciousness is the fundamental property of spacetime as theoretical physicist Andre Linde asks, Is it possible that consciousness, like spacetime, has its own intrinsic degrees of freedom?^{vi}. While Tegmark (2015)^{vii} views consciousness as a state of matter, Ray Kurzweil goes one step further when he says that it is by knowing more accurately how our brains function that we may someday hope to understand God himself. So, as we evolve and expand the brain's neocortex and become more godlike^{viii}, in recent times, various eminent scientists and philosophers like John Hagelin Donald Hoffman, Giulio Tononi and Christof Koch, Robert Lanza, Sir Roger Penrose and Stuart Hameroff have attempted to provide new and valuable insights into the highly perplexing nature of consciousness and all of them have maintained that a pure materialist, objective description of the Universe will be incomplete without a proper theory of consciousness to complement it. In the novel, we see when the whole-brain emulation has not yet been accomplished, Richard Forthright wondering on the question of whether the qualia or subjective mode of awareness are really 'intrinsic to the working of the mind or just an accident of evolution?'^{ix}. While speculating on the mode and outcome of Richard's brain uploading project, neurologists and philosophers too have been puzzling over the question of whether to treat qualia as intrinsic to consciousness^x. However, Martine Rothblatt suggests that consciousness might very well be an evolutionary epiphenomenon arising at a critical moment when our DNAs information processing capabilities had undergone a radical change and as such It would not seem less improbable that inanimate lines of code can be ordered by human intelligence to assemble into conscious-trending clumps of software programs^{xi}. Many of the theories of consciousness posit a computational view of the emergence of consciousness and do not preclude the possibility of simulation of brain and replication of the human mind in a non-biological, digital substrate. Sandberg and Bostrom believe that 'full human brain emulations should be possible before mid-century'^{xii}. At the same time, Christof Koch and Giulio Tononi believe that in near future once we will have reduced our consciousness to patterns of electrons, we will be able to upload our mind, thoughts, memories, and personality to a computer^{xiii}. Various other tech luminaries, computer scientists and neuroscientists also share this optimistic view of brain/mind upload^{xiv}. According to Randal A. Koene, mind designates the totality and manner in which our thoughts take place, while brain refers to the underlying mechanics, the substrate and the manner^{xv} through which thoughts are carried out. So, before diving deep into the main study of the implications of a virtual reality culture constructed

with the aid of computerized information systems, driven by a series of paradigm-shattering breakthroughs, and marked by immortalization via identity-reconstruction procedures where natural processes of our baseline biological bodies are always reversed, reconfigurability and malleability determine the nature of digitized selves, virtual and analogue realities switch roles, digitized memories on computational substrates become the basic building blocks of existence and the traditional, religious hope of spiritual salvation is further augmented and complemented by a techno-utopian vision of software-based physical immortality, we already can taste the complexity and profundity of the problems we have to overcome if we seek to transcend our biologically based superfluous mode of being.

The most basic belief underlying this entire project of immortalization through upload is that an upload could have a virtual (simulated) body giving the same sensations and the same possibilities for interaction as a non-simulated body^{xvi}; however, it is with the pursuit of our goal to transcend the barrier of earthly awareness by connecting the human consciousness to a cosmic plane of consciousness that the concept starts getting trickier. This idea that the Universe has made us conscious to make us capable of fulfilling a greater purpose of self-actualization is also mentioned in the novel: Not only can we defeat entropy, but the universe, in a way, wants us to use our powers as conscious beings to make things better. And part of that is defeating death^{xvii}. Complexity theorist Stuart Kauffman has posited his fourth law of thermodynamics that could allow life-forms to create order and self-organization thus countering the second law of thermodynamics that guides universal decay and disorder. James N. Gardner in his Selfish Biocosm hypothesis also posits a picture in which the intelligence gene in our universe is programmed to replicate itself spontaneously towards higher-order and organization where the finely tuned fundamental constants of nature will serve as its DNA: Life itself, when it becomes sufficiently evolved, sophisticated, and pervasive, will duplicate the cosmos^{xviii}. This extropian vision of defeating entropy and death parallels the picture of Omega Point cosmology presented by physicist Frank J. Tipler which in turn is based on Teilhard de Chardin's idea of resurrection through cosmic consciousness. Tipler's Omega Point is another such instance of physical eschatology program where ideas from theoretical physics have been employed to give us an information-theoretic picture of God capable of executing an infinite amount of operations thus ushering in a boundary condition of space-time in which all the dead are resurrected, producing

an endless virtual afterlife^{xxix}. Emulation of mind along with consciousness can be envisaged as one of the several ways which an intelligent civilization might seek to adopt for self-organization and self-replication in a non-biological and substrate-independent manner. The idea of constructing whole-brain emulation by capturing every bit of data in the neural synaptic connection is one of the most coveted dreams of simulation technologies: By duplicating synaptic interconnections and plugging them into the cybernetic matrix, humans could transition back and forth between flesh and data^{xx}. Since life as a complex adaptive system will try finding newer and more diverse ways of replicating itself by symbiotic evolutionary advancements, simulation can become such a medium of symbiogenesis where life can incorporate in it an entirely novel mode of immortalization and self-replication. The novel relies on the specific kind of reductionist view of consciousness that maintains the assumption that somehow this entire complex phenomenon involving the qualia or subjective conscious experiences can be broken down to specific neural correlates or precise electrochemical activities in the brain. The question then will be to see whether this reductionist view of consciousness can encapsulate any form of theological eschatological in a true sense and for this purpose we need to take a deeper look into the ways that computer-generated hyperreality has significantly effected or altered the fundamental patterns of engagement with the reality of its masses. Certain characters in the novel are convinced of the disruptive capabilities of the hallucinatory power of the virtual world and they feel the existence of religion itself is seriously threatened. Many feel that in an age when living within the data-intensive personalized hallucination streams have become commonplace, Religion as such as it has existed and flourished for thousands of years doesn't stand a chance^{xxi}. Though both the practices of immersing oneself in the experiences of virtual reality and or participating in spiritual practices of traditional religions follow the same technique of adding something fantastical and imaginative, to the physical reality that everyone sees^{xxii} so that it becomes more addictive for it followers. We may be tempted to conclude that this hyperreal world of simulacra based on the participants wholly customized personalized stream of algorithmically generated alternate reality^{xxiii} traps the minds of its followers in the same feedback loop that its religious counterparts do as when they help their followers to believe in something higher than themselves and promise to connect their experiences to an even grander form of metaphysical reality. The all-pervasive and all-powerful simulation technologies have gifted mankind with a godlike capability to manifest themselves in any form they choose in their

recreated fantasy. This is akin to the digital reformulation of the Biblical trope of epiphany where God used to reveal Himself before the characters not directly but through some kind of avatar or manifestation^{xxiv}. In the same vein, in the digital universe, one's identity becomes fluid and dynamic almost to the level of being epiphanic since here, one can choose to present himself in any one of a number of persistent faces^{xxv}. Rothblatt also points this out when she says that identity of an individual is not stable or permanent, rather it is dynamic and dependant on its mindfile and mindware constituents and mind uploading will only make us even more aware of this truth. Whether the identities are stored on chemical states on billions of neurons in a brain's connectome or on software states on billions of bytes of code in a mindware connectome^{xxvi}, both can serve as the basis states for construction of an entire world for the avatars. The plasticity and fluidity of such a digital world are naturally also free of most of the dualities and binaries. The digital world of Bitworld is free of most of the dualistic divisions which plague the Meatspace or the physical reality since It didn't really have the ability to recognize humans, or to reliably tell one human from another^{xxvii}. The VR realm of Bitworld is based on its capabilities to simulate each and every aspect of the physical world of Meatspace or the world of life and death since the Bitworld not just scans and uploads those scans to clouds but also instills in them qualia, experiences, a social life, memories, all of the other things that souls in Meatspace had^{xxviii}. Rothblatt maintains that, When we copy our consciousness into a mindclone (via mindfiles and mindware), we are copying our soul into the mindclone^{xxix}. To become an alternative to the physical world of embodied materiality, the simulated one not just faithfully mimics those basic constituents of identity but also promises to saturate it with an excess or abundance of it. It is through an excess or surplus of details that the simulated world forms a plane or reality in continuation to the physical one. Most of the customers who volunteer for brain scanning do that out of a belief in the continuation of life in an afterlife the simulated world, the belief that the resulting process was in some sense a continuation of their existence in a sort of afterlife^{xxx}. Elmo Shepherd who later becomes El in the Bitworld had his belief firmly placed in this type of continuation of memories and experiences to the other side of the existence: that brains can be simulated and that once the simulation is switched on, you'll reboot in exactly the same state as when you last lost consciousness. Like waking up from a nap^{xxxi}. Lorrimar also stresses upon this aspect of retention and continuation of memories: an uploaded mind will at least retain the memory of the body it once possessed^{xxxii}. Rothblatt opines that in a

virtual world, not all the processes would be so extremely smooth and here instead of waking up into a new state as if from a sleep, we may wake up as strangers in our foreign bodies where we will have no sense of belonging or no certain answer to our most basic questions. However, all these will not stop our simulated mindwares from trying to discover our reason of existence or finding some connection to a humane creator in the same way as our minds do in the physical world in its quest for God as the transcendent un-caused cause behind all the creation: The natural mindware of a brain's connectome that leads natural humans to pine for such answers will be replicated in the digital mindware of a mindclone^{xxxiii}. The souls of the scanned persons do not seem to function as inert or monolithic avatars, rather they show enormous capacity for developing several distinctive traits of their own and take on personhood in the hyperreal realm of digital uploads: But the reality was that when scanned brains were booted up as new processes, with the ability to draw upon computing resources and to interact with the other processes, they took on seemingly personlike attributes^{xxxiv}. Thus, uploaded avatars in the hyperreal world seem to transcend all forms of embodiment, both virtual and material: One's soul transcends one's body and one's mindclone, just as it transcends one's prosthetics and one's grave^{xxxv}. The idea of transcending the physical barriers and finding new modes of becoming in an alternate plane of reality is itself full of religious implications. This idea unites together both the Christian trope of resurrection as well as Hindu, Buddhist, ancient Greek and Egyptian concept of souls in an afterlife. As Lorrimar maintains, the idea of both the virtual form of resurrection in a simulated reality as well as an immortal, imperishable resurrection body that Paul describes in 1 Corinthians 15 ^{xxxvi}can be realized under mind-uploading. So, reflecting on the implications of attaining a transhuman state in the form of digitized immortality, we may say that such a technologized resurrection is not a tool for the secularization of the traditional, Christian apocalyptic tropes, rather it holds promises to help mankind realize the dream of an eternal disembodied mode of existence which while incorporating the core tenets of Christianity also goes beyond it. Though critics of transhumanism find flaws in the transhumanist vision of immortality and find it to be at odds with the traditional, Christian idea of immortality and resurrection, there are still many ardent proponents of this transhumanist version of immortality via upload. French theologian Jean Danielou has opined that traditional Christian eschatology sees death an invention of God's love to prevent the immortalization of death and techno-immortality through upload is another way of going against God's will in that it seeks to revel in

and indefinitely extend the weariness that would result from the indefinite repetition of biological existence in a man who had managed to escape from death^{xxxvii}. However, following Hopkins line of argument we may say that techno-immortality through upload will only open up a new avenue for transcending the animal^{xxxviii} and thus pose no threat to God's plan of salvation, since humans are already immortal in God's eye. In his article Utopianism and Eschatology, Hava Tirosh-Samuelson explores some core similarities in the apocalyptic and eschatological aspects of trans/posthumanism and the core beliefs of Jewish religious traditions. He dubs the venture of uploading of selves to the digital substrate as the spiritual goal of transhumanism^{xxxix}.

In the novel, Richard's uploaded godlike self-dubbed Egdod finds its rival in El and for El, salvation in digital afterlife lies towards finding new avenues for new modes of being and becoming, freed from biological limit^{xl}. Egdod himself is a self-created being, the first of the Gods in the Bitworld: Egdod had first become conscious and extracted his soul from chaos^{xli}. The adventures of Egdod and El in the digital afterlife involve dealing with such a transcendent and numinous concept as soul albeit in a digitized form in the virtual afterlife. Now, mind uploading and techno-immortality might not at first impress us as a true technoscientific version of the Christian idea of whole-bodied resurrection for it involves such numinous concepts as souls, which seem to be more in tune with the classic projections of the afterlife in the pre-Christian Greek, Egyptian and polytheistic Middle-Eastern cultures, but as Stephen Cave points out in his Soul Story theory, that the Abrahamic traditions contain an enormous emphasis on appreciation and continuation of the inner life of mind and consciousness in all its richness and this reinforces the sense of individual cosmic significance of their believers^{xlii}, which is the basis of the digital form resurrection depicted in the novel. This aspect of the inner life of the mind is extremely essential for telling apart a soul-based philosophy from a mind-based one and it can be best understood in the light of Rahner's idea of *Vorgriff*, the transcendental, self-luminous, self-reflective essence through whose presence a merely conscious entity achieves the status of a soul. One's existence as a conscious self in the upload^{xliii} can make oneself aware of the presence of this *Vorgriff* and thus opens him up to the realization of this true meaning of soul. Terrence Klein opines that for Rahner, the mind represents the evolutionary emergence of a higher sphere of existence^{xliv}. We may say that paralleling how Christianity once provided an alternative vision of resurrection and afterlife to those preceding it like the Greek and Egyptian cultures, so does

transhumanism now attempt to provide an alternative vision of immortality through uploading to a digital realm. It is only by adopting a multidisciplinary approach that we may hope to do justice to such a varied, dynamic and complex theme as this.

Apocalyptic, Eschatological Dimensions of Uploaded Selves or Souls

I yield this body, too tenacious a cage for the soul which thirsts for freedom and, by scattering and annihilating the atoms that compose my frame, set at liberty the life imprisoned within, and so cruelly prevented from soaring from this dim Earth to a sphere more congenial to its immortal essence ^{xlv}

In the novel, the uploaded paradise of the Bitworld is a place of unlimited potentialities as well as unforeseen dangers and unprecedented challenges. While pursuing their project of uploading, the 'think-tank branch of the Forthrast/Waterhouse/Shepherd brain science complex made it sure not to restrict their activities towards mere manufacturing of mindless, mechanical replicas of deceased individuals, rather they aim to engage with the 'matter of mortality, consciousness, and what it meant to be a human and most of all with the question of what it means To have a soul in the afterlife^{xlvi}. Rothblatt has opined that spirituality is bound to emerge even in the virtual reality afterlife once we will have perfectly replicated consciousness since, As consciousness arises from appropriately complex connectomics, so is spirituality immanent in appropriately human consciousness^{xlvii}. The upload technology employed in the novel builds upon the idea of technoscientifically reformulating the existing theological views that the soul is more permanent than the body, and exists on a higher plane^{xlviii}. So, theologically the brain emulation and recreation of virtual avatars contain some philosophically profound and metaphysically significant connotations. As we have seen already in the previous section, the novel repeatedly makes us wonder as to whether the extension of life through upload in a simulated afterlife should be interpreted as an alternative mode of prolonging the death of the physically deceased individual or is genuinely geared towards the realization of the immortality of man or his soul in the truest sense of the term. The researchers in the novel are seen busy trying to make sense of the vastly more numerous recently uploaded souls and their relationship to life and death, or death after death^{xlix}. Now, any form of continuation of life through the digital reincarnation of self in the virtual world demands that through the process of scanning the whole of a human personality is captured and retrieved after biological demise. The very ideas of re-creation of

brains functioning in software and reincarnating a scanned connectome as a digital soul, living in the cloud ^l are surcharged with theological connotations steeped in not just Judeo-Christian but also ancient Greek and Egyptian eschatology. One's scanning and uploading of consciousness can be equated to the biblical idea of the ascendance of one's soul in the clouds. In 1 Thessalonians 4:17, a Pauline epistle of the New Testament we find, After that, we who are still alive and are left will be caught up together with them in the clouds to meet the Lord in the air. And so we will be with the Lord forever. Any act of replicating consciousness in the minds of the virtual avatars also carries with it a promise of recreating souls within them as well: 'When we replicate our consciousness with mindclones, we will be quite unavoidably replicating our souls as well ^{li}. During the final moments leading up to the scanning and upload of Richards brain, we see the characters ingrained belief in an afterlife, the Biblical paradigm of resurrection and also in the omnipotence of God: Only God can take a life. In Him all things are possible including a full recovery for Dodge. As long as his soul remains united with his body, Richard is as alive as anyone at this table^{lii}. So, a transhuman culture does not preclude the idea of the fusion of traditional Christian motif of an everlasting life through resurrection with the technological mode of immortalization via upload; rather it is only when we interpret this digital resurrection as a continuation of death-in-life, that we will fail to appreciate its religious eschatological aspect. Critics of transhumanism might argue that this type of resurrection project is quite opposed to the idea of a divinely mediated idea of resurrection and sustenance the life after death, as any mortal intervention in this regard will only threaten to undermine Gods plan. However, sound this argument might appear, we can always counter it from the perspective of the standard Christian belief that all humans already are immortal and our decisions in his life determine how our eternal existence will be spent^{liii} and thus, by choosing to decide how or when this transcendence will occur, transhumanist venture of upload will not upset the final divine plan. So, we may say that recreating a new mode of reality in the digital world can be based on the traditional, Biblical paradigm and this reality or virtuality may not differ in its concept of afterlife or resurrection in some radically different way from its predecessor. Both the religious idea of the continuation of life after death and the digital mode of resurrection via brain emulation depend on a particular belief system: It's a kind of belief system that in the future we are going to upload our brains into computers and live forever digitally^{liv}. Zula, Richard's niece also harbors this kind of hyper optimistic vision of a future where the souls that have been

uploaded to silicon will become super fast, super powerful, and render living, biological brains irrelevant^{lv}. According to Rothblatt, techno-immortality implies that death will no longer continue to be the sole determining factor in our life, rather Our souls will now be able to outlast our bodies^{lvi}; or to borrow Cave's words, the uploaded avatars in the virtual world surely dream of shiny *new* bodies made of much more reliable stuff than carbon-based flesh and bone^{lvii}. Digital life, thus promises to be so much more than the bio-life rooted in organic chemistry and the beings inhabiting such a digital world possess the options to expand, excel and extend their original bio-self in various ways. Yuval Noah Harari also envisages a trans/posthuman future when the digital will no longer be subordinate to the real, rather it will attain a God-like status: This cosmic data-processing system would be like God and the Homo sapiens still clinging to the flesh-and-blood mortals status will be deemed an obsolete algorithm^{lviii}. The optimism and hope that it harbors surely seem to border on the theological. In the digital Garden, the souls or the mindclones fashioned by Egdod & co. feel the very basic humane urge to connect to some higher form of creator-god: to be a mindclone is to seek a relationship with God^{lix}. Thus, we see that even when the digital way of attaining immortality is seen as a concrete possibility, religious motifs of soul, afterlife, resurrection etc. continue to wield enormous influence in shaping the spiritual life of the subjects.

One of the main differences between the divinely mediated process of full-bodied resurrection plan and its trans/posthumanist digital counterpart is that in the latter there will always be some uncertain, unknowable and inscrutable elements lurking somewhere. One of such uncertainties is regarding the possibility of continuation of memories in the afterlife. A character named Corvalis Kawasaki, Richard's former business partner wonders Do you take your memories with you into Bitworld? Do the people wandering around that town remember where they came from?^{lx}. However, as we will see towards the latter half of the novel that the continuation of memories is indeed possible and in the post-biological and post-mortal realm of the Bitworld, the souls of the deceased persons can be said to have truly conquered death: by any biological standard, they were dead. But there was no doubt that they had gone on to an afterlife^{lxi}. In the Bitworld of TRain, the type of immortality is symbolic and is attained by implementing what Stephen Cave terms as *Replication View* of resurrection^{lxii} that basically involves immortality through uploading ourselves onto computers and then reload ourselves into new bodies or digital avatars^{lxiii}. According to Cave, Of all the narratives, the Soul should be best able to deliver an

immortality worth having^{lxiv} and this immortality can be achieved through a non-physical afterlife in a fantastical realm which is quite perfectly illustrated by the Bitworld of *Dodge*. Cave also feels certain that digital age, however, promises even more radical reinterpretations of the Resurrection Narrative^{lxv}. Cave's idea of Replication View of resurrection is in turn based on Lifton and Olsons (1974) view of symbolic immortality. This form of attainment of immortality through various means such as brain uploading is an essential feature of transhumanist worldview and the religious implications of it have been studied in great details by various renowned scholars (Gray 2011^{lxvi}; Tirosh-Samuels 2012^{lxvii}; Gollner 2013^{lxviii}; Bernstein 2015^{lxix}; Huberman 2017^{lxx}). This awareness of immortality through soul path smacks of a rapturous feeling which is divine: the awareness that death was not permanent and that everyone could potentially live forever was the most momentous thing that humans could possibly have learned^{lxxi}. Cave, sharing the similar spirit of optimism writes, Being immaterial, this soul is not subject to decay and destruction like your physical frame, and so when your body dies, your soul can continue its journey to the next life and immortality^{lxxii}.

In the digital world, however, the minds or souls of those scanned people find hard to make sense of the nature of things around them, for those things are nothing but pure simulacra composed of pure abstractions down to their very cores. The souls feel that their originally human brains be they flesh-and-blood Meatspace brains or their carefully husbanded digital simulations in Bitworld weren't hooked up to make sense of a universe^{lxxiii} such as this one. The laws that govern the physical, material world often fail to grasp the complexity embedded in the nested layers of immateriality which form the very crux of such digital, post-material realm and like the quantum multiverse scenarios put forward by the likes of Tegmark, Brian Greene or David Deutsch, for this reality too there was no end to it; very soon the whole universe stopped making sense, or decohered.^{lxxiv}

Digital Pantheon in the Simulated Afterlife

In the virtual realm, Egdod, the Beta Gods and El become incarnations of the type of 'super superintelligence who by becoming all-powerful and all-knowing'^{lxxv} become digital gods in the new age. It is not the type of Godhood that Christian theological vision loves to project, and is much different from the type of resurrection in whole bodies that the apocalyptic tropes centred

of Christ's body generally promise. The gods in the world evolve to become increasingly more abstract than their Christian counterparts in the actual world. Here, the very existence of souls and afterlife in the simulated techno-world demands that there be a transcendental signifier to make such ideas meaningful in a true sense of the term. As we have already seen that through replication of body, mind, soul and consciousness in the digital realm all distinctions between pre-Christian and Christian views on the soul and spirit can be annihilated, similarly here too we shall see how through the digital re-incarnation of *Imago Dei*, the distinction between polytheism and monotheism will also be annihilated. In fact, through the self-luminosity of Rahners *Vorgriff*, even in the upload scenario, the virtual souls can not only question their be-ing as a being, but also hope to listen to a revelation from God as a finite spirit and participate in community as a person.^{lxxvi}

While still alive physically, we see Richard speculating and distinguishing between the the Christian version of hell where sinners could at least remember why they were burning in eternal fire and the Greek version of Hell where people suffered 'without knowing why'^{lxxvii}. As the novel progresses, we find that both the Christian and Hellenic version of the afterlife will be important in understanding the real scope and significance of the digital afterlife that Richard's project of whole-brain emulation would bring about. Richard feels that irrespective of the fact that whether the inhabitants in the digital world would continue to live as spirits or as digital simulations of their brains, these souls will develop new ways of responding to various events, actions or stimuli and this is quite in keeping with what Kurzweil says in his book *How To Create A Mind*: a digital brain would need a human narrative of its own fictional story so that it can pretend to be a biological human^{lxxviii}. Since simulating a seemingly everlasting virtual afterlife is but an extension of the traditional form of mystical, theocentric vision into a parallel realm, there need be a narrative through which the souls could relate their experiences to their earthly counterparts. Lifton and Olson similarly state that for modes of immortality to be meaningful, they must relate to the particular kinds of experience characteristic of a given historical period^{lxxix}. In the afterlife, the digital world that is being built by Egdod also relies upon such a humane and easily relatable kind of narrative only to be replaced by a more sinister and inhuman one by his rival El. Kurzweil has also predicted that once the mind upload will be complete, the reinstated mind will crave for a new body and the virtual bodies in completely realistic virtual environments^{lxxx} will serve a very important purpose in this regard. In the novel

El becomes something more than the Kurzweilian human body version 2.0, rather he becomes the overlord of the paradise once built by Egdod. The entire landscape of Egdod's paradise with all its inhabitants comprising of the angels, souls, Adam and Eve are such examples of Rothwell's mindclones or Kurzweil's human body 2.0 and they are technologised illustrations of Milton's Paradise Lost and Genesis. We can interpret Egdod as the Christological incarnation while El is the Promethean counterpart to him seeking to upset the established order in his desire to build the world around him from scratch. Now, taking the cue from German Jewish philosopher Karl Lowith's view of two oppositional strands existing in Western consciousness, namely the Promethean trend and the Christian one, we may opine that El is truly the digital incarnation of the Promethean idea of posthuman embodiment which rejects the body as well as the human spirit in search of a radically new mode of being, while Egdod represents the traditional Christian trope of accepting and affirming the God-gifted human spirit to the very last even when he as a mortal being has ceased to exist physically. El's Promethean endeavour is essentially transhumanist in his emphasis on attributing godhood to himself: The Bible said that God made man in his image. The German philosopher Ludwig Feuerbach said that man-made God in his image. The transhumanists say that humanity will make itself into God^{lxxxix}. Following Caves' line of thought, we can state that this is the most extreme version of techno-utopianism, and its debt to the Judeo-Christian tradition is obvious^{lxxxix}. Egdod is indeed a perfect example of what Caves terms as the DigiGod who according to techno-optimists would therefore resurrect all of us and create a fine paradise in which we can all live happily ever after^{lxxxix}. In the digital world, mindclones along with the inhabitants of the real, physical world will find it easy to pursue their spirituality and moving forward in their theological quest: Mindclones will have no problem expressing their faith in the virtual world, and their faith will have no problem finding them there^{lxxxix}. Rothblatt has also commented on the possibility of assuming godhood in the simulated world of digital reality. The version of the afterlife that El seeks to create differs from Egdod since El wants to recreate something radically different from what Egdod has imagined. For Egdod, the new world would be based on the memories of his previous embodied life, while for El any idea of past is bound to create only unnecessary burden and he wants to raze the old creation down to create something different from the past. He wants to build a new universe in which consciousness entities based on human minds, but bigger, better, deathless can dwell and do whatever they want, free from the constraints imposed by the physical world^{lxxxv}. It was

Explicating the Apocalyptic and Eschatological Dimensions of Mind-Uploading in Neal Stephenson's
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Richard, who in the digital afterlife in TRain at first assumed the role of an omnipotent, creator god based on the Old Testament: EGDOD The name of Dodges most powerful character in TRain^{lxxxvi}. In the digital afterlife that Egdod creates, the newest avatars are referred to as souls and it is with their help that Egdod seeks to continue building his techno-heaven paralleling Gods work in Biblical paradise. One anomalous and rebellious soul from among them would later become El, Egdods archenemy. El refers to himself as the greatest and most powerful soul in the entire Bitworld universe^{lxxxvii}. El desires to create a new world and cannot find any justification for dying and being transmogrified into a digital entity if you're going to use all of that computational power to re-create the analog world you just managed to escape from^{lxxxviii}. Egdod worked along with a pantheon of other gods called the Beta Gods who helped Egdod in his act of creation and Egdods act of creation was more like an expression of his memories from a previous life though he has not been able to derive a proper connection between these two sets of experiences: The emergence of these things was not an act of creating new out of nothing, but a kind of slow remembrance^{lxxxix}. So, he strikes us as a thinking, feeling, and humane sort of God like the Old Testaments Yahweh. While speaking to El, Corvallis discovers close parallels between Els attempts at replacing Egdods creation with something new, more brilliant, more perfect^{xc} and the Titanomachia mentioned in Greek mythology. When El becomes the new god of the digital realm, Egdod gets relegated into the background as a Beta-El, the greatest god of the First Age. El demands from the inhabitants of the digital world an unquestionable and total submission to his will often mimicking the Abrahamic trope normally associated with an omnipotent Godhead to be found in the Bible or Quran. It is quite clear that the digital world has transcended El to the status of a godlike posthuman. Zimmerman speaks of the possibility of the emergence of such a posthuman godlike entity: the God-like posthuman amounts to a creature that has become divine and that has thereby attained the status of cosmic Logos^{xc}. El, however, fails to impress us a true God for his inability to appreciate and respect the basic dignity of the lives of the avatars as individuals; rather he views them as mindless raw materials in want of further up-gradation while he goes on with his project of revamping the entire paradise from the scratch. Thus, it is clear from the novel, that any attempt to realize full godhood in person is bound to be doomed to utter failure unless it is rooted in the transcendental, religious tropes of the traditional religious paradigm, for then it would only become a blank parody or a simulation of a faith without a substance. So, the question that whether trans/posthumanist project of

technoutopian resurrection would only offer a parody of the type of Biblical form of divinely mediated resurrection or something more profound and fulfilling would depend on its rootedness in the Christian or non-Christian views of death, afterlife or resurrection. Brent Waters (2014) argues that while dealing with the issue of death in an age of *technoculture* there are two ways of dealing with it: either as a Christian pilgrim moving towards the promised Heavenly afterlife without being concerned with the fears of death or as non-Christian nomads meandering through the paths of personal modes of revelations, moral subjectivism, private contemplation and causations ^{xcii}. So, we may conclude by saying that it is by appreciating and preserving what Francis Fukuyama has dubbed as Factor X or some essential human quality underneath [all contingent characteristics] that is worthy of a certain minimal level of respect ^{xciii} that the trans/posthumanist upload project may truly hope to transcend the limitations of mind, body and soul of a human being and also recreate the image of God as the creator, preserver, and sustainer of everything.

Conclusion

The article endeavoured to analyze Neal Stephenson's novel *Dodge* to describe how the apocalyptic and eschatological dimensions of the technoutopian project of uploading can and does relate to primarily Christian and also non-Christian views of eschatology, soul, afterlife and immortality. The power of uploading to replicate and recreate not just aspects of physical reality but also such abstract entities like mind, consciousness and soul is immense and can hope to transcend the human to a level of spiritually enriched form of transhumanism and even posthumanism. However, it is only through recognizing and realizing the moral, theological implications from a traditional Christian perspective and also constructively engaging with it that such technoscientific endeavours can hope to pattern a most powerful and fulfilling kind of reality and in this sort of engagement, both trans/posthumanism technoculture as well the religion concerned will be radically transformed.

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