ATTAINING TRANSCENDENCE:
TRANSHUMANISM, THE BODY, AND THE ABRAHAMIC RELIGIONS

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The last thirty years have seen the growth of biotechnologies which are offering the promise of new kinds of medical treatments for improving human performance. While many biotechnologies are in their nascent stage they reflect human concern with human decline and the loss of cognitive abilities due to trauma and ageing. The advent and growth of new biotechnologies such as genetic engineering and recombinant DNA, nanotechnology and information technology have impressed global audiences. These new technologies promise a new world which will alleviate human suffering and improve and augment human capacities. Genetic engineering, for example, has in the past ten years created recombinant animals which contain the DNA of human beings. These new technologies may pose challenging questions for the Abrahamic religions. Therefore, this chapter examines the similarities and differences between the Abrahamic religions and the growing movement of transhumanism which views new biotechnologies in a positive light.

Where are the Abrahamic religions located in relation to transhumanism? I contend that both the Abrahamic religions and transhumanism describe varying notions of the human body which are comparable. I also argue that for the Abrahamic religions and transhumanism the body is an instrument and a means of spiritual transformation. My position is informed by Cox who views the body as an aspect which connects the material and immaterial elements of human beings. The first section provides an overview to transhumanism and provides the backdrop for the next sections which offer a comparable analysis of the Abrahamic religions and transhumanism. Three areas of analysis are explored in relation to the body; body techniques and enhancement, the body and natural order, and becoming Godlike. While this analysis is not exhaustive it identifies points of ideological meeting between the Abrahamic religions and transhumanism in relation to the body.

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An interesting philosophical offshoot of the new biotechnologies has been the increasing popularity of transhumanism in the Western world. Transhumanism is a school of thought which contends that future humans will be radically different due to technological forays into the human body and brain. Transhumanists view the future world as a “process of evolutionary complexification toward evermore complex structures, forms and operations”.2 According to noted transhumanists such a Ray Kurzweil, Nick Bostrum, Gregory Stock and Simon Young, current human cognitive and physical capacities are limited due to evolution. The futurist artist Stellarc goes so far as to claim that the human body is obsolete and weak and needing revamping via new technologies. Various transhumanists view the body as susceptible to malfunction, fatigue, disease and ageing. In other words, humans are prisoners to their bodies due to their inherited limitations. What the transhumanist foresees is a future in which the human body shall transcend its biological constraints and be enhanced via genetic and molecular engineering, cybernetics and nanotechnology. The transhumanist movement towards body enhancement may also be viewed as the ancient human drive to alter and improve upon the human form. Many societies, both ancient and modern, have engaged in various body altering techniques in order to improve its physical performance.3 For example, Hindu, Buddhist and Sufi practitioners use meditational techniques known as pranayana and fikr in order to improve heightened states of awareness. These techniques are alleged to have various benefits such as improving physical and mental well-being. Long-term benefits of meditation may include heightened awareness, improved sense of comfort and a shift in experiencing self.4 For example, according to Cahn and Polich neuroimaging studies indicate that meditation may trigger changes to the anterior cingulate cortex and dorsolateral prefrontal areas.

Some transhumanists believe that by 2030 technology will reach a singularity point which will spur a new generation of ‘super’ technologies. The singularity is a point whereby old paradigms are discarded for

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a new reality. In this case, the slow pace of biological evolution will be expedited by high speed cognitive prostheses and genetically altered bodies. The predicted singularity will be a time for exponential technological enhancement, especially in the areas of computers. During the singularity super computers will achieve quantum levels of computation. Super intelligent computers will spread throughout the globe and eventually lead to human/machine interfaces.

The transhumanist project is inherently promethean, in that modern humans will eventually become posthumans—an interface between human and machine, beings who will tinker with their own evolution. Posthumans will have markedly improved cognitive and physical abilities, will live longer, perhaps be immortal, and not succumb to congenital and chronic disease. Posthumanism will be “a conglomerate of technological visions of human transformation from genetic engineering to diverse cyborg utopias”. Kreuger asserts that a posthuman is a human descendant whose body has undergone such radical augmentation that he/she can no longer be defined as human—not a normal human anyway. Such people will exceed the cognitive and sensory abilities of ordinary humans. In a nutshell, the posthuman aim is towards achieving immortality using the available technologies. Posthumanism views immortality as intrinsically linked to technology. In this way, human biological evolution may eventually be supplanted by human engineered evolution.

Posthumans may be partly or mostly biological in form, but will likely be partly or wholly postbiological—our personalities having been transferred ‘into’ more durable, modifiable, and faster, more powerful bodies and thinking hardware. Some of the technologies that we currently expect to play a role in allowing us to become posthuman include genetic engineering, neural-computer integration, molecular nanotechnology, and cognitive science.

Furthermore, the increased cognitive capacities of future humans will be able to develop new ways for dealing with the environmental crisis and creating alternative, clean energies. What transhumanism also proposes

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7 Ibid.
8 Ibid., 57.
is the inevitability of the coherence between evolution and technology. This combination will benefit each other towards an in-built purpose or entelechy. In Kurzweil’s words, “The purpose of the universe reflects the same purpose as our lives; to move toward greater intelligence and knowledge… we will within this century be ready to infuse our solar system with our intelligence through self-replicating non-biological intelligence.”

One may ask at this point, what does posthuman existence offer? This is a pertinent question. Posthumanism offers future humans a virtual world where they may freely be able to alter their appearance without being stuck in a physical body. Posthumans may also be able to experience and enjoy various virtual utopias, savour every kind of culinary and sensual pleasure, and be in contact with other virtual beings. In this virtual playground new dimensions of sexuality may also be experienced without the problems of unwanted pregnancy and sexually transmitted diseases. Although future humans will be encouraged to shed their biological bodies this will not mean an end to physicality and sexuality.

Transhumanism, the Body, and Religion: Comparable Approaches

Both the Abrahamic religions and transhumanism do not deem the body as being a static corporeal entity, but rather as dynamic. This point needs to be explained further. In the Abrahamic religions human beings are bimorphic, composed of matter and spirit. This idea is elaborately explained in Islamic theology further. In Islam, the nafs is denotative of the human personality and is also responsible for committing sin. For example, there are five kinds of nafs in Islam, from nafs-e-ammara (lower nafs) that is interested in satisfying instinctual drives to nafs-al-mutmainnah that describes the highest level of spiritual refinement in a human being. In Sufism the journey towards the nafs-al-mutmainnah can be accomplished by controlling the lower nafs via a series of bodily techniques such as fasting, sequestering, meditation, prayer, and pious works. In this way, the lower nafs is rigorously checked (ridayat an-nafs). Once ridayat an-nafs is attained can the Sufi enter into a state of awareness in which the nafs is ‘dissolved’ or ‘annihilated’ within the Divine (fana); a state analogous with

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the Buddhist notion of nirvana or the Hindu notion of moksha. Human nature is described as yetzer meaning ‘impulse’. Yetzer is further categorised as yetzer ra and yetzer tov; in the former the human being is governed by selfish desires that can lead a human to commit evil. In the latter, the person’s moral conscience informs his/her thought and actions.

An interesting aspect of Judaism is that the soul’s existence is not dependent on the body since it existed in eternity with God. In this way, the soul is theocentric, in other words, the soul’s final destination is towards union with God. Human life is in a state of ‘ab initio’, in a state of imperfection and striving towards perfection ‘shlemut’. “Because man is other than his physical surroundings, the real is found in the perfection of the soul… It is this process of perfection that man continues to rely on the supernatural realm for his identity”. 13 What is important here is that the body is constantly being monitored through various disciplines. Sufism has developed over many centuries various ascetic based practices for controlling bodily urges and desires through fasting, intensive prayer and meditation, sequestering and chanting. Such practices are also found in many Christian monastic orders. In Islamic and Christian forms of asceticism the body is deemed a vehicle for spiritual transformation. It is central to spiritual awakening. This point is made clear by Cox when he states that the whole person is important in spiritual transformation in Christianity. Cox opines that traditional Christian notions of the body as being less significant was influenced by Greek dualism which deemed the body as being inferior to spirit.14 Willard’s holistic model of the body is relevant here.15 For Willard, the human being is an inter-connected matrix of mind, emotions and physiology which assists various functions such as sensing danger and responding to one’s environment. In addition, Cox tells us that the human body is not inherently evil but should be considered as a gatekeeper that needs to be consistent with God’s purposes.16

Cox’s reformulation of the body in Christianity is similar to Islam. The body in Islam is meticulously controlled by an ongoing repertoire of body techniques that are aimed towards a “complete and absolute cathecting

14 Cox, The Physical Body.
or investment of the body.” Most Muslims are brought up with a total mistrust for dirt and uncleanness, especially where it compromises their immediate surroundings. This is especially the case where dirt invades the bodily domain, promoting a rigorous response by the individual to remove it. Several techniques may be employed to free oneself from the polluting aspects of dirt, including religious ablution (wuzu), reciting of religious formulas, wearing of clean clothes, keeping one’s surroundings clean, keeping the orifices clean, and bathing after coitus. As Bouhdiba puts it, “Eating, drinking, urinating, farting, defecating, having sexual intercourse, vomiting, bleeding,” all compromise in varying degrees one’s control over bodily boundaries. What is important is that the body must be restored to its previous state of purity, since it is only through this state that the believer can continue their “quest for spirituality.” The point to emerge here is that bodily purification, or its lack, is coextensive with the pan Islamic view of keeping the bodily orifices in check. The famous Islamic saying, “Cleanliness is part of faith. Dirt is the work of the devil.”

Similar to the Abrahamic religions the body is informed by a series of special techniques in order to transform it to superior entity. These techniques include gene therapy, nanotechnology, brain-machine interfaces, cosmetic neurology, or a combination of these. Of these, cosmetic neurology is widely engaged in western countries. Cosmetic neurology relates to the non-therapeutic use of pharmacological substances by healthy adults in order to enhance cognitive abilities. For example, research has shown that 18% of American college students use some form of pharmacological study aid in the form of prescription stimulants (Dextro-Amphetamine and Methylphenidate). Currently, various kinds of pharmacological therapies are being used to improve neural plasticity and motor learning. In the future novel kinds of drugs will be used to improve cognitive

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18 Ibid.
19 Ibid., 55–56.
20 Ibid., 55.
21 Ibid.
Such drugs may include Atomoxetine to increase arousal levels and Modafinil for enhanced alertness. Modafinil, for instance, has been identified as improving reaction time in memory tests and working memory in aviators.

The use of pharmacological substances for cognitive enhancements is not dissimilar to the employment of cannabis by Indian sufis in order to enhance altered states of consciousness. For transhumanists and sufis, the mind is neuro-plastic and is capable of entering into heightened states of awareness. Such heightened states of awareness may lead to more insightful understandings of the self and the lifeworld. Additionally, the use of pharmacological substances is an extension of meditative and contemplative techniques found in Abrahamic religions which foster heightened awareness. In the future, pharmacological substances may combine nanotechnology in order to improve their precision and efficacy. New kinds of religious and spiritual experiences may be triggered by such drugs, especially when combined with other bio-technologies such as brain-machine interfaces.

What is important is that such technologies in the future may be used by both transhumanists and followers of Abrahamic religions for similar reasons, that is, to delve deeper into human consciousness. On this note, Greenfield argues that in the future human brains will be connected to computers that will provide individuals with a kaleidoscope of virtual worlds to engage with. The engagement with virtual worlds may actually deepen religious experience by allowing individuals to engage with states of consciousness which are currently accessible by manipulating consciousness via meditational techniques and pharmacological substances. The point is that future enhancement body techniques will not necessarily promote a divide between transhumanism and Abrahamic religions but rather create new ways for engaging with non-ordinary states of consciousness. Possibly, here, transhumanists, via the use of such

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technologies, may appreciate the intense religious like experiences consistent with followers of the Abrahamic religions.

**Body and Natural Order**

The Abrahamic religions view the body as part of the natural order. Natural order is emphasised in the Abrahamic religions in order to conceive the universe in a particular way. In Islam, the universe is created by the act of Divine mercy (*rahma*), and is characterised by *al-fitra* (natural order). The universe is believed to embody *al-fitra* such as in the kaleidoscope array of meta-patterns inherent in nature. Medieval Christian and Muslim scholars often portrayed the body in naturalistic ways such as via the model of microcosm-macrocosm. The human being was considered as a miniature of the universe, embodying similar patterns inherent throughout the cosmos. Islamic thinkers made connections between the body and the cosmos. For example, the twelve bodily orifices corresponded with the twelve zodiacal signs, while the veins contained in the body were believed to equate to the number of solar days.\(^\text{27}\) This idea of naturalness in the Abrahamic religions is also considered to manifest in individual and collective behaviours such as circumcision, respect to elders and correct parenting.

Transhumanism also adheres to naturalistic notions of the body via Darwinian evolution. In this schema the human body is a product of millions of years of natural selection and genetic variation which has provided the extant body with its unique physical and mental characteristics. Recent discoveries in molecular biology have created a Darwinian version of microcosm-macrocosm. In this model, humans beings (*Homo sapiens*) are genetically related to all life on earth, to the point that they share 98% of mitochondrial DNA with chimpanzees (*Pan troglodytes*). Even from a point of view of human brain evolution, the noted neuroscientist Paul Maclean pointed to the human brain’s tri-partite structure, reflecting reptilian and paleo-mammalian ancestry.\(^\text{28}\) In other words, the bodies and brains of extant humans are evolutionary repositories going back to hundreds of millions of years. At a cosmic scale, Carl Sagan and other

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astrophysicists have elaborated this naturalistic connection by pointing out that every elemental atom in the human body was once contained in stars which became unleashed through supernovae. As Sagan stated, humans are composed of “star stuff”.

Transhumanists use Darwinian evolution as a means of explaining the present limitations of the human body. However, the kinds of physical and cognitive enhancements which transhumanism proposes for the human body work within the ambit of ‘natural’ evolution. In transhumanist philosophy human development and use of technology altered the course of human evolution. Technology became intrinsic to human evolution to the point that it worked in tandem with natural selection.

The naturalistic approaches of the body of the Abrahamic religions and transhumanist philosophy should be viewed as models for understanding the connectedness between the human and non-human worlds. In Christian Creation Theology this means that human beings find their true identity by interacting with non-human life forms. Transhumanist philosophy takes this potential interaction between humans and non-humans one step further is via—the combination of human and non-human DNA. This is an area of transhumanist interest which has interesting religious implications since recombinant DNA technology is already being used via ‘pharm animals’ (genetically modified animals containing human DNA). The proposition that transgenics may alter human beings’ cognitive and sensory capacities has been noted by Julian Savulescu and Paul Ehrlich. For Savulescu, recombinant DNA between humans and non-human animals is a way of improving human cognition and sensory perception. In transhumanist thought, such biological enhancements may have wider social and health benefits. For example, future humanity may be able to reduce the rate of telomere (a region where exists repetitive DNA sequencing at the end of a chromosome) degradation via recombining human genetic material with long lived animals such as the Galapagos tortoise, or improve the human neuronal memory function by transferring the gene responsible for long term memory in elephants. Moreover, the novel splicing of the owl or rabbit gene responsible for enhanced night

vision in human beings may curtail night time road accidents and assist rescue teams.\textsuperscript{32}

The transgenics approach is cognate with the Abrahamic religions as both examine how humans can become co-creators in their lifeworlds. Creation and Islamic theologies extol the order of the universe which enables the Divine to participate in the cosmos. Similarly, transhumanist philosophy views humanity as being able to re-evolve itself within the universe, as an active participant. Both Abrahamic and transhumanist approaches, then, privilege human creativity and its capacity to become creative participants in the cosmos.

\textit{Becoming Godlike}

It was the ancient Greeks who aspired towards a vision of the body’s physical perfection. Greek sciences and arts were testimonies of the perfection ideal toward which they strove. The importance of perfection is also an integral element of Christianity. However, Christian perfection focuses on cleansing the soul so that its nature mirrors the nature of God. In mystical Islam (Sufism) the heart is the seat of the Divine. Sufis use the metaphor of ‘polishing the mirror of one’s heart’ in order for humans to reflect the Divine nature. In other words, it is condoned in Abrahamic religions for humans to become godlike in relation to intellectual and moral development. In Christian terminology humans are viewed as God’s children “in exactly the same way that we are the parents of our children”.\textsuperscript{33} If we are God’s children, then, might we not strive to “become like our Father, just as we expect that our children will become like us in time”.\textsuperscript{34} Literally speaking, “this idea implies that upon maturity we too should be gods”.\textsuperscript{35} This line of inquiry is also found in transhumanist philosophy since it offers possibilities for “improving our intellectual and moral natures”.\textsuperscript{36} For Campbell and Walker this kind of argument provides a tenable “transhumanist-religious hybrid”: from transhumanism it draws from the idea of self improvement, and from religion this hybrid draws from the idea

\begin{footnotesize}
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\item \textsuperscript{32} Ibid.
\item \textsuperscript{34} Ibid.
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that “part of our maturation process” is to become like our Heavenly Father.37

The “theological accommodation of this hybrid” has surprisingly found sympathy within the writings of the late John Paul II. In an article on the pope’s writings the eastern orthodox theologian David Hart writes,

there is, as it happens, nothing inherently wicked in the desire to become a god, at least not from the perspective of Christian tradition; and I would even say that if there is one element of the transhumanist creed that is not wholly contemptible—one isolated moment of innocence, however fleeting and imperfect—it is the earnestness with which it gives expression to this perfectly natural longing.38

Hart further describes this longing as follows:

Theologically speaking, the proper destiny of human beings is to be “glorified”—or “divinized” in Christ by the power of the holy Spirit, to become “partakers of the one divine nature (II Peter 1:4), to be called gods (Psalm 82:6: John 10:34–36). This is the venerable doctrine of “theosis” or “deification” the teaching that—to employ a lapidary formula of great antiquity—“God became man that man might become god”: that is to say, in assuming human nature in the incarnation, Christ opened the path to union with the divine nature for all persons.39

Hart’s connection between tranhumanism and the concept of theosis is interesting in that it identifies that the goal of human destiny is to become godlike. Hart’s thesis also entertains the potential for transhumanism and Abrahamic religions to share a common goal, albeit, through different methods. While transhumanism and the Abrahamic religions “share a common symbolic of transcendence, fear of finitude, craving for immortality and god-like pretensions”,40 the alleged gulf between them may be more superficial than certain.

**Conclusion**

This analysis has examined comparable elements between Abrahamic religions and transhumanism in relation to the body. The first section
provided an overview of transhumanist philosophy. Transhumanism is a school of thought which endeavours to engineer the human body beyond its present capabilities. The goal of transhumanism is for future humanity to become post-human—humans with superior physical and mental capabilities who have mastered techniques in achieving immortality. Both Abrahamic religions and transhumanism privilege the body with attaining transcendent dimensions.

My examination further explored three areas of ideological meeting between the Abrahamic religions and transhumanism; body techniques and enhancement, the body and natural order, and becoming Godlike. Both the Abrahamic religions and transhumanism offer an array of body techniques for enhancing physical and mental abilities. In the Abrahamic religions such techniques include meditational practices, fasting, sequestering and various kinds of sensory deprivation which Winkelman claims derive from prehistoric shamanic mind practices. Such practices may trigger a transformation of consciousness, and for reintegrating the human psyche. While these techniques are fundamentally religious in nature, their prolonged engagement may lead to various physical and mental benefits. For transhumanism various new bio-technologies may improve human cognitive and physical abilities. Technologies such as nanotechnology, gene therapy, cosmetic neurology, and brain-machine interfaces are deemed as enabling future humans to become post-humans. Possibly, the use of such technologies may lead to attaining transcendent states of consciousness which are consistent with religious experiences. What transhumanists pose is that such an evolution is not only necessary but will in effect enable them to experience “new modes of thought and experience, thus adding to the palette of possible religious feelings”.

In relation to the body and natural order both the Abrahamic religions and transhumanist philosophy offer naturalistic approaches to the body. For the former, naturalism is conceived of as microcosm/macrocosm, where the body is considered as a miniature of the universe. The body conveys universal dimensions of symmetry and harmony. For transhumanism, the body is a product of natural selection and variation, a system of evolutionary tradeoffs. While the body is impressive it has limitations which future technologies may improve.

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Finally, Abrahamic religions and transhumanist philosophy share a view of human beings becoming godlike. I drew attention to Hart’s notion of theosis which identifies an ideological meeting between the Abrahamic religions and transhumanist philosophy. Thus, followers of the Abrahamic religions and transhumanists may be the inheritors of a new consciousness which will be able to draw forth the wonder and mystery of the universe.\textsuperscript{43}

The values underlying the Abrahamic religions are fundamentally directed to understanding Divine manifestation in the universe. In Islam, for example, God’s signs (\textit{ayat}) are manifest everywhere in the cosmos and offer ways for humans to understand Divine creativity and its limitless possibilities. Such signs are intended to change the consciousness of humans so that they become more attentive to the Divine. Similarly, transhumanist philosophy entertains future post humans as being more considerate to the environment and developing spiritual values.

\textsuperscript{43} Ibid.