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Transhumanism and Health: A Christian Perspective

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ABSTRACT

This paper examines the compatibility of transhumanism with Christian teachings. It focuses upon health in the wide sense of freedom from disease, suffering and life enhancement. Both Transhumanism and Christianity see the human condition as 'broken' or defective but differ in their means of repairing this. Both focus upon overcoming death. I argue that both Christianity and transhumanist technologies stress the limitations of the human body and how these can be overcome. I concentrate on four areas pertaining to Christianity and Transhumanism: Abolishing suffering; radical life extension; elimination of death; and resurrection. The paper concludes that transhumanism contains religious themes but there are significant differences from mainline Christianity.

INTRODUCTION

This paper examines the compatibility of transhumanism with Christian teachings. It focuses upon health in the wide sense of freedom from disease, suffering and life enhancement. The term transhumanism, popularised by the biologist Julian Huxley in 1957, pertains to the idea that the capabilities of humans can be enhanced through technological means and are dependent upon reason, science and technology. Max More (1990), philosopher and futurist and since 2011 CEO of Alcor Life Extension, provides a succinct definition:

'Transhumanism is a class of philosophies of life that seek the continuation and acceleration of the evolution of intelligent life beyond its currently human form and human limitations by means of science and technology, guided by life-promoting principles and values.'

These technologies aim to overcome the limitations of the human condition- disease, aging and death. They include artificial intelligence, nanotechnology, nanomedicine, biotechnology, genetic engineering, stem cell cloning, and transgenesis. The main foci are on significantly enhancing mental and physical functioning, expanding beyond the confines of the physical body and overcoming death itself. These technological developments will ensure that we live longer, healthier, and happier lives through removing biological imperfections and the social ills caused by them. As will shortly be discussed, they emphasise mind and data as core aspects of being human. The term enhancement entails radical transformation and refers to 'biomedical interventions that are used to improve human form or functioning beyond what is necessary to restore or sustain health' (Parens 1998).

While humanism has underpinned western thinking for several centuries, in the past forty years a new worldview has emerged – Transhumanism. This has been inspired by a number of fields: cybernetics, robotics, nanotechnology, genetic engineering and artificial intelligence (AI). Transhumanist thought asserts progress through human reason, science, and technology. Its advocates see it as an "extension of secular humanism" (Bostrom 2005), but it is notable that it contains many religious themes. Given the capacity to transcend the limits of human biology, we now exist in the post- human state with a blurring of boundaries between humans and nature and humans and machines. In the contemporary world we can see this happening with augmented reality; wearable technology and technology for medical monitoring like sleep and exercise apps which are associated with digitalisation of the human condition. While still a relatively small movement worldwide, relatively new and evolving, I would argue that it has had a significant cultural influence, particularly in the

West. The movement is at present multifaceted, ill-defined and far from homogeneous-expressing a variety of opinions. Estimates are that the Transhumanist movement comprises around 5000people (Tirosh Samuelson 2012).

This movement argues that as AI develops, humans will be able to download their minds onto computers which will serve humanity's needs. Ultimately machines will transform the universe into an 'extended thinking entity' (Morovac 1988:116) and there will come a time when all that remains are computations. Bodily existence and computer simulation will no longer be clearly demarcated. Within a very brief time period, the world will change almost beyond recognition. This hypothetical point- the singularity- results from the creation of a rapidly self-enhancing super - human intelligence. Ray Kurzweil (2005), inventor and futurist, posits the year 2045 as 'the culmination of the merger of our biological thinking and existence with our technology, resulting in a world that is still human but transcends our biological roots'. There will be a total merging of human and computer intelligence.

Transhumanism attempts to remake, not just enhance, human nature. It raises significant questions relating to what a human being is. To what extent does modification of the body result in the death of the human? This movement proposes that we can enhance physical and mental capabilities, resilience to disease and stress, thus resulting in healthier, happier and longer lives. Hughes (2012) asserts that transhumanism is best viewed as a contemporary expression of ancient hopes to radically transforms human social and bodily existence. Pre-Enlightenment these hopes were conveyed through religious millennialism. Post- Enlightenment science and technology have been deployed to enhance health, longevity and human abilities, both physical and mental, and employ reason in order to revolutionize society. Transhumanist Nick Bostrom (2008:7) argues that there is an instinctual universal drive to remain alive:' When presented with a real world choice, most would choose the path of prolonged life, health, and youthful vigour over the default route of aging, disease, and death'

Elkins (2011) sums up the main tenets of transhumanism. First, there is no soul which transcends death. Mind is the central core of our personhood. For many transhumanists mind can be reduced to brain functioning. Transhumanism can be seen as both materialistic and dualistic with many proponents asserting that the mind has an independent existence outside the body in which it is encased.

Transhumanists define a human personhood in terms of is what is inside the brain and were the contents to be uploaded onto a hard drive, then that would still be you. But the body still plays an essential role in the transhumanist agenda-be it a body of flesh or one which is based on silicon or other materials-techno sapiens (Pugh 2017). It is the bodily limits of homosapiens that must be transcended. But bodies made of different non –living materials might mediate experience in different ways to such an extent that' the human creature is erased' (Pugh 2017).

Second, the evolutionary process is held to be too slow, with humans being a 'work in progress', not yet fully evolved. Furthermore the human species is currently in an early state, still evolving and by no means is it at the acme of its development. Thus humans cannot wait for evolution to modify them and must deploy technology to speed things up.

Third, in its current form the human body is defective, limited and the human condition as it stands at present is deplorable and it is in need of significant improvement. As Ray Kurzweil states: There is a need for us to become 'less biological' and more technologically enhanced, more 'God-like' (Quoted in Garreau 2005).

Fourth, human nature is malleable rather than static. Humankind is a 'work in progress'. Transhumanists argue for the malleability of human nature through technology. In their view 'Changing nature for the better is a noble and glorious thing for humans to do' (Bostrom 2003:35). For instance Garreau (2005:108), the author of Radical Evolution: The Promise and Peril of Enhancing Our Minds, Our Bodies—and What It Means to Be Human, emphasises that human nature is not 'etched in stone'.

Fifth, information is the essence of human nature. The human body is both matter and a mind. The latter consists purely of data. Transhumanists hold that humans are biological machines driven by software and information is transferable from humans to machines. The mind consists of data and therefore it is possible to transfer this data onto another 'substrate'. Humans soon will be able to pass digital information onto computers from neural microchips implanted in the brain. There will come a time when humans and machines cannot be distinguished any longer. Neuroscientists increasingly speculate that our personality, skills

and memories can be defined by the connections between neurons and that it will be possible to 'download' brain's contents directly on to a computer, allowing the person to become a robot in the future (Sandberg and Bostrom 2008) .

Finally, it is possible to transfer information into something more durable. The task for transhumanists is to find a medium separate from the human body in which cognitive functioning can continue, perhaps indefinitely.

The transhumanist worldview raises significant questions pertaining to whether or not human nature is fixed or malleable and whether science should indeed interfere with biological processes to enhance, improve or perfect humans. Do humans have an unchanging essence? If so technology will never change this. What is the difference between treatment and enhancement? Does transhumanism dehumanise humans? What is a human being in today's contemporary world and how will this differ in the future? How is human nature related to our identity? Moreland and Rae (2000:236) underscore the fact that 'Our view of a human person touches virtually every debated issue in bioethics today'.

Transhumanism

'I would define the human species as that species that inherently seeks to extend our own horizons. We didn't stay on the ground, we didn't stay on the planet, we're not staying with the limitations of biology' (Kurzweil quoted in Hughes 2006, 298–99).

TRANSHUMANISM AND RELIGION

This paper examines religious aspects of transhumanism with an emphasis on Christianity. While the technology for radical life enhancement and extension does not exist at the present time, transhumanists maintain that given the rapid advances in science it will exist in the near future. For some of them cryonics-freezing the body post clinical death, is an interim measure, ensuring that it can be revived and at this time such technology, like mind uploading- transferring data from the human brain onto a computer- and nanotechnology- manipulating matter at the atomic level-will be available. In this technique the body is frozen, then when the appropriate technology will become available in the future (distant?), the body will be revived any damage done to it through cryopreservation will be repairable. In some instances only the head is preserved.[2]Cryonics is a way of realising transhumanist aspirations – a vehicle to the future. Many transhumanist advocates like US inventor and entrepreneur Ray Kurzweil, nanotechnology pioneer Eric Drexler and PayPal founder and venture capitalist Peter Thiel support cryogenic preservation until medical science can revive them and augment and enhance their bodies. However by no means do all transumanists buy into cryogenic technology.

Below I will focus upon Transhumanism and Christianity. Reformed theologian Ron Cole Turner (2018) notes that while Christians disagree about how to view transhumanism, there is no doubt that the power of technology to transform humanity is rapidly growing. How do we reconcile transformation resulting from God's grace with technological growth? Furthermore it is important to note that interpretations of scripture may vary among different groups of Christians. Southern Baptist Minister and theologian Jacob Shatzer (2019) argues that while some Christians understand transhumanism in biblical terms, Transhumanism as a whole is fundamentally opposed to an orthodox and biblical understanding of humanity. In his view the idea of overcoming and transcending humanity is directly opposed to both the Scriptures and the Gospel.

However one group of Christians- The Christian Transhumanist Association- maintain that God's mission emphasizes the transformation and renewal of creation. Thus the intentional use of technology empowers us to become more human. In their view science and technology are a natural outgrowth of being made in imago dei. Christian transhumanists emphasize working together with God to accomplish his work in the world through using science and technology in an ethically responsible way. Schatzer (2019) asserts that many Christian transhumanists maintain an implicit debt to open and process theology-the idea that God is ultimately open, improving, and adapting, like creation. Process theology contradicts the idea of a God who is the unchanging basis for all knowledge and truth. In strong disagreement he states that God isn't open and risky; he's sovereign and omnipotent

Below I will concentrate four areas pertaining to Christianity and Transhumanism: Abolishing suffering; radical life extension; elimination of death; and resurrection.

Christianity has never been against enhancement per se. Historical evidence suggests that

humankind has for millennia used technology to enhance its skills. Jesus himself was said to be a Tekton – an artisan who worked in a human occupation as a carpenter. But what is the Christian response to technological innovations that might enhance us in significant ways like increasing our physical strength or intelligence or keeping us alive long term if not forever? Few, if any, Christians would object to cochlear implants for deafness while many would be antagonistic to radical enhancement of human intellect through technological or pharmacological means which is not directly related to cure of disease or maintenance of health. Shatzer (2019) writes how Christians need to be cautious about use of technology and need to question the degree to which they should accept or reject its use. To what extent do radical technologies distort the created order? Are we becoming gods ourselves?

As Ted Peters (2018) asks:

'What does it mean to be human? Is humanity so distasteful that we should transform it into something post-human? According to the transhumanist vision of the future, the post-human will be a more highly evolved super intelligence, a deathless cyborg. How compatible is this transhumanist vision with the Christian promise? According to the Christian theologian, the human race will undergo a transformation, to be sure; but this transformation will render us more truly human, not post-human. Are these two views compatible'?

Transhumanism And The Problem Of Suffering

Transhumanists argue that in the future there will come a time when we can abolish almost every form of suffering. Given the appropriate technology we will be able to eliminate physical disease and emotional disorders. British philosopher and founder of the World Transhumanist Association, David Pearce (1995),argues in The Hedonistic Imperative that pharmacology, genetic engineering, nanotechnology and neurosurgery have the potential to eradicate all forms of unpleasant experience from human and non-human life, then suffering will be replaced with 'gradients of bliss'. Childs (2015) speaks of:

'Lifelong emotional well-being through re-calibration of the pleasure centers" by building on what pharmaceuticals can already do in mood alteration. This would drastically reduce negative emotions in one's life and even eliminate bad memories'.

The elimination of suffering is one major aim of Transhumanism. They assert that it's technically possible to abolish the biological substrates underlying unpleasant experience – both psychological and physical pain (Porter 2017)

We may ask is total abolition of suffering a good thing? Does suffering serve any purpose at all? Mehlman (2012) cautions how enhancement interventions may rob us of the very features that make us human. Francis Fukuyama, American political scientist, stresses that by changing the current human form, are at risk of losing positive qualities resulting from adverse life experiences. These include struggle, aspiration, love, compassion, pain, suffering, loss, and death all of which transhumanism aims to eliminate. These experiences give life meaning, dignity and are what makes us human. As Tirosh-Samuelson (2012) asserts, negative emotional states like anxiety, insecurity and uncertainty have some positive value and are very much part of the human condition. Furthermore, human nature is the core of our moral values allowing us to make moral choices. Some Christians see a positive redemptive value in suffering and differ from transhumanists who strive to avoid it altogether.

One major source of opposition among Christians pertains to the problem of suffering. One theodicy is that it can be spiritually transforming and efforts to avoid it might reduce opportunities for character building (Hughes 2007). In contrast secular transhumanists maintain that most forms of suffering including mental and physical illness, unwanted death, cruelty and poverty can be overcome given advances in technology. However it is questionable that living forever would eliminate all forms of suffering and might possibly bring about its own challenges.

From a Christian perspective Christian theologians and lay activists from diverse churches and denominations have objected to transhumanism, claiming that Christians will attain in the afterlife what radical transhumanism promises –radically extended life spans or the abolition of suffering. They view transhumanism as highly typical of utopian movements which attempt to' create heaven on earth' (Mitchell and Kilner 2003)

Radical Life Extension

The knowledge that we will die is part of the human condition. Life and death are central concerns of all religions. Furthermore rapid advances in medical science allow us to stave off death for longer and longer time periods. As

Childs (2015) notes, transhumanism offers 'Vastly extended life" through the use of gene therapy, other biological measures that retard aging and biologically engineered nanotechnology, the development of atomic scale machines with the potential to heal and rejuvenate'. Similarly aging is increasingly becoming an engineering problem at the level of the genes. The natural patterns of birth, aging and death are slowly undergoing transformations. These issues have significant implications for Christianity (Mercer and Maher 2009).

While Christians generally agree that saving and preserving lives is generally a good thing, it remains ambiguous as to whether deliberately prolonging the human life span is also good. As Thompson (2017) asserts, coming to terms with our mortality might have positive advantages- providing opportunities to develop the virtues of faith, hope, empathy, mercy and love. The transhumanist ideas of immortality and the unnaturalness of death directly contradict the Core Christian notion of resurrection which asserts that the transformation of our bodies will occur through the resurrection (Phil 3:21). The idea of resurrection is paradoxical in proclaiming that dying leads to eternal life. While both transhumanists and Christians aspire to immortality, they differ in the means of achieving this. Waters summarizes this difference well:

'Both…agree that humans need to be released from their current plight. For Post-humanists, this is achieved through technologically driven transformation, while Christians believe they are transformed by their life in Christ. Both agree that death is the final enemy. One conquers this foe by extending longevity and perhaps achieving virtual immortality, while the other is resurrected into the eternal life of God' Death was never part of God's original plan but came about through sin and thus our mortality is closely tied to our full redemption.'(Cited in Peters 2011).

Religion and transhumanism aim for transcendence of the mundane and both deal with the human struggle pertaining to death and finitude. As One website Beyond human: Exploring transhumanism (2014, November 25) states:' Religious ideas such as immortality and the transcendence of the soul are mirrored in transhumanist projects of radical life extension and the transcendence of the physical body through uploading minds onto computers'. However unlike most religious believers, transhumanists aim to realise their aspirations in this world. They rely, not on divine intervention, but rather on rational thinking and empiricism.

Both Christianity and transhumanism see the human condition as broken or defective. Both seek to address poverty, hunger, illness, death and suffering. The however disagree on the ways to accomplish this. While transhumanism advocates the use of technological innovation, Christianity asserts that humankind will undergo a transformation- we will become perfected through faith in Jesus Christ. Importantly Christians are not opposed to using technology which they view as a natural outgrowth of being created in God's likeness.

Finally transhumanist aspirations raise significant ethical issues in relation to inequality. Will only the rich be able to benefit from such enhancement technologies? Will this result in greater inequality than already exists in contemporary societies? Will the rich live significantly longer lifespans than their poorer counterparts who will continue to suffer mortality and limitations? Will these post humans enslave the unenhanced or attempt to eliminate them. It is possible that oppression will increase in the post human era. These are significant questions for Christian morality (See Tirosh Samuelson 2012, Green 2015).

THE RESURRECTION: THE END OF DISEASE

Christians maintain that death has already been defeated through the death and subsequent bodily resurrection of Jesus Christ. Humans are given hope for their own future resurrection. The resurrection assures humankind of God's forgiveness and provides solace in the knowledge that death, disease, and decay will be eliminated.' But Christ has indeed been raised from the dead, the first fruits of those who have fallen asleep. For since death came through a man, the resurrection of the dead comes also through a man. For as in Adam all die, so in Christ all will be made alive' (1Corinthians 15:20-22).Unlike Christians, Transhumanist conceptualizations on the body resemble Gnostic ideas which see the body as malleable, repugnant and disposable.

As Mercer (2015) notes, while Christians maintain an eschatological resurrection of the body, this is to be contrasted with transhumanists who aim for cybernetic immortality through disembodied intelligence. Transhumanism and Christian

resurrection entail embodiment. For the former the body is not necessarily one of flesh, it may be silicon or even inside a computer. Christians generally concur that the new body will be incorruptible and immortal like the resurrected body of Jesus, and will be a gift of God's grace and love.

Mercer (2017), modelling on Jesus's resurrection, asserts that Christian resurrection entails embodiment, is transformative, and results in a changed body that is qualitatively different from the body prior to this event. The post resurrection body is held to be powerful and imperishable (1 Corinthians 15:42–43). For after his resurrection Jesus's body was changed –he could make himself invisible (Acts 9:1-9) and appear and disappear before witnesses (Luke 24:13-43). But his personal identity remained unchanged with his disciples still being able to recognise him. Finally, Christianity argues that the resurrected body will be free of sin, there is absolutely no reason to think that the enhanced community of cryonics will be the same.

CONCLUSION

Transhumanist ideas have evoked considerable theological response among Christians. Mainline Christians have often been critical of transhumanism on account of the belief in Humanity's capacity to work out its own salvation. Christian theologians have been highly critical of the transhumanist agenda for their hubris, mistaken understandings of the nature of humankind and their rather superficial view of transcendence (Cole-Turner 2011; Hertzfeld 2011; Peters 2003, 2005; Waters 2006).

While some would argue that transhumanism contains many 'religious' themes relating to transcendence and eschatology (egTirosh Samuelson 2012), unlike most religious people, transhumanists aim to realise their aspirations in this world through rational thinking and empiricism rather than through any divine influence. They rely, not on supernatural powers or divine intervention, but rather on rational thinking and empiricism. Transhumanism has a naturalistic outlook. At times transhumanism has been viewed as directly opposed to traditional religions. I would concur with Smith (2018):

'Transhumanism offers adherents the comforts and promises of traditional faith — without the humility that comes from being a created creature, and with the further benefit of eschewing all worry about the eternal consequences of sin, the laws of karma, or a future reincarnation in which our condition is based directly on how we live our present life. In short, transhumanism's primary purpose is to substitute religious belief with a nonjudgmental and ironic technological echo of Christian eschatology'.

However some (eg Cole Turner 2012) argue that much transhumanist thought actually reworks Christian themes. Indeed transhumanism is similar to traditional religions in several respects: the search for perfection and a significant focus on human improvement; a focus upon the improvement society through eliminating poverty, disease, and suffering; a view of human history that sees the future as significantly better than the past; and an emphasis on transcendence (see also Tirosh Samuelson 2012). In many ways transhumanism and Christianity are similar -both express a utopian vision, both can be seen as apocalyptic and both have their profits. Issues of life and death are prominent concerns in both. Some have even argued that transhumanism should be viewed as a secular faith (e.g. TiroshSamuelson 2012).

The area of Transhumanism and religion is of key importance to the debates on religion and science. Historian Yuval Noah Harari (2017) discusses how technology influences religion His book Homo Deus: A Brief History of Tomorrow, speaks about how technology can define the scope and limits of our religious vision, killing old gods and creating new ones. For him our modern technoculture can potentially create new forms of religious expression. In fact, in his view, this is already occurring.

Future work in this area should encourage in depth debates between liberal and conservative views, anthropocentric versus theocentric perspectives, materialistic versus supernatural positions, pragmatic versus dogmatic outlooks, and revisionists versus traditionalists.

FOOTNOTES

- The distinction between enhancement and treatment can sometimes be difficult to make. It problematizes the proper limits of healthcare.
- Transhumanist technologies like mind uploading see information as the essence of human nature. In cases where there is neuro

preservation, some theologians question the assertion that who we are can be reduced to information or data in the brain. John Swinton (2014) emphasises that we have bodily memory as well. This is a complex argument involving personhood and imagodei. While the Bible provides no developed theory about human nature, human beings are described in Genesis1: 26–28 as created in the image of God (imago Dei). This position is found in Christianity, where Jesus Christ is seen as the true human being, thus revealing what humans are meant to be. In contrast, if humans are really the creation of God, then it could be argued that transforming that creation trespasses on divine territory. To radically change man is to go away from the image in which God created us. Such a position might be seen as blasphemous.

- In a similar vein Pugh (2017) asserts that both human consciousness and subjectivity derive from markedly complex interactions between the body and its environment. For him human knowing is a distinctly embodied phenomenon. Pert (1986) notes how body and brain are inextricably linked and emotions and the knowing associated with them manifest throughout the body and not just in the neural circuitry in the brain. In a similar vein computer scientist and theologian Noreen Hertzfeld (2002) argues that that we are continuously in a relationship with the world and other bodies and all experience is embodied. Embodiment possibilities in the future might include robotics, regenerative technologies and currently unknown biomedical technologies and through this process will be transformed. It may result in new and improved bodies and even the possibility of mind uploading.

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