* 1. **Transhumanism: Operation Super (hu)man**

Introduction

Transhumanism is an emerging philosophical and social movement that, by the means of technology, intends to lengthen human life and also to improve and expand the intellectual, physical and psychological capabilities. Within transhumanism it is not about a new approach of man, but about the announcement of an improved (enhanced) man, a trans-human or post-human form of life that leaves the human life, as we know now, behind. It is in every way, physically as well as mentally, the perfect man, the super man. Transhumanism is a convergence, a fusion of evolution, humanism and information technology. So transhumanism is not a religion or a doctrine of salvation, it is a rational view on the human development, so it is thought (1)

Many of the goals of transhumanism seem to overlap the eschatological hope of Christians, such as the eradication of diseases and death, but finally they are different in the way this should be achieved. There are many expectations of transhumanism that vary from an exaggerated development of the expansion of human capacities to doomsayers that consider every step to be the end of humanity and an evolution of a new super race, led by artificial intelligence or by Satan. Transhumanism is based on the evolution theory of Charles Darwin. It is everywhere in the trans-humanistic literature. But also other thinkers like the German antichristian philosopher Friedrich Nietzsche are occasionally quoted with consent, just as all kinds of post-modern philosophers.

**De Huxley family**

The term transhumanism was launched in 1956 by the atheistic evolutionary biologist Julian Huxley. He was the first Director of the UNESCO and co-founder of the World Wildlife Fund. He has also been the president of the British eugenics movement for a couple of years. He was a fervent advocate of all kinds of birth and population control. In 1963 Huxley became President of the British Humanist Association. His grandfather was befriended with Charles Darwin. His brother Aldous Huxley was the author of the futuristic book 'Brave New World' which partially describes a trans-human society.

In this article we intend to look at the developments of transhumanism within a biblical context, by using the borders of the creation order as the major criteria and touchstones. First of all, I want to describe the sky-high, unbiblical expectations of some transhumanists and afterwards some ethical options and comments on an increasing technical use of many applications. This is supplementary to the article I wrote titled: Artificial Intelligence: a curse of a blessing? (2)

**Expected developments in the coming 50 years** (3,4)

Some years ago, the New Scientist Magazine asked a number of top scientist about their expectations on the coming 50 years (3). Here are some of their answers: “By using artificial cells and sperms, manipulated from the body cells of both parents, almost all babies are born without genetic defects; new medicines will enable the human body to regenerate the ligaments that were lost by diseases or traumas; by using brain stimulating medicines, people will be able to have new mystical experiences and face their mortality without fear; the human mind will be expanded with implantable, organ electrical brain machine interfaces; portable devices will lead to new approaches for the development of therapies on behalf of cognitive diseases, such as schizophrenia, autism, depression and the Alzheimer disease; psychologists will be able to use image-shaping devices that tell us what is happening in the brains when we judge, when we make decisions, when we are dealing with one another and when we shape expectations and intentions; the non-biological computer intelligence will be a billion times larger than the combined intelligence of all human brains and finally, people will merge with the tools they have made; However, all of this implies also the risk of misuse, such as the implant of wrong thoughts in the heads of others and the influence of their preferences and decisions”.

**Transhumanism and singularity?**

Transhumanism is based on an expected convergence of biotechnology, nanotechnology, information and communication technology, neurosciences and robotics. In one way or the other all these fields, including their hybrids, are the subject of a consistent scientific research and technological development. Transhumanism expects that this research will ultimately end up in technological applications in order to improve human life.

Many transhumanist thinkers expect that these technological convergence will take place in this century. Take Ray Kurzwell, who boldly predicts that a techno-social ‘singularity’ will cause it to happen. Technological singularity is a time in the future where the technological improvement goes so fast that people with their current intelligence will no longer be able to comprehend the then developing society. (5) The time when all exponential trends that have begun since the existence of life, will all come together and will ‘go through the roof’. Ray Kurzweil puts it as follows in his book 'Kurzweil on the edge - The intelligent universe' (2002) (6,7):

“An analysis of the history of technology shows that technological change is exponential is, in contrast to the usual 'intuitive linear’ view. We therefore will not experience one hundred years of change during the 21st century, but it is more like to be 20,000 years (measured in terms of our current idea of change). The 'benefits' such as chip speed and cost-effectiveness also increase exponentially. There is even exponential growth in the exponential growth (double-exponential growth, S-curve). In a few decades, the machine intelligence will exceed the human intelligence and lead to singularity - technological changes that are so fast and all-encompassing in such a way that there will be a situation of a breaking point in human history. The consequences will be amongst others: the merging of biological and non-biological intelligence, immortal ‘human’ creatures based on software and ultra-high levels of intelligence that will spread in the universe at the speed of light”.

Based on this evolutionary ideology and its effect, there is still a lot to be done.

Important questions to be asked are:

- What is the essential feature of a (hu)man?

- What is the definition of conscience, personality, reality and identity? (2)

**Rene Descartes’ views on the human body**

The dream about immortality is nothing new. The French philosopher René Descartes already claimed that the spirit or soul is very unique and differs from the fleshy body. He considered the spirit as natural, immortal and divine, while considering the human body as a kind of machine that consists of nerves, muscles, veins, blood and skin. (8) This, however, is a reductionist thinking about the human image, which has been outdated in modern health care.

Yet we see this human image now repeated in many varieties with many transhumanists. Many A.I. (Artificial Intelligence) theorists consider man especially as an extremely complex biological information processing machine.

They state that the spirit is a complex electrochemical mechanism of mortal brain cells that are restorable, including the individual personality together with the conscious and unconscious realm of desires, experiences, memories, knowledge and emotions.

Together with the information theory, they consider the human spirit as neuronal patterns of information. Therefore, AI prophets state that the immortality of a spirit can be achieved by mapping out, extracting, reproducing and transferring the individual information pattern as consciously as possible, in order to ‘redeem’ the individual in an artificial digital vessel from his ‘mortal carbon cage’. This is in contrast to a physical immortality as Christians expect in the future. The image of the ‘post human man’ is therefore highly characterized by a moderated physicality.

**Post-humanism, a step after transhumanism**

While technology in the first place connects to the human body, the desire for enhancement and immortality based on technology, paradoxically goes hand in hand with a strongly increasing loss and distance in comparison to the originally natural body. (9) Hence that Cary Wolfe elaborates post-humanism in his book titled ‘What is Post-humanism?’ as a new theoretic model for biological, mechanical and communication processes (11) In that post-human view the body is considered an original prosthesis that we all need to learn to manipulate, just as extending or replacing body parts by other prosthetics. Finally he states in that book:

“A post-human view configures man so that he can merge seamlessly with intelligent machines. In the post-human existence there are no essential differences or absolute boundaries between physical existence and computer simulation, cybernetic mechanism and biological organism, robot technology and human goals. (11) According to Robert Geraci in the book *Apocalyptic A.I.: Visions of Heaven In Robotics, Artificial Intelligence, and Virtual Realit*y, the technological progress anticipates in a way that creates a heaven on earth “before the transcendent spirit escapes from this earth” into an expanding space of “immorality, intellect, moral kindness and meaningful calculation.” (10)

**Science-fiction and science**

A.I. or artificial intelligence with its possible technological and scientific applications, is one of the most commonly discussed topics which are investigated in science fiction films and cyberpunk novels. Contemporary science fiction stories and novels contain technological adventures in which the limit of human fantasies, adventures and romances are set in a technological future. It is a transhumanist search in the field of innovation of science and technology, of spirituality and a legitimate desire for salvation, power, immortality and the elimination of diseases. Some examples of contemporary SF movies are Steven Spielberg’s A.I. Artificial Intelligence (2001), Alex Proyas' ‘I Robot (2004), Wachowski Brothers’ The Matrix (1999), Jose Padilh's Robocop (2014) and Wally Pfister's Transcendence (2014). (12) All this in order to transcend the earthly limitations. The original body is limiting the expansion of the spirit and the path, which is taken through extensions, prostheses and cyberspace technologies, finally leads to the disembodied purity of the matrix.

In this way the ultimate goal of the cyberpunk genre is indicated as the realization of an absent body, which is a pure mental existence. In this way we obtain a new version of the Cartesian dream. After all, the body in Utopia is also a ‘body without a body’, a beautiful, transparent and luminous body, which is fast, magnificent in power, infinite in duration, invisible and protected.

**The Bible and the body**

In the Bible the body is an inseparable and fully integrated part of the whole man. Man is body and at the same time has a body (Gen.2:7). Because of the body we have a ‘world awareness’ in the material world. We as human are God’s temple if God’s Spirit dwells in us (1Cor.3:16). The redemption of man doesn’t only involve spiritual redemption but redemption of the total inseparable unity of man in connectedness with God.

*“Now may the God of peace Himself sanctify you entirely; and may your spirit and soul and body be kept complete, without blame at the coming of our Lord Jesus Christ. Faithful is He who calls you, and He also will do it.”* (1Thes.5:23-24).

The expectation is that we shall also have a perfect resurrection body in heaven. *“It is sown a natural body, it is raised a spiritual body. If there is a natural body, there is also a spiritual body”* (1Cor.15:44). In the search for the consciousness of man, also more and more scientists become aware that consciousness not only has to do with our thoughts and feelings, but is inseparably connected with our physicality, by the movement and the gravity that we experience. Taking refuge in another reality (which is something else than making use of creativity, imagination) is a refuge from God’s creation order.

The idea of separating the body and spirit is an ancient old occult trap.

In the Promise magazine, I have proved in many articles that in many world religions, taking distance from the body leads to a receptiveness to the fallen spiritual world. It is a satanic principle whereby the creation order of spirit, soul and body is broken. Through our body and our senses we have also contact with reality and a pure consciousness. In the occult, people are trying, by rituals, trance, hypnotic forms, drugs, wrong meditations, wrong exercises, forms of music, to cause a separation between our physicality and our spirit. People think that if a spirit can escape from the body, man comes to a higher consciousness and evolves into being a god. This very same idea we find, as I earlier proved, also in many movements of transhumanism.

**Genetics**

If the 20th century was the ‘golden age’ of the development of computers, then the 21st century is the ‘golden age’ of genetics. Worldwide there has been a lot of discussion about the question whether we are allowed to modify the DNA of embryos. Genetic technology or gene technology is a modern form of bio technology whereby the DNA of an organism is directly modified. This in contrast to the classical biotechnology whereby the DNA of an organism is *indirectly* modified, e.g. by cross-breeding. Genetic manipulation is the insertion of a part of DNA from one organism into another one. This technique is called recombinant DNA technique. If you modify that DNA, you also change the DNA of the next generations. The modification of DNA so early in life is called germline genetic modification. In a previous article (13), I have indicated that there are many ethical objections to be raised from a biblical perspective with regard to the modification of DNA in embryos; the selection of embryos to prevent that a child will carry a hereditary disease; the cultivation of human organs in animals and the production of ‘artificial’ embryos.

Genetic modification that has been applied for decades, is now experiencing a drastic increase of its technical possibilities, which leads to a new field, called synthetic biology.

It fits seamlessly to the transhumanist thinking. Many Christians are struggling with ethical choices, especially with the methods that make use of ‘residual embryos’ which are killed after selection. Fortunately there is also a majority of Christians that generally rejects the ‘cultivation’ of embryos for research purposes. A very important fundamental question in the whole dialogue is: When is it a matter of life? Dr. Henk Jochemsen, former director of the Lindeboom Institute, also indicates that an embryo is a human in process and therefore needs full protection. He basically applauds the combating of hereditary diseases by germline genetic modification as long as the technique is safe and no embryos are needed for research. He asked at the same time the question in the Linde Magazine whether the application of the technique will be limited to that end: “There is no sharp line to be drawn between the healing of diseases and “human enhancement”.

Do we get ‘man on delivery’ in the future, on which we stick the desired features in the DNA? (14) It only becomes really dangerous when Darwinist philosophers will try to formulate a scientific application as a basis for a eugenic program (as it was with the Nazis). If, in the end, man will be cloned anyway, will it then be a person with constitutional rights? We are witnessing a depersonalization of human life, if all parts of humans and genetic materials are sold and patented, edited and developed. Is an unprecedented change of traditional, social and legal definitions waiting for us? Traditional ideas of life, birth, disease, death, mother, father, and person are beginning to waver and will then disappear. The devil wants to destroy God’s creation order. I think that faith in God and man as His image bearer, is the only basis with which we can limit the current developments. Christians should take a well-considered stand on genetic manipulation and cloning. This applies both to the use of genetic technology and the possible dangers.

According to Professor Dr, A. Houtepen, a Roman Catholic theologian and ethicist, “genetics should also be viewed from the perspective of the finiteness of man and the vulnerability of the universe. In stewardship, neither an anthropocentric exploitation drive nor a cosmic equivalence of man with animal and plant, is fitting” (15).

**Human enhancement**

A description for a terminology for human enhancement in the sense of transhumanism, could possibly be: ways to make functional changes in human features, capacities, emotions and capabilities that go beyond the limits of the creation order; this with the help of advances in biology, chemistry, physics, materials, information technology and human sciences. Technique can now already help restoring impaired body functions. Hearing aids, pace makers, contact lenses and all kinds of prostheses have totally become common.

There’s nothing wrong with that. It becomes crazy when people inject the growth hormone EPO to increase the physical stamina. People can also use anabolic steroids, a human growth hormone, with amphetamines or fortifying blood transfusions in order to obtain extra physical strength. Through hormonal therapy people can stimulate or restrain their physical growth. People can bend their own hormonal system from feminine into masculine and vice versa. They can transplant a number of organs and sorts of tissues.

More than 70,000 formerly deaf people have received a cochlear implant, by which a certain type of deafness can partially be restored. In a number of cases of blindness the vision can partially be restored by linking camera systems to the nerve channels: there are experiments with retinal interfaces and with implants in the visual cortex. (16) Via deep brain stimulationsome symptoms of the Parkinson’s disease and obsessive compulsive disorder can be reduced.

The Antwerp surgeon Dirk de Ridder has recently succeeded to reduce the appetite of obesity patients by stimulating the right spot in the brain electrically. (Carpentier, 2007). Far reaching emotional states can also be incited by electrical stimulation such as emotions of depression, happiness, laughter outbursts, falling in love, calming, anger, sleep, taste, sexual excitement, disgust, wire-heading scenarios in which one controls his own emotional life electrically. Also (sudden) physical movement and sensory hallucinations can be incited in this way.

The evolution goes further. Apart from every (direct) connection to the brain, also some very functional limb prostheses have been developed. So there are Cheetah lower leg prostheses with which e.g. Oscar Pistorius was able to sprint at Olympic level. The prototype of the robotic foot on which Hugh Herr can walk, is despite the many permanent inconveniences in several respects clearly and distinctly superior to an organic human foot: his gait is a lot more energy efficient, which increases his stamina for hiking, and additionally, his foot is much more resistant to degradation.

Chips can also be implanted in the body that exchange information with the outside world, or monitor devices that monitor physical processes. (16) There are also developments that may be realized in the short term, such as: Broadband connections between the human brain and machines that change the way we work, drive and relax. Sensors and computers will increase the level of human consciousness. By the implantation of electrodes in specific parts of the brain, it is possible to register the *thought of* moving fairly accurate with a computer, so that on mere thought one can make a device that is connected to the brain, to move.

This can partially reduce the restriction of movement, in case of paralysis. In case of Amyotrophic Lateral Sclerosis (ALS) in advanced stage, a patient can look at the PC screen with his eyes, point out letters and communicate only in this way. Recently, this limited telekinetic ability has also been realized with a non-body penetrating, quite comfortable helmet. In a way this is a (somewhat clumsy) ‘fifth limb’. Amputee people can use ‘robotic’ prostheses through related technology: signals from the brain or the nerve system manipulate the limbs driven by devices, sometimes up to the level of artificial finger phalanges.

Again and again the important touchstone is whether the improvement will remain within the natural creation borders, or that people will try to cross them.



Evolution

Post Human

Transhumanists

Humans

Animals

Plants

**Nephilim**

An interesting view on transhumanism is the indication of the Nephilim in the Bible. Rev. W.P. de Nooy wrote about it in the book titled *Trends en ontwikkelingen op het gebied van het transhumanisme* (Trends and developments in the field of transhumanism) (17):

“The ages of before the Flood are described in Genesis 6, where the angels descended from heaven to earth and multiplied themselves with women. Also the (apocrypha) book Henoch describes that angels, in the time before the flood, went to the earth against the will of God and taught human race useful, though also bad things and that they depraved the animal world. If the angels descended to the earth against God’s will, we can conclude that they were disobedient angels which did not acknowledge God’s authority anymore and so automatically came under the authority of Satan.

The angels and their offspring (the giants) have ruined the animal world genetically, according to the non-biblical books Henoch and Jasher (which are cited by Biblical writers). These angels saw from the heavenly dimensions the beautiful earthly women and they also wanted to have them. They went to the earth and came on the mountain of Hermon in Northern Israel. Their number was 200 (source: Henoch) and they multiplied themselves with the women from which children were born that grew into giants (in Hebrew also called ‘Annunaki’ and ‘Nephilim’).” (Some interpreters on the other hand, state that all of this should be understood in spiritual sense, just like the sin ‘gives birth’ – see e.g. Ps. 7:14 and Jam. 1:15). De Nooy notes further that the increasing transhumanist development may become a weapon in the hands of the antichrist.

**Revelation 13, the Antichrist**

“What the world doesn’t see, is that the trend of transhumanism and hybridization could have very well been triggered by the spirit of the antichrist, which is now already in the world: *“and every spirit that does not confess Jesus is not from God.* *This is the spirit of the antichrist, which you have heard is coming, and now it is already in the world* (1 Jn 4:3). The antichrist needs a human race that is absolutely obedient, which (in an antichristian way) could be realized by dehumanize man, e.g. by connecting a device (electronic device or chip or network) to the antichrist, so that orders/adoration of the antichrist can be carried out in a slave manner.

**The Mark of the Beast.**

We see in Revelation 13 that there is a strong stress on forming a unity of human race under the leadership of the Antichrist. God purposely created a language confusion right after the building of the tower of Babel: *“Behold, they are one people, and they all have the same language. And this is what they have started to do, and now nothing which they plan to do will be impossible for them.”* Gen. 11:6), according to de Nooy.

I personally do not believe (1) that human consciousness exists or evaluates out of nothing. But in the text in Revelation there is mention of a cybernetic singularity that develops explosively and which, **as soon as it is given a spirit**, it may develop into a synthetic übermensch, which is a virtual divinity, an antichrist.

Now already a lot of and even a daily increasing information has been saved from most people on earth, which also makes us vulnerable in many ways.

Just think of all the things we are connected with via networks.

**Speculation on biotechnology**

In speculations on biotechnological threats in the near or very near future even greater risks are foreseen. For example an incorrect or malicious use of nanotechnology. This could set in motion an irreversible ecological process that can cause all of the biomass on the planet to be transformed into a uniform substance in a time span of a few weeks. A nuclear dooms dayis nothing to that.

Although this Grey Goo scenario meanwhile is dismissed as highly improbable (Giles, 2004 (19) the realistic fear still remains that nano and bio weapons will have a much greater destructive potential than the present nuclear arsenal (Joy, 2000; Kurzweil, 2005: 397-426 (20). Many speculations of the causes and the arising of the worldwide pandemic Covid-19 involve the tampering in the biotechnology, whether intentional or not.

According to Bill Joy (co-founder of Sun Microsystems), intelligent robots may ultimately prove to be a stronger species than man, so that the latter will get the status of endangered animal species. According to Martin Rees, a renowned British cosmologist and astrophysicist, and former president of the Royal Society in London, there is a fair (50/50%) chance that, as a result of possibly malicious or unintentional release of destructive technology, the 21st century will be the ‘last century’ of Homo sapiens.

Garner (21) indicates that potential conflicts of values will arise between different people, especially when one group controls the technology. Amongst others by co modification, which is a process whereby more aspects of human action and organ systems are measured in monetary terms. Because more and more services and goods are for sale, human relations will have an increasingly businesslike character. Parts of the human will become tradeable products which are being reserved for individualistic gain without considering the consequences concerning other people. Garner tells it briefly when he says: "... technology is both a product and an instrument of social control, which theologically means that man is able to cause both great good and great evil.”

**Testing Of Transhumanism**

A perfect human race can only be found in the gospel of Jesus Christ.

The Bible says that the Christian faith is useless if Christ has not been raised.

But because Christ has been raised, we all shall be made alive by Christ (1Cor.15:17 and 22). In Christ a new man is born. By faith and out of grace, an eternal perfect life is accessible for everyone. A (future) eternal life, without pain and sorrow.

An important touchstone for all developments is, as earlier mentioned, the biblical human image, the inseparable creation order of spirit, soul and body and the natural boundaries that God has established. A human is not an (accidental) product of evolution, but a creation deed according to the image of God, created within the context that God Himself has determined in relation toward Himself, toward man himself, toward the fellowman and with nature. It is legitimate to search for means of improvement or restoration of health within those boundaries. Thereby it should be noted that now, this is for the natural man only partly reachable within the specified limits and in future it will be fully reachable. In his test on transhumanism,

Shaw (18) discusses some of the fundamental theological questions: the trap is that human race strives to be like God. In particular, he outlines four strategies of ‘playing God’, including an assault on reality (Striving for Almotce); striving for immortality (Striving for eternity); assumption of knowledge (Striving for omniscience); and arrogance of grace (Striving for redemption). This corresponds with my earlier thoughts in the article “Babel in construction’ (22) in which I mentioned three great dangers of a transhumanist development.

1) Autonomy
(Gen. 3:22-24) Man seems to develop himself into a creature that gains more and more control over his environment. The world seems to be getting smaller and smaller. Man seems to gain divine features, such as omnipresence, creation power, and seems to loose limitations and boundaries of his body and existence.

2) Identity crisis

On the one hand, it leads to the enlargement of the ‘I’, on the other hand, there’s no clear distinction anymore between God and man and the rest of the world, between reality and unreality and between space and boundaries of time (See Rom. 1:18 ff). Men can adopt different identities in different situations.

3) World view

Man is, as mentioned above, overwhelmed by a materialistic, reductionist, symbiotic and evolutionistic world view, in which he develops further and further away from the realization that we are living in God’s world and are accountable to Him for how we have dealt with ourselves, with others and with His creation. *The spirit which is in the world and has (temporarily) developed itself, is not out of the love of God but a spirit of the lust of the flesh, the lust of the eyes and the boastful pride of life* (1 Jn. 2:15-16). The tree of knowledge has developed further away from God, and man has chosen for it instead of choosing the tree of Life which *is*, and which doesn’t need to be developed (21). The ancient Babel seems to resurrect in the transhumanist ideologies, but Revelation 18:10 reads: *“Woe, woe, the great city, Babylon* (Hebrew for Babel) *the strong city! For in one hour your judgment has come”.* There is an explosive development indeed, which is unprecedented in history, and all the more true is near the coming of the Lord, Who says: *“Behold, I am making all things new”.*

Gerard Feller

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