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**SALVATION
THROUGH
TECHNOLOGY**

VERAX

INSTITUTE



Orientation in a Time of Confusion

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Impressum

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Salvation Through Technology

Creating A Posthuman

New Breed

By Dr. Martin Erdmann

In *The Metaphysics of Virtual Reality* Michael Heim has observed, “Behind the development of every major technology lies a vision”. [1] It will be no different with the technologies used by postmoderns to transform themselves into posthumans. Critically examining these mythical and religious themes helps to explain why postmodernity is not displacing modernity as a historical era, but is subsuming and transforming it within a thoroughgoing historicist vision. Postmodernity is simultaneously the affirmation and negation of modernity. Despite the Enlightenment’s apparent victory of displacing theology with science as the dominant force of cultural formation, religious motivations were, according to David F. Noble, never eliminated but only muted. [2] Rapid technological development was often praised in progressive and scientific terms, but it was “driven also by distant dreams, spiritual yearnings for supernatural redemption” [3]. Indeed, “modern technology and religion have evolved together, and as a result the technological enterprise has been and remains suffused with religious belief” [4].

For a thousand years in Western culture, the advancement of the mechanical arts – technology – has been inspired by deep religious desires of transcendence and redemption. Although currently obscured by secular language and ideology, the contemporary resurgence of religion, even New Age spirituality, alongside and hand-in-hand with technology is thus not an aberration but simply the reassertion of a forgotten tradition.

Redemption Through Mechanical Arts

Early in the Christian era, Augustine wrote in *The City of God* that “Quite apart from those supernatural arts of living in virtue and reaching immortal beatitude,” no human achievement can offer any sort of solace for a life condemned to misery. The mechanical arts, no matter how



Augustine - Philippe de Champaigne

advanced, existed solely to aid fallen humans and nothing more. Redemption and transcendence could only be achieved through the unearned grace of God. Augustine's pessimistic outlook was partially conditioned by taking the effects of sin and rebellion against God seriously. However, it should also be noted that he lived at a time when the Roman Empire was on the trajectory of irreversible decline.

In the Middle Ages a new millennium mentality developed, making explicit use of the fruits of technology. In Genesis, man had been given dominion over the natural world, but then sinned and lost it, and thereafter had to earn his livelihood "by the sweat of his brow." Now through the help of technology, man could gain back some of that dominance and accomplish things he never could have done without it. The increasing use of machines allowed man to exploit the material resources

at his disposal more efficiently. Technological development became closely identified with the advance of God's visible kingdom on earth. Herein lay its all-important spiritual significance.

In sharp contrast to the portrayal of time and eternity in Augustine's *City of God* human history was redefined as an active pursuit of achieving perfection. No longer were people expected to face a bleak existence of mere subsistence passively and blindly. Instead, people were expected to work consciously in an attempt to make their earthly lot better. Technology could, in ways everyone saw, give assurance that humanity was improving its position in life and was succeeding over nature. The notion gained currency that by the proliferating use of technology heavenly conditions could be created on earth in the future.

In the early Middle Ages the project of technological advancement, especially the introduction of the heavy plough, came to be identified



Benedict of Nursia

with Christian transcendence of a sinful world and Christian redemption from a fallen human nature. Most notably, Benedictine monks regarded manual labor as an important means to earn spiritual favors with God, equal to prolonged prayer and worship. As early as the sixth century, Benedict of Nursia considered physical toil as a vital aspect of monastic devotion culminating in the pursuit of perfection. He imbued the use of machinery with a spiritual purpose, because it increased the efficiency of human industry. In contrast to the previous use of solely spiritual images, mechanical artifacts appeared in the monastic illumination of calendars. Other decorations depict technological advancements aiding the righteous armies of God, whereas the evil opposition is technologically inferior. At this point we may see the first tendrils of this attitude shift taking hold and technology becoming an aspect of Christian virtue. Quite simply: what

was good and productive in life became identified with the prevailing Roman Catholic religion.



Duns Scotus Erigena

Carolingian philosopher John Scotus Erigena coined the term *artes mechanicae* – mechanical arts – and declared technology to be part of humanity’s original endowment from God. He wrote that the arts are “man’s links to the Divine, [and] cultivating them a means to salvation.” Through effort and study, the powers Adam and Eve possessed in their state of innocence could perhaps be regained and thus fallen humanity would be well along to achieving perfection and redemption. Mechanical arts were no longer simply a raw necessity for fallen humans; rather, they had become Christianized and invested with a spiritual significance that would only grow over time.

Redemption Through Alchemy

In the late Middle Ages, mystics sought self-transcendence through repetitive chemical rituals – the quest for the so-called “[Philosopher’s stone](#)”. [Alchemy](#)[5] was above all the knowledge of the secret initiates, and its goal was esoteric knowledge: the science of [Hermeticism](#). [6] Its technique was based on the idea that in the endless mixing of the same ingredients – chemical opposites – the chemicals would somehow transcend themselves after a hundred or a thousand identical operations. No one could know in advance when or how this transformation would take place. No one attempting to repeat this process could be assured of success. This ritualistic procedure was not merely a mysterious chemical reaction, but the alchemist’s magic gateway to transcend his own creaturely limits. The discovery of the so-called “Philosopher’s Stone”, which would allow the transmutation of lead into gold, was the product of the alchemist’s very soul. In its essence, alchemy was a deeply religious pursuit. “Gold ... is the symbol of immortality.”[7]

Alchemy, following the lead of magic, argued for the Hermetic principle of the macrocosm’s correlation with the microcosm: “[As above, so below](#).” All being is at bottom one, or monistic. “It means,” writes Thomas Molnar, “that there is an absolute although hidden concordance

between the lower and the higher worlds, the key of which lends to the magus incalculable powers.”[8] Thus, by manipulating the cosmos, the initiate can change the nature of man. On the other hand, by manipulating something near at hand, he can affect something far away.[9] There is an ontological relationship between man and the cosmos, a **chain of being**. It is therefore the task of humanity to bridge the chasm between its own temporarily limited being and God’s eternal being. With its roots in Hermeticism, alchemy was self-consciously committed to the divinization of humanity.

Alchemy is based on a **Pelagian** view of humanity. Human nature is supposedly good. The possibility for perfection is always present in life. Human beings are not flawed by the effects of ethical rebellion. Given this outlook, the self-transcendence of humanity becomes a sociological imperative: “At the stage we have reached in scientific research our minds and intelligence will have to surpass themselves and rise to transcendent heights; the human, all-too human, will no longer suffice.”[10] Not only is this leap of being a sociological imperative, but it is also an ethical imperative: “If men have in them the physical possibility of attaining one or other of these states [of higher consciousness], the quest for the best means of doing so ought to be the principal aim of their lives.”[11] This transformation is strictly a question of the proper technique.

If my brain [writes Eliade] is equipped with the necessary machinery – if all this does not belong exclusively to the domain of religion or mythology – if it is not all a question of divine “grace” or “magical initiation” but depends upon certain techniques and certain internal and external attitudes capable of setting this machinery in motion – then I am satisfied that my only ambition and most urgent duty ought to be to reach this “awakened state” and attain these heights at which the mind can soar.[12]



C. S. Lewis

The long history of alchemical pursuits testified vividly to the persistence of a faith in the potency of techniques, ritualistic or otherwise, in achieving human self-transcendence. The unshakable confidence in the mind’s capacity to invent techniques which would rid human nature of its imperfections is firmly rooted in the irrational ground of mysticism. In the quest for immortality every man-made device is judged superior to the workings of God’s grace, as delineated in the Christian faith.

C. S. Lewis makes the observation in *The Abolition of Man* (1944)[13] that a combination of occultism and humanism appeared in Western history at the time of the Renaissance, setting a vital building block – certainly not the only one – in the intellectual edifice of modern science:

I have described as a “magician’s bargain” that process whereby man surrenders object after object, and finally himself, to Nature

in return for power. And I meant what I said. The fact that the scientist has succeeded where the magician failed has put such a wide contrast between them in popular thought that the real story of the birth of Science is misunderstood. You will even find people who write about the sixteenth century as if Magic were a medieval survival and Science the new thing that came in to sweep it away. Those who have studied the period know better. There was very little magic in the Middle Ages: the sixteenth and seventeenth centuries are the high noon of magic. The serious magical endeavour and the serious scientific endeavour are twins: one was sickly and died, the other strong and thrived. But they were twins. They were born of the same impulse. I allow that some (certainly not all) of the early scientists were actuated by a pure love of knowledge. But if we consider the temper of that age as a whole we can discern the impulse of which I speak.

Humanist philosophy and occultism were two sides of the same revival of Renaissance paganism. Thus, Lewis argued, occultism and humanistic rationalism are not enemies in principle but rather cooperating philosophies that are united against Christianity and Christian civilization. This is the theme of his great masterpiece, the novel *That Hideous Strength*.

Recovering Adamic Perfection Through Invention

An important figure in the development of modern Western science is Francis Bacon. Science was in Bacon's view limited primarily to the construction and employment of mechanical arts. An avid reader of John's *Apocalypse*, the Viscount of St. Albans cautioned the Christian public in England about the appearance of the Antichrist. He wrote that "Antichrist will use these means freely and effectively, in order that he may crush and confound the power of this world ... the Church should consider employment of these inventions because of future perils in the times of Antichrist which with the grace of God it would be easy to meet, if prelates and princes promoted study and investigated the secrets of nature."



Francis Bacon

Bacon also believed that technological know-how was an original birth right of humanity which had simply been lost in the Fall. Writing in his *Opus Majus*, he suggested the contemporary gaps in human understanding stem directly from Original Sin: "Owing to original sin and the particular sins of the individual, part of the image has been damaged, for reason is blind, memory is weak, and the will depraved."

For Francis Bacon the pursuit of knowledge and technology had three reasons: First, to make sure that the benefits of technology would not be the sole province of the Antichrist; second,

to regain power and knowledge lost after the Fall in Eden; and third, to overcome current individual sins and achieve spiritual perfection.

In the 17th century learned divines in England and on the Continent such as Joseph Mede and Johann Heinrich Alsted devoted their intellectual powers to a study of biblical prophecy. Of particular interest to them were the [Apocalypse of John](#) and the book of Daniel. In Daniel 12:4 the prophet wrote, “*Many shall run to and fro, and knowledge shall be increased*”. As historian Charles Webster observes, “The Puritans genuinely thought that each step in the conquest of nature represented a move towards the millennial condition.” The proliferation of scientific and technological achievements could only mean that the end of the world was close.



The Royal Society was founded in 1660 for the purpose of improving general and practical knowledge. Its Fellows worked at experimental inquiries and the mechanical arts. Margaret Jacobs notes: “Almost every important seventeenth century English scientist or promoter of science from Robert Boyle to Isaac Newton believed in the approaching millennium.” Accompanying this belief was the desire to [recover the original Adamic perfection](#) and [knowledge lost with the Fall](#). Robert Hooke wrote that the Royal Society existed “to attempt the recovery of such allowable arts and inventions as are lost.” Thomas Sprat was certain that science was the perfect way to establish “man’s redemption.” John Wilkins claimed in *The Beauty of Providence* that the advancement of scientific knowledge would allow [humanity to recover from the Fall](#). Robert Boyle thought that scientists had a special relationship with God; that they were “born the priest of nature”. They would ultimately “have a far greater knowledge of God’s wonderful universe than Adam himself could have had.”

In Masonic writings of the time, God is identified very specifically as a practitioner of me-

chanical arts, most often as the “Great Architect” who had “the Liberal Sciences, particularly Geometry, written on his Heart”. Members were encouraged to practice the same scientific arts not only to reclaim lost Adamic knowledge but also to become more God-like. Freemasonry was a means to redemption and perfection through the cultivation of science and technology.

A particular legacy of Freemasonry in England and France was the development of engineering as a profession. [August Comte](#) wrote of the role engineers would play in humanity’s reclamation of Eden: “The establishment of the class of engineers ... will, without doubt, constitute the direct and necessary instrument of coalition between men of science and industrialists, by which alone the new social order can commence.” Comte suggested that they, the new priesthood, imitate priests and monks by renouncing pleasures of the flesh.

Achieving Perfection by Transcending Human Nature

Consequently, it is not surprising that religious themes continue to inform the development of postmodern technologies, for postmodernity is modernity’s prodigal child. Yet since postmodernity is also the negation of modernity, its religious themes are radically reinterpreted and redirected. Modern millennial expectations for an [Edenic and Adamic recovery](#), for instance, were reinforced by advances in modern science and technology. Humankind, it was believed, was entering a golden age when it would faithfully exercise its divinely [mandated dominion](#) over creation, and, more importantly, would obtain the state of perfection humans enjoyed prior to the Fall.[14]

The postmodern turn is to insist that such a [restorationist](#) program is too confined. Complete mastery over nature, and derivatively human nature, cannot be achieved until humans perfect themselves by becoming a [superior species](#). The promise of transcending human nature to become some kind of [immortal Superman](#) is a fundamental part of technology which is often not explicitly recognized in general. The current technological attempts to prolong the normal human lifespan goes well beyond the common fear of death and desire to overcome it and results in a negation of all we are in an effort to become something else entirely. If the modern project is to make humans better, then the postmodern goal is to make creatures that are more than human.

The former Secretary General of UNESCO, [Julian Huxley](#) wrote in the concluding chapter of *Touchstone for Ethics*, the following:

[Man the conscious microcosm has been](#)



Julian Huxley

thrown up by the blind and automatic forces of the unconscious macrocosm. But now his consciousness can begin to play an active part, and to influence the process of the macrocosm by guiding and acting as the growing-point of its evolution. Man's ethics and his moral aspirations have now become an integral part of any future evolutionary process.[15]

This theme became a familiar one in later books by Huxley. No statement is more forthright, however, than the opening chapter of his 1957 book, *Knowledge, Morality, and Destiny*, which he titled "Transhumanism":

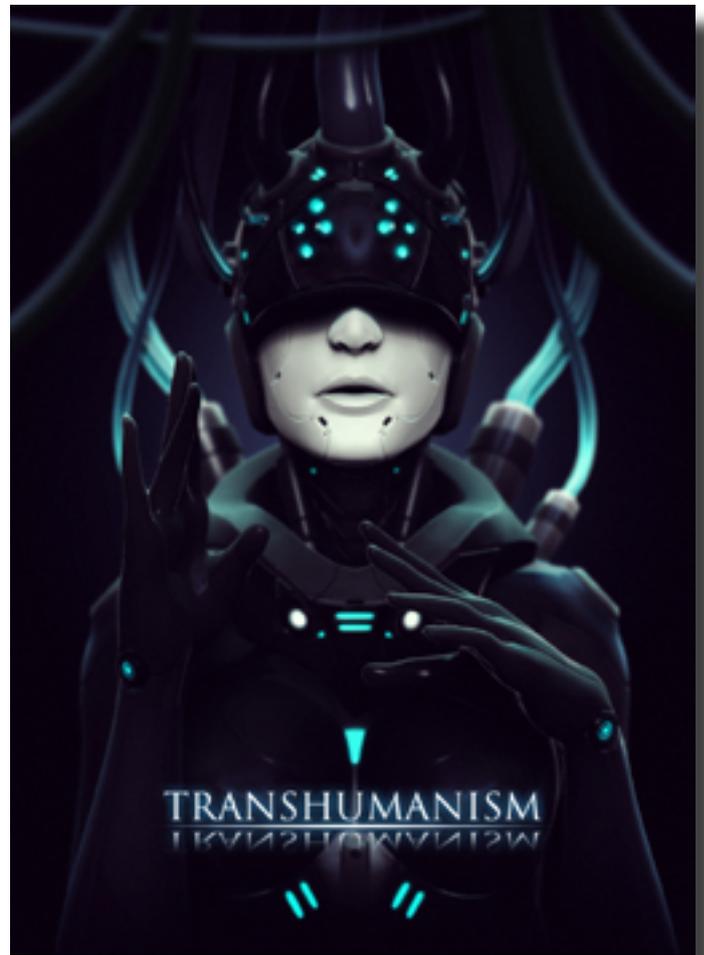


As a result of a thousand million years of evolution, the universe is becoming conscious of itself, able to understand something of its past history and possible future. This cosmic self-awareness is being realized in one tiny fragment of the universe – in a few of us human beings. [16]

There is nothing humble about residing on a tiny bit of dust in an immense universe, whether one is a Christian or an evolutionist. Huxley repeats the now-familiar themes: "For do not let us forget that the human species is as radically different from any of the microscopic single-celled animals that lived a thousand million years ago as they were from a fragment of stone or metal." [17]

The two great discontinuities in the uniformitarian universe were the appearance of life and the appearance of man. Evolutionists use uniformitarianism to push God back to the infinite past

or into the infinite future, and to deny the six-day creation. They do not use uniformitarianism to refute these two great discontinuities. We are now at another great period of evolutionary discontinuity. A new era is about to dawn. [Julian Huxley](#) spelled it out for us in no uncertain terms: “The new understanding of the universe has come about through the new knowledge amassed in the last hundred years – by psychologists, biologists, and other scientists, by archaeologists, anthropologists, and historians. It has defined man’s responsibility and destiny – to be an agent for the rest of the world in the job of realizing its inherent potentialities as fully as possible.”[18] An amazing bit of luck for all of us, isn’t it? It took 15 billion years[19] to get from the “big bang” to the creation of life in the solar system. Then it took another 3.497 (or possibly 3.498) billion years to get from life’s origin[20] to that second great cosmological discontinuity, man. And now, here we are, ready for stage three, the ascension of man to



his position of universal – literally universal – power. If you had been born a Neanderthal man (let alone a brontosaurus), or even an eighteenth-century *Philosophe*, you would have missed it. Missed what? According to Huxley, you would have missed man turning into a posthuman:

It is as if man had been suddenly appointed managing director of the biggest business of all, the business of evolution – appointed without being asked if he wanted it, and without proper warning or preparation. What is more, he can’t refuse the job. Whether he wants to or not, whether he is conscious of what he is doing or not, he is in point of fact determining the future direction of evolution on this earth. That is his inescapable destiny, and the sooner he realizes it and starts believing in it, the better for all concerned.[21]

A new humanity is coming:

The human species can, if it wishes, transcend itself – not just sporadically, an individual here in one way, and an individual there in another way, but in its entirety, as humanity. We need a name for this new belief. Perhaps transhumanism will serve: man remaining man, but transcending himself, by realizing new possibilities of and for his human nature.[22]

With those few fateful words, this world-renowned scientist sparked a brand new ideology – a scientific, philosophic phenomenon with some of the boldest aspirations in history. Though its meaning has been revised somewhat since Huxley’s day, Transhumanism remains true to the spirit of rational humanism in which he originally coined it.[23]

In a candid statement Huxley made sure that his readers would not miss the radical implica-

tions of what he was writing:

Assuredly the concept of man as instrument and agent of the evolutionary process will become the dominant integrator of all ideas about human destiny, and will set the pattern of our general attitude to life. It will replace the idea of man as the Lord of Creation, as the puppet of blind fate, or as the willing or unwilling subject of a Divine Master.[24]

Man had lowly origins, but he is now the source of direction and meaning for the evolutionary process. After all, Huxley believed, there is no one higher than man, for there is no one – no self-aware Creator – who preceded man.

Technology to Achieve Immortality

Transhumanist philosophy promotes the idea of human enhancement by technological means. In its extremes, futuristic concepts like intelligence enhancement (up to “superintelligence”) using techniques like genetic engineering, psychopharmacology, anti-aging therapies, neural interfaces, wearable/implantable computers, long-lasting internal organ replacement, mental uploading and so forth are propagated from prominent positions like the US Nanotechnology Initiative and the Oxford University philosophy department. Today, the Oxonian don Nick Bostrom, the co-founder of the World Transhumanist Association, advocates the “possibility” and even “desirability” of developing technology for the purpose of seeking immortality and improving current mortal existence by enhancing “intellectual, physical, and psychological capacities”. [25] In order to make these revolutionary alterations, essentially mechanizing the human species, transhumanists urge the human race to seize control of its destiny, [26] casting off the restrictive and pernicious dogmas of bygone eras, as they see it. [27] It is “a way of think-

ing about the future that is based on the premise that the human species in its current form does not represent the end of our development but rather a comparatively early phase.” [28]

The 21st century, the age of technological advancements, is instilling in modern civilizations a new innovation that could change the shape of humanity forever. The dawn of the new millennium could alter from fantasy to reality the prospect of creating a perfect human being, who would no longer be subject to death. In the meantime, expanding technological opportunities would enable humans to have extended and healthier life-spans, enhanced intellectual, physical and emotional capacities and a future that promotes life-long happiness, prosperity and eternal freedom.

The increased growth of Transhuman-



ism, we are told, is a first step into breaking through the barriers of human limitations. At the same time, transhumanists paradoxically purport to consider the ethical implications of proposed technological leaps. They are dedicating themselves to researching the possible threats such technology might pose and which could endanger humanity. Thus, they foresee a future that would produce a “dazzling landscape of radical possibilities, ranging from unlimited bliss to the extinction of intelligent life”.



The statement that Transhumanism is part of a religious worldview cannot be denied and is readily admitted by its more forthright devotees. In a *LA Weekly* interview, Natasha Vita-More and Max More speak of Transhumanism as part of a belief system. Both are committed transhumanists, and Max More is a leading figure in the “[extropian](#)” branch of the Transhumanist movement. More states that the first principle of extropianism, which he defines as “Perpetual Progress”, involves “seeking more intelligence, wisdom and effectiveness, an indefinite life span, and the removal of political, cultural, biological and psychological limits to self-actualization and self-realization. Perpetually overcoming constraints on our progress and possibilities. Expanding into the universe and advancing without end.”[29] Transhumanists do not accept the traditional Christian view of God, and their [monistic](#) bent is easily detected. Avowed Transhumanist Samantha Atkins speaks of “the norm, the ‘way nature made us,’” which clearly disqualifies a single Creator-God. The statement of beliefs of the Transhumanist Church also negates the need for a Savior-God: “We are our own saviors. We cannot rely on supernatural or external forces to guide us on our journey. Responsibility is on our shoulders to create the world we wish to live in.”[30] Transhumanists recognize the longings for immortality, enhancement, and meaning that religion fulfills, and often describe themselves as very spiritual – yet their materialistic presuppositions lead them to substitute the promises of a technological utopia for those of spiritual salvation. Many subscribe to secular Buddhism[31], whose belief that the world is all one and evolving towards reunification fits well with posthuman hopes of self-transcendence and greater human-machine interface. Natu-

rally, the utopian vision of unending health and youthful vigor in a world free of the suffering, hatred, and baseness of humanity is similar to the Christian description of Heaven – except that transhumanists hope for [paradise on earth](#) and see posthumans, not Christ, as the focus.

In accord with age-long mystical quests, Transhumanists would argue that human beings can loosen the chains of a mortal existence. Their religion is a new incarnation of Hermeticism. [32] The organic constitution of the human body is viewed as something to get rid of by merging it with a machine. Katherine Haynes, a professor at the University of California in Los Angeles, states, “Humans can either go gently into that good night, joining the dinosaurs as a species that once ruled the earth but now is obsolete, or hang on for a while longer by becoming machines themselves. In either case ... the age of the humans is drawing to a close.”[33] Stripped of its pessimistic tone, Hayes’ statement expresses the identical aspiration of Chinese alchemists in their search for the “divine [cinnabar](#),” or drinkable gold, which would produce eternal life.[34] The “Philosopher’s Stone” was always seen as the elixir of immortal youth.[35]

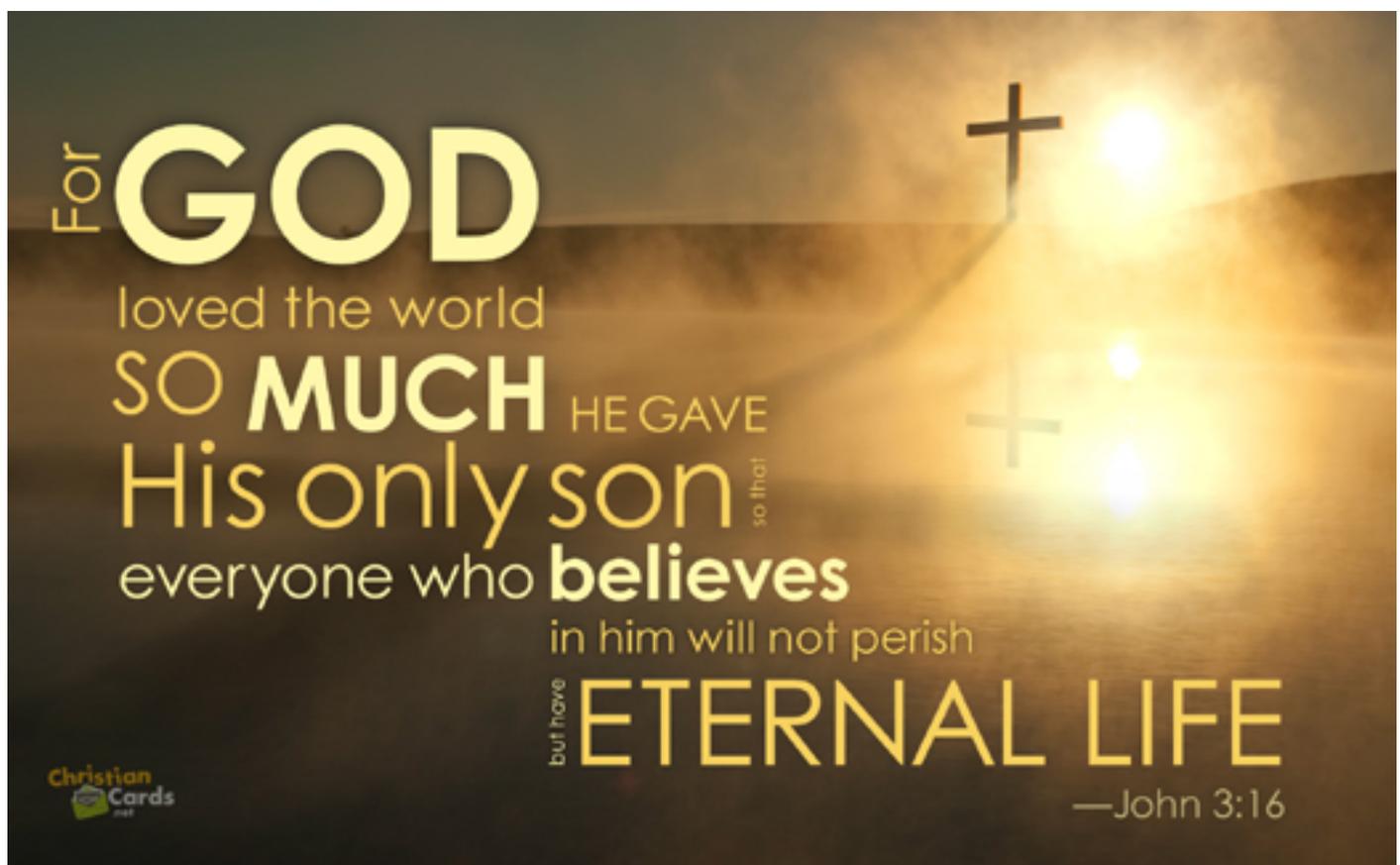
In accordance with Transhumanism’s stated goal to transcend all created limits, humanity is to seek the non-conditioned, [pre-creation state](#). This can mean one of two things: either total union with the metaphysical One or total and perfect spiritual autonomy. The goal of ritual regeneration of the cosmos, such as we find in the seasonal fertility festivals of most primitive cultures, is not pursued. Instead, the goal is escape from the cosmic cycle.[36] But the means is the same in each case: the attempted return to the Time before time, the pristine Golden Age.

Tutankhamun



The Way to True Immortality

The response to human mortality that has been made by Christianity is to point to the source of the imperfection – ethical rebellion of human beings against their creator God. The natural decay of every complex structures in the universe is attributable to God’s curse on this ethical rebellion, and the promise of external restoration goes with the promise of internal regeneration ([Romans 8:18-23](#)). The core problem of individual human beings lies, therefore, in their autonomous dispositions. Human beings must be conformed ethically to the image of Jesus Christ, the perfectly human and divine Son of God. To achieve this goal, each person requires unconditional grace from God ([Romans 8:29](#); [Eph. 2:8-9](#)), which involves not only forgiveness, but also the means of progressive sanctification: the comprehensive submission to God’s sovereign rule ([Phil. 3:14](#)). The goal is the ultimate (post-judgment) attainment of perfect humanity, not the attainment of full technological perfection, as a quasi-divine being ([Phil. 3:20-21](#)).



Christian theology has always proscribed the perennial human aspiration to seek metaphysical self-transcendence; instead, it has proclaimed the need of ethical maturity and proffered the means to achieve it. Its message is quite simple: The Fall of humankind was ethical; the restoration of humankind is ethical. Faith in Christ’s death and bodily resurrection, as an atoning, justifying and sanctifying sacrifice, is the Christian way of salvation ([1 John 4:9-10](#)).

Transhumanism, as an off-shoot of ancient mysticism, presents an alternative view. The plight of humanity is essentially metaphysical. It postulates that creation is defective, if not itself the main flaw (as some Eastern religions hypothesize). Whatever form of monism it takes, it always sets forth self-transcending regeneration as the goal. Each individual person must become a new immortal creature, achievable only by his own efforts of mystic ritualism and/

or modern technology. In short, the very essence of Transhumanism is the call to escape from finitude. It corresponds with the unquenchable human desire to become a divine being. The Christian faith counters this quest by pointing to the source of life, temporal and eternal: Jesus Christ ([1 John 5:11-12](#)).

In conclusion, we have shown that the concept of human enhancement by technological means is not primarily a technological issue, but rather the newest incarnation of the ancient, deeply religious endeavor “to become like God” – infinitely wise, omnipotent, autonomous, and immortal.

In view of the failure of mysticism (in the ancient and modern variations of Hermeticism, [Gnosticism](#), Neoplatonism, and Alchemy) to reach its goal of transcending human nature, we should carefully examine the philosophical underpinnings of the transhumanist religion. We should ask ourselves if we really agree with its understanding of human nature, before we subscribe to its technical promises and accept the fundamental paradigm shift implied by the concept of human enhancement technologies.

Endnotes:

1 Michael Heim, *The Metaphysics of Virtual Reality* (Oxford: Oxford University Press, 1993) p. 118.

2 David F. Noble, *The Religion of Technology; The Divinity of Man and the Spirit of Invention* (New York: Knopf, 1997) pp. 3-6.

3 Ibid., p. 3.

4 Ibid., p. 5.

5 See Mircea Eliade, *The Forge and the Crucible: The Origins and Structures of Alchemy* (New York: Harper Torchbooks, [1956] 1971). For a detailed bibliography on alchemy, see Alan Pritchard, *Alchemy: A bibliography of English-language writings* (London: Routledge & Kegan Paul, 1980).

6 H. J. Shepard, “Gnosticism and Alchemy”, *Ambix*, VI (1958), pp. 140-48; Shepard, “The Redemption Theme in Hellenistic Alchemy”, *Ambix*, VII (1959), pp. 42-76.

7 Mircea Eliade, *The Forge and the Crucible: The Origin and Structures of Alchemy* (New York: Harper Torchbooks, [1956] 1971), p. 151.

8 Ibid., p. 82.

9 Ibid., p. 83.

10 Ibid., pp. 60-61.

11 Ibid., p. 357.

12 Ibid.

13 C. S. Lewis, *The Abolition of Man* (New York: HarperCollins Publishers, [1944] 2001) 76-

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14 Ibid., pp. 21-100; John Passmore, *The Perfectibility of Man* (Indianapolis, IN: Liberty Fund Inc., 1970, 2000) pp. 116-327.

15 Julian Huxley, of *Touchstone for Ethics, 1893-1943* (Ayer Co Pub, Jun 1947) p. 257. This is a quotation from an earlier book by Huxley, published by the United Nations' Educational, Scientific, and Cultural Organization (UNESCO): *The Prerequisites of Progress* (Paris: Editions Fontaine, 1947).

16 Julian Huxley, *Knowledge, Morality, and Destiny* (New York: Mentor Book, [1957] 1960) p. 13.

17 Ibid.

18 Ibid.

19 Or possibly 6 billion years, depending on how one views the Hubble Constant.

20 3.5 billion until about 2 or 3 million years ago

21 Ibid., pp. 13-14.

22 Ibid., p. 17.

23 Nick Bostrom, "The Transhumanist FAQ, #5.1, Version 2.0, 2003", <<http://www.transhumanism.org>>.

24 Ibid., #5.4.

25 Ibid., #1.1.

26 Extropy Institute, "Mission of Extropy Institute" <<http://www.extropy.org>>.

27 Bostrom, "The Transhumanist FAQ", #1.1, Version 2.0, 2003", <<http://www.transhumanism.org>>.

28 Ibid.

29 Brendon Bernhard, "The Transhumanists," *L.A. Weekly*. (January 19-25, 2001), <<http://www.natasha.cc/laweekly.htm>>.

30 Tripper McCarthy, "Beliefs of the Transhumanist Church," *The Transhumanist Church*, <<http://www.transhumanistchurch.org/beliefs/beliefs.html>>.

31 Betterhumans Staff, "Transhumanism," 12/24/2002, <<http://www.betterhumans.org>>: "Transhumanist spirituality: In many respects Transhumanism seeks to actualize the goals and hopes traditionally espoused by religions. While mostly atheistic or agnostic, many Transhumanists describe themselves as being very spiritual. In fact, a disproportionately high number of Transhumanists follow Eastern philosophical traditions, especially secular Buddhism."

32 See C. Christopher Hook, "The Techno Sapiens Are Coming," *Christianity Today* (19 December 2003), <<http://www.christianitytoday.com/ct/2004/001/1.36.html>> (31 March 2004).

Hook uses the term “Gnosticism”, but it is more precise to say “Hermeticism”.

33 Ibid.

34 Mircea Eliade, *The Forge and the Crucible: The Origin and Structures of Alchemy* (New York: Harper Torchbooks, [1956] 1971), pp. 109-11.

35 Ibid., pp. 124, 167.

36 Eliade, *Myth and Reality* (New York: Harper Torchbooks, [1963] 1968), pp. 62, 346.

Dr. Martin Erdmann

In 1996, Dr. Erdmann founded Online Communication Systems, Inc. in Columbus, Ohio, using it primarily for theological distance education. For four years he headed up the New Testament department of the Staatsunabhängige Theologische Hochschule Basel (State-Independent Theological Seminary), Switzerland. Subsequently, he was the department head of New Testament Studies and Modern Church History at the Academy for Reformation Theology in Hannover, Germany, and Director of the Verax Institute in Switzerland. From 2003 to 2010 he taught all of the Bible Studies courses in the Distance Learning program of Patrick Henry College.

Dr. Erdmann’s accomplishments extend beyond theology. As Vice-President of Mustardseed Media, San Jose, CA, he participated in a project called Biblelands, an online multimedia tour of Israel and the Near East. In his position as Senior Scientist at the University Hospital in Basel, he was involved in researching the ethical implications of nanotechnology. He is also the author of five books.