

TRANSHUMANISM: PHILOSOPHY OF THE FUTURE?

John Clarke: 21 April 2015

The philosophy of transhumanism has emerged in response to spectacular recent developments within the sciences which promise radical transformations in human capacities, for in mental capacity, health, longevity, perhaps even evolving into a new kind of human being – a transhuman. The talk will outline these developments, asking whether we can take control of our own evolution as a species, and whether the implications of transhumanism for the human race are really possible, desirable, natural, or simply harmless fantasy.

Transforming human nature

QUOTE: Nietzsche: Zarathustra: “Man is a rope tied from man to overman. The time has come for man to set himself a goal. The time has come for man to plant the seed of his highest hope”. QUOTE Portable Nietzsche 124+. The Last Man simply pursues happiness, contentment

Cf Huxley: *Brave New World*

Cf Shaw: Man and Superman.

History shows many attempts to transform human nature. Cf P. Ball: *Unnatural*

Past futurisms

Religious – millenarianism – rapture – second coming

“Be ye perfect”

Buddhism – Enlightenment as human transformation

Alchemy – East and West – transformation of human (lead) into higher state (gold). Search for elixir of eternal youth

Pico della Mirandola (15th c.) – we are what we make ourselves

Project begins in earnest in the Enlightenment (modernity):

Battle of Ancients and Moderns – Francis Bacon – moderns win

Progress with the New Science

Descartes: through the advance of knowledge we become “masters and possessors of nature” – and also of ourselves – cf Kant: “Sapere aude” dare to know.

Human Perfectibility - Condorcet: *Sketch of the Progress of the Human Spirit* (1794) (1) History gives evidence of progress (2) Progress in the natural sciences will be followed by the moral and political sciences (3) social evils are not endemic but the consequence of ignorance (O’Hear p.106, Pagden 313):

French Revolution: Human rights include right to autonomy and self-development

Transformation of human nature – Marx: human nature not fixed, Lenin, Mao, Khmer Rouge, Also ISIS

Evolution – Social Darwinism – Eugenics – improving the human – reaction following Nazis

Twentieth century

Links with socialist progressivism

Goes back to Comte – positivism

QUOTE: Aldous Huxley in Anderson: *The Next Enlightenment* p.78

“I think there are good reasons for tempered optimism that there are still a great many potentialities – for rationality, for affection and kindness, for creativity – still lying latent man.”

Marxist scientists in c.1920s ff.– Haldane, Bernal, Needham

Julian Huxley – invented ‘transhumanism’

Post WW2 advances in science give new impetus

Twentieth Century Futurism

Advance of science and technology

Growth of science fiction

H.G. Wells - Public lecture 1932 ‘The Discovery of the Future’ called for university departments and professors of foresight’

Post WW2 – beginnings of futurology – a big industry

Herman Kahn – Hudson Institute 1961 – E.g. World Futures Studies, World Futures Society, Positive Futures Network, Futures Forum

Club of Rome founded 1968, Produced Limits to Growth. Critique of idea of unlimited growth. Used computer models

Utopianism

New Age, Age of Aquarius. “This is the dawning of the Age of Aquarius”

Consciousness Raising

Reich, Marcuse – de-repression

Dystopianism – reaction against scientific progress

Precipitated by nuclear power,

Environmental crises, limits to growth

Paul Ehrlich: Population Bomb (1968) Malthusian predictions

Huxley: *Brave New World*, Orwell: *1984*

Transhumanism Defs: QUOTE H & G 148-9.

According to the Transhumanist Declaration of the World Transhumanist Association, humanity will be radically changed by technology in the future. We foresee the feasibility of redesigning the human condition, including such parameters as the inevitability aging, limitations on human and artificial intellects, unchosen psychology, suffering, and our confinement to the planet earth. It is a science and a philosophy that seeks to employ genetic technology, information technology and nanotechnology to greatly enhance the healthy lifespan of persons, increase intelligence, and make us humans happier and more virtuous.

Some key ideas

Singularity – unique moment of transformation to TH

Ray Kurzweil: *The Singularity is Near: When Humans Transcend Biology* (2005).
“Science will enable us to transcend the limitations of our biological bodies and brains. We will gain power over our fates. Our mortality will be in our own hands. We will be able to live as long as we want.”

Full realisation of human potentiality

Hava Tirosh Samuelson: “TH is an outgrowth of Enlightenment humanism. As such TH is secular and rationalistic, concerned with the attainment of happiness with well-being and human flourishing, and has been a major concern of humanity, and a major feature of modern western thought.”

Controlled evolution

John Stewart: *Evolution's Arrow: The Direction of Evolution and the Future of Humanity* (2000). We will take control of our evolution leading to dramatic improvement in human qualities and political harmony QUOTE 18-19

Longevity / immortality

Extension of life by medical means : de Grey QUOTE H&G 39

Cybernetic Immortality **IBID 189**. Ray Kurzweil (**H&G 42**) SIM Substrate-Independent Mind – machine complexity catching up with brains (**More 179**)

Limitless power of technology

Eric Drexler *Engines of Creativity* (1996): “emerging technology will enable us to build almost anything that the laws of nature allow to exist. Driven by self-creating software, these methods will transform technology and the economy at their roots, opening up a new world of possibilities. They will indeed be engines of abundance”

Even over the universe

Frank Tipler: *The Physics of Immortality* (1994). “The unlimited power of science in the future, will eventually lead to our control of the universe. It will in time even permeate the whole universe with a super-intelligence, causing it to awaken to a God-like state of Being”

Tranhumanist foundations in science

Three specific areas

1. Genetics

Basically – speeded up evolution – by means of genetic engineering – production of genetically modified organisms

Mostly applied to medical treatments and genetically engineered organisms – eg food crops – cloning

Beyond this: Prospect of hugely expanded potential for human life

Example: gene editing

Cutting and pasting the genome sequence – permanent change to germ-line – latest method Crispr

Methods: 1. Gene therapy, 2. Editing embryonic cells, 2. Editing stem-cells

Disease dispositions arising from single-gene – HIV, sickle cell anaemia haemophila, Huntington's diseases, muscular dystrophy, cystic fibrosis

General health – wellbeing

Personal characteristics - intelligence

Longevity

Problems: 1. Many failures, 2. risk of unintended modifications

Brain-computer interface

Cyborgs – implants – eg heart pace-makes – artificial hearts etc

Brain implants connected to external info sources

Possibly linking to other brains – network minds – collective intelligence

2. Information technology and artificial intelligence

Cognitive enhancement – towards Superintelligence

Major advances 1945+ – various stages – simulating human intelligence

Deep Blue – ELIZA - specific intelligence – logistic paradigm

Problem of general intelligence – simulating human brain/mind

Parallel processing

Neural networks – multi-layered connectivity

Self-learning and self-programming systems – cf Turing “Child Machine”

Brain-computer interface – cyborgs

Implants - Enhancing brain function – expanded potential

Direct connections with information sources

Link to other brains – networked minds – to form superminds

Advantages of brain-computer connectivity

Speed of processing – 300,000,000 m/s versus 120 m/s

Toughness and durability and reliability and flexibility of machines

3. Nanotechnology – manipulation of material on an atomic or molecular level – nanoscale assemblers

Example: printer model – replacing sections of DNA

Drexler: re-engineering the world atom by atom

QUOTE 231 & 239

“Advances in the technologies of genetics, medicine, space, computation, will depend on our ability to arrange atoms in any form with atomic level assemblers”

TRANSUMANISM (TH): SOME QUESTIONS

Metaphysical questions

Is TH a new form of religion, a new technologically-driven form of spiritual transcendence?”

Is TH a new scientifically-based worldview which fulfills the Enlightenment project of a purely secular world?

Is TH contrary to the way of nature? If so, does that matter. Or should we go with the flow of nature?

Is human nature indefinitely transformable, or should we treat it as a timeless absolute?

Is the indefinite extension of life desirable, or even achievable

Scientific questions

Is TH science fiction rather than science?

Is TH overestimating the potential of the sciences to achieve its goals?

Is science capable of the indefinite progress presupposed by TH?

Practical questions

Is TH overestimating the potential of technology to achieve its goals?

Is TH overestimating our moral capacity to control future developments envisaged by TH, and thereby to achieve a 'higher' form of humanity?

Should we avoid this sort of grand project and stick to more modest goals, especially the goals of ecological sustainability and living within the limits imposed by nature?

Political questions

How could humanity cope with the population consequences of the indefinite extension of life?

Will the TH project inevitably lead to increasing class and wealth disparities?

How could TH possibly avoid the project from falling into the wrong hands, perhaps leading to catastrophic consequences?

TRANSHUMANISM: SOME BOOKS

M. More & N. Vita-More: *The Transhumanist Reader: Classical and Contemporary Essays on the Science, Technology and Philosophy of the Future* (Very thorough, detailed and wide-ranging approach to the subject, including social and political aspects)

G. Hansell & W. Grassie (eds): *Transhumanism and its Critics* (Very readable on the whole, and with a tendency towards skepticism concerning TH)

E. Drexler: *Engines of Creation: The Coming of the Era of Technology* (Popular book, a bit dated, but sets going the conversation about the development and uses – and misuses – of nanotechnology)

Nick Bostrom: *Superintelligence: Paths, Dangers, Strategies* (A superintelligent exploration of the methods and issues surrounding the quest for a higher form of human intelligence)

Jon Stewart: *Evolution's Arrow: The Direction of Evolution and the Future of Humanity* (Biologists vision of a progressive future of humanity which can and should take control of its own evolutionary development)

Ted Chu: *Human Purpose and Transhuman Potential: A Cosmic Vision for our Future Evolution* (A visionary work which draws on a wide range of historical, philosophical and scientific sources)

Philip Ball: *Unnatural: The Heretical Idea of Making People* (Popular science writing at its readable best, narrating the history of humanity's attempts to re-create and transform human nature for the better)

Steve Fuller: *Humanity 2.0: What it Means to be Human Past, Present and Future* (Philosophical exploration of the idea of an emerging new stage in the evolution of humanity, and the attendant issues which confront us on this journey. Not an easy read)

Ray Kurzweil: *The Singularity is Near: When Humans Transcend Biology* (A classic work which foresees the dawning of a new civilization where we will be able to transcend our biological limitations and amplify our creativity indefinitely)

Frank Tipler: *The Physics of Immortality: God, Immortality and the Resurrection of the Dead* (Claims that the unlimited power of science can make possible immortal life on earth and control of the universe which will give rise to a God-like state of Being)