

## The New Science-Art Renaissance and the Critical Issues of Transhumanism

**Introduction:** In this article I seek to explore the link between our current physics of entropy and Transhumanism and to counterpoint this with a Transhuman approach based on syntropy that is the creative ability of humanity and evolution in general to move to greater levels and layers of complexity while, all the time the universe is 'running down' that is becoming more entropic.

**Discussion:** The Platonic Academy was banished by the Byzantine emperor Justinian the Great in 529 AD. The traditional story of its re-establishment near Florence during the 15<sup>th</sup> Century became legendary. The story centers around Cosimo de Medici when he attended the Council of Florence in 1438, where he became intrigued by the pagan philosophies of Plato, as expounded by the philosopher Gemistus Pletho. Cosimo intended to re-establish the Platonic Academy near Florence and finally achieved this goal in 1462 (Hankins J. 1990). Years prior to the opening Marsilio Ficino, having demonstrated youthful enthusiasm toward Platonic spiritual philosophy, was taught Greek and was carefully groomed to guide the academic functioning of the Academy. Cosimo, his son and grandson, provided Ficino with a residence in Caregina, central to the new Academy, to develop the lost atomistic spiritual tradition of Platonic philosophy. Ficino based his Renaissance upon Platonic theology (Snyder J. 2012).

This spiritual responsibility failed to inspire the genius of the gifted student Leonardo da Vinci, (1452-1519). Leonardo, famous for his painting of the Mona Lisa, is generally considered to be a central figure of the Great Italian Renaissance. In fact, he cannot be considered a true figure of the Renaissance because he did not fully comprehend the nature of the Platonic spiritual optical engineering principles. During the 20<sup>th</sup> Century the American engineer and philosopher, Buckminster Fuller, derived his theories of a universe functioning on two distinct energy systems. One can be considered holographic and the other physical. Plato's spiritual mathematics influenced Fuller, as is clearly recorded within his biography, *A Fuller Explanation*, written by the dedicated student, Amy Edmondson (Edmondson A. 1987).

After being educated within the Platonic Academy, da Vinci at the age of 30 was employed as a military engineer by Milan's Duke Sforza, to research and design instruments of war. One such design has since been considered to be the first robotic design. Therefore, Leonardo da Vinci used his great artistic abilities to record his mechanical theories, as a military engineer. This occupation had been specifically regarded by Plato as being barbaric and unfit to be considered the role of a true philosopher. Leonardo is considered to be a key figure in bringing about the mechanistic era, which reached its peak during the 20<sup>th</sup> Century, when mainstream science was completely ruled by the logic upholding a quantum mechanics governed by the second law of thermodynamics. Saying that quantum mechanics is governed by the second law of thermodynamics is a bit too much, because the relations between the two are very complex and unclear; a quantum system that violates the second principle is described by Keefe (Keefe P.D., 2005).

*The Romantic movement* (Wikipedia, Romantic Age), in reaction to the rationalist pragmatism of *The Enlightenment* (Wikipedia, Age of Enlightenment), focused upon feelings rather than thought and included creativity, art, imagination and dreams all within the purview of 'rationality'. Whereas, *The Enlightenment* held that human actions were guided by the mathematical forces of economics, sociology, and physics, with all being governed by the second law of thermodynamics - as propounded by Charles Darwin, the Romantics ascribed human development to ethical, imaginal, creative and electromagnetic considerations.

As the science of quantum biology began to emerge during the 20<sup>th</sup> Century, the 'Enlightenment' logic began to be criticised as being incomplete. Various models of quantum biology were postulated, in which naturally occurring electromagnetic forces were considered to be functioning within the human energy system, in order to evolve consciousness (Pregnotato M. 2010). In

upholding quantum mechanics, a serious problem presented itself, when those forces were reasoned to be acting in defiance of the second law of thermodynamics.

A critical assessment of this confused situation was made by the 1937 Nobel Laureate in medicine, Albert Szent-Györgyi. In 1941, studying the solutions of the equations that combine quantum mechanics with special relativity, the mathematician Luigi Fantappiè discovered that the positive solutions describe energy and matter that diverge from causes located in the past and are governed by the law of entropy, i.e. the tendency towards dissipation of energy, chaos, disorder and death. Whereas the negative solutions describe energy and matter that diverge backwards in time from causes located in the future and are governed by a symmetric law, which Fantappiè named “syntropy”, i.e. the tendency towards energy concentration, order, organization and life (Di Corpo U. 2005). During the latter part of the 1950s, Szent-Györgyi related the theories of quantum mechanics to the biochemistry of cancer.

In 1974 he began to consider that a confused understanding of the second law of thermodynamics was fundamentally an electronic problem at the molecular level and he adopted the Fantappiè’s term “syntropy” to replace the term negentropy, used by other researchers, to allow quantum life-force energies to interact with the entropic energies of quantum mechanics to evolve consciousness (Wikipedia, Albert Szent-Györgyi). In the 21<sup>st</sup> Century, quantum biology, with the help of nanotechnology, discovered that there are negentropic properties associated with the biological functioning of carbon signaling within the human metabolism (Bozov R. S. 2011). Quantum biologists now postulate that living information energy entangles itself with the entropic energies belonging to quantum mechanics.

The excitement of discovering relevant new technologies for the betterment of the human condition can now be considered as belonging to an upgrading of Leonardo da Vinci’s mechanistic era. Optimists see this as leading towards a much more natural and profound state of human existence.

This article is written as a critique of Julian Huxley’s theory of transhumanism (Wikipedia, Julian Huxley) and its later re-development by the current Transhumanist Movement, which in terms of this article may be considered as an extension of our existing entropic technology and thus may be considered as entropic viz. Entrohumanism. I propose that no sustainable ethical ethos can belong to the energies of quantum mechanics, when kept in isolation from entanglement with the energies of quantum biology. This postulates that quantum evolutionary biology can help modify transhumanism’s objectives for the common good, by introducing aspects of negentropic logic propounded by the Platonic tradition of the ancient Greek philosophy’s *Science for Ethical Ends*.

Petar Grujic, Science Advisor to the Belgrade Institute of Physics, published numerous papers (Web, Grujic publications) demonstrating that the lost ancient Greek ethical science was based upon an infinite fractal mathematical logic. However, any ethical science linking the properties of emotional thought to the principles governing atomistic Platonic particle movement is forbidden by the incomplete 20<sup>th</sup> Century definition of the second law of thermodynamics. This imbalanced law requires the eventual extinction of all life through the thermodynamic death of our universe.

It can therefore be argued that any negentropic force that allows the universe continuance beyond the extremity of the Second law can be seen as a science representing optimum evolutionary development and health. This argument suggests that the ethics postulated by Szent-Györgyi may be defined in medical terms involving his electromagnetic carcinogenic problem at a molecular level. At the very least, the sentence of extinction, as prescribed by quantum mechanics, can be given a reprieve to allow for new human survival scientific evidence to be presented.

The discoveries of electromagnetic forces during the 18<sup>th</sup> and 19<sup>th</sup> Centuries caused scientists to revisit Platonic science principles. The relevant electromagnetic forces, being based upon the

principles of particle movement to instruct the evolution of consciousness, were based upon the spiritual mathematics of the ancient Greek *Science for Ethical Ends*. After Pythagoras introduced the properties of light into the ancient concepts of atomic movement, associating it with the generation of electromagnetic information obviously followed. Hans Christian Oersted, the discoverer of the electromagnetic field, actually wrote about the relevant ethics involved, in his Doctoral dissertation referring to Immanuel Kant's God-like electromagnetic ethic (Brian, R. & Cohen R., 2011).

Charles Darwin based his theory of evolution upon Thomas Malthus' population essay (Wikipedia, Thomas Robert Malthus), which directed the policies of the East India Company. This powerful, and ultimately infamous, company financed Darwin's famous voyage of discovery, on HMS Beagle. Darwin's obsession with the second law of thermodynamics is now the subject of great controversy, although at the beginning of the 20<sup>th</sup> Century it was well accepted. Einstein agreed with Darwin that the second law was the Premier Law of the sciences. Sir Arthur Eddington referred to it as the *Supreme metaphysical law of the entire universe* (Goodfield J. 1977) and Lord Bertrand Russell's most popular essay *A Free Man's Worship* (Russell B. 1985), also advocated such as a fire-and-brimstone religious sentiment.

Julian Huxely's theories on transhumanism seems to have a ennobling ring about the universe becoming conscious of itself, with humankind claiming a wonderful destiny by developing a universal conscious participation, well at least, as Julian wrote, until "the final ticking of the cosmic clock" (Huxley J. 1957). His eugenic theories, based upon Darwin's evolutionary ideas, and given their most ugly expression at Auschwitz, were ultimately tied to the dictates of the second law of thermodynamics.<sup>1, 2</sup> It was also referred to earlier by the educator, Maria Montessori (Wikipedia, Maria Montessori), who was listed in the TIME magazine's *Century of Science* (Dorfman A. and Hart M. 1999) as being the greatest scientist of 1907. She referred to the second law of thermodynamics as the greed energy law as she developed her optimum social cradle of play based practical activities for the development of children, which is still in use in kindergartens to this day.

Together, with her contemporary Teilhard de Chardin (Wikipedia, Pierre Teilhard de Chardin), they advocated the unlocking of the *Golden Gates to the Future* compatible with ethos of the Platonic tradition of Greek philosophy. A key figure in the eugenics movement in America was Alexander Graham Bell, a sponsor of Montessori's research, along with both Thomas Edison and President Woodrow Wilson. Unfortunately, Montessori and de Chardin's research into the natural effects of environmental electromagnetic forces/waves upon young children did not form the basis of Bell's eugenics program which was based upon Darwinian evolutionary theory. This is a key present aspect of my work and that of the Science Art Research Center in Australia in identifying and then linking these waves to our health, children's intellectual development and peak sports achievement. (Rushkoff, 2013: 100-109). The American eugenics organisation influenced the unethical political aspirations of Hitler's Third Reich.

**Conclusion:** To this end my organisation has been negotiating with the Science Art Research Centre of Australia for an international syntropy art exhibition that is mobile and that can be integrated with practical demonstrations of the Social Cradle so that Science, Art and Craft can

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<sup>1</sup> This is the evolutionary electromagnetic anti-life medical problem, at the molecular level, alluded to by Szent-Györgyi.

<sup>2</sup> There are many complex models being developed within quantum biological research concerning the electromagnetic theories of creation, finding expression within the functioning of the mind and brain. They are too complex to detail within a brief critique of the current status of transhumanism. However, in general, as the energies of the holographic state of quantum biology entangle with the energies of quantum mechanics, consciousness is evolved, in violation of 20<sup>th</sup> Century quantum mechanics.

integrate in helping point a way forward towards being more fully human, in effect a syntrohumanism rather than entrotroshuman in today's difficult and challenging world.

Finally it would appear unethical for the second law of thermodynamics to continue to dismiss such models out of hand, or to treat the ancient Greek science for ethical ends as some sort of irrelevant pagan heresy. The combination of science and art needs to be implemented as a rediscovered research methodology<sup>3</sup> to help reason about the ethical nature of humankind. From the union of holistic Renaissance thought and creativity there emerges a growing awareness, necessary for our evolution to more elevated states of consciousness with their associated greater levels of involvement in social design and democracy. This new measurement of humanity liberates humankind from the bonds of the materialistic world-view of last century that is leading towards Transhumanism and points instead towards a world view that is, I would argue, more fully human and one that embraces syntropy in science and the social sciences.

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<sup>3</sup> Leonardo da Vinci instigated this procedure during the Italian Renaissance

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